



POWYS COUNTY COUNCIL

NORTH POWYS BULKING FACILITY

Site Condition Report

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Project code: 416.00798.00039

About WRAP

WRAP is a climate action NGO working around the globe to tackle the causes of the climate crisis and give the planet a sustainable future.

Our core purpose is to help you tackle climate change and protect our planet by changing the way things are produced, consumed, and disposed of.

Document reference: WRAP Cymru, 2023, Bristol, Site Condition Report, Prepared by SLR Consulting Ltd.

Written by: SLR Consulting Ltd



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Contents

1.0 Introduction	2
1.1 Site Condition Report Approach	2
2.0 Site Condition Report	4

Acknowledgements

The content of this Report has been based upon information provided by WRAP Cymru and Powys County Council.

1.0 Introduction

The Waste and Resource Action Programme (WRAP), on behalf of Powys County Council (PCC) has retained SLR Consulting Limited (SLR) to prepare a Site Condition Report (SCR) for the proposed North Powys Bulking Facility, under the Environmental Permitting (England and Wales) Regulations 2016 (as amended).

The SCR has been prepared to record the condition of the additional area of land that was added to the permit boundary in August 2022, to accommodate a firewater tank. The area is illustrated on Drawing 002.

1.1 Site Condition Report Approach

This SCR has been prepared in accordance with Natural Resources Wales's (NRW) H5 SCR Guidance and Templates¹. The SCR aims to record and describe the conditions of the land at the site prior to the commencement of any operations. The SCR will capture the conditions of the site at the start of the EP with particular attention paid to contamination levels in the underlying and surrounding soil and groundwater.

This will provide a point of reference and baseline environmental data so that when the EP is surrendered it can be demonstrated that there has been no deterioration in the condition of the land as a result of the proposed operations, and ensure that the condition of the land is in a 'satisfactory state' on surrender of the EP.

The location of the site and environmental site setting is illustrated on Drawing 001A, and the Environmental Permit Boundary and the Site Layout illustrating the additional area of land to be included in the SCR are shown on Drawings 004 and 002 respectively.

Sections 1 to 3 of NRW's SCR template have been completed within this document and comprises the following aspects:

- Site details;
- Condition of the land at permit issue;
 - Geology;
 - Hydrology;
 - Hydrogeology;
 - Pollution History; and

¹ [Environmental Permitting Regulations, Guidance for applicants H5, Site Condition Report, Guidance and Template \(cyfoethnaturiol.cymru\)](https://www.naturalresources.wales/cyfoethnaturiol.cymru)

- Evidence of historic contamination.
- Permitted activities.

Sections 4 to 7 of the SCR template will be maintained during the life of the permit and Sections 8 to 10 will be completed and submitted in support of the application to surrender the EP.

2.0 Site Condition Report

1.0 SITE DETAILS	
Name of the applicant	Powys County Council
Activity address	North Powys Bulking Facility, Abermule Business Park, Abermule, Newtown, Powys, SY15 6NU
National grid reference	SO 15743 94208

Document reference and dates for Site Condition Report at permit application and surrender	<u>Permit Application</u> Appendix SCR1: Abermule Business Park, Site Condition Report, 10026414-ARC-XX-XX-RP-ZZ-0005-03, Arcadis December 2021 416.00798.00038/SCR, SLR, May 2023
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Document references for Site plans (including location and boundaries)	<ul style="list-style-type: none">• Drawing 001A – Environmental Site Setting• Drawing 001B – Environmental Site Setting• Drawing 002 – Site Layout• Drawing 003 – Site Drainage• Drawing 004 – Environmental Permit Boundary
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Note:

In Part A of the application form you must give us details of the Site's location and provide us with a Site plan. We need a detailed Site plan (or plans) showing:

- Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the Site.
- Locations of receptors, sources of emissions/releases, and monitoring points.
- Site drainage.
- Site surfacing.

If this information is not shown on the Site plan required by Part B2 of the application form, then you should submit the additional plan or plans with this Site condition report.

2.0 CONDITION OF THE LAND AT PERMIT ISSUE	
<p>Environmental setting including:</p> <ul style="list-style-type: none">• geology• hydrogeology• surface waters	<p>Geology</p> <p>A review of the British Geological Survey (BGS) GeoIndex (onshore) map² reveals that the site is underlain by a bedrock of Nantglyn Flags Formation comprising mudstone, siltstone and sandstone.</p> <p>Superficial deposits are comprised of Alluvial Fan Deposits of clay and silt.</p> <p>Made ground is associated with the former roadway, which is located along the north western site boundary, including the additional area of the land where the firewater tank is situated. The area was previously used for the storage of farm equipment, soil stockpiling, and hay bales.</p> <p>Ground investigations on site, referenced in Appendix SCR1, encountered both granular and cohesive deposits:</p> <ul style="list-style-type: none">• Cohesive deposits: Greenish brown slightly sandy, gravelly silt and soft to firm greyish and orangish brown slightly sandy gravelly clays to a maximum depth of 4.00m bgl and a maximum thickness of 4.00m;• Granular deposits: Medium dense to very dense brown and grey sandy clayey sub-angular to sub-rounded fine to coarse gravel up to a maximum depth of 10.00mbgl and maximum thickness of 6.00m.

² British Geological Survey GeoIndex Onshore Map, Available at [GeoIndex \(onshore\) - British Geological Survey \(bgs.ac.uk\)](https://www.bgs.ac.uk/geoindex/), accessed in April 2023

Hydrogeology

The bedrock underlying the site is classified as a Secondary B Aquifer which is defined by NRW as “*mainly lower permeability layers that may store and yield limited amounts of groundwater through characteristics like thin cracks (called fissures) and openings or eroded layers*”.

The superficial deposits are classed as unproductive.

A groundwater abstraction license held by PCC, and used for farming and domestic is located approximately 260m south west of the site.

The Data Map Wales Viewer³ confirms that the site does not lie within a Source Protection Zone (SPZ).

Groundwater flow direction is anticipated to be towards the west and south west consistent with the catchment and flow direction of the River Severn.

Hydrology

There are no hydrological features located within the site boundary.

The River Severn runs approximately 210m north of the site and Montgomery Canal is situated approximately 410m north.

Approximately 20m south lies a drain and a small pond beyond this, approximately 60m from the site boundary.

The Groundwater Vulnerability Layer on the BGS GeoIndex (onshore) map² reveals that the site lies within a high groundwater vulnerability area, classified as a Secondary Aquifer.

	<p>Flooding</p> <p>A review of the Data Map Wales Viewer³ confirms that the site does not lie within a Source Protection Zone.</p>
<p>Pollution history including:</p> <ul style="list-style-type: none"> • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures 	<p>The pollution history for the site is summarised in the Phase 1 Geo-Environmental Desk Study for Powys County Council (Ref: 0001-UA006590-26-UP32R-01) included as Appendix SCR2.</p> <p>Pollution History</p> <p>There are no recorded pollution incidents to controlled waters for the site or within approximately 250m of the site. The closest incident was a minor incident from a sheep farm, which occurred 475m north west.</p> <p>Discharge Consents</p> <p>The site holds a discharge consent to sewer with Hafren Dyfrdwy (009188V).</p> <p>There are no further recorded discharge consents within approximately 250m of the site. The closest is located approximately 300m south east of the site, for the discharge of sewage to the surface water course which runs past the eastern boundary of the site.</p> <p>Waste Management Activities</p> <p>No licenced waste management facilities lie within a 250m radius of the site.</p> <p>Landfill Sites</p> <p>No recorded landfill sites (historic or current) are situated within 250m of the site.</p>

³ Data Map Wales Viewer, Available at [New map | DataMapWales \(gov.wales\)](https://newmap.gov.wales/), accessed in April 2023

Historic Mapping

The site's history is included in the Phase 1 Geo-Environmental Desk Study for Powys County Council (Ref: 0001-UA006590-26-UP32R-01) included as Appendix SCR2, and summarised below.

On Site

1884 – 1885: The site consisted of an open field, with no apparent use. An unnamed road cut across the north western area of the site.

1903 – 1964: No significant change to the site.

1983 – 1984: The unnamed road in the north west of the site was no longer in use.

2000: No significant change.

2006: No significant change.

2017: The site was identified as Abermule Business park with a road running south east along the western site boundary.

Off Site

1884 – 1885: The Cambrian Railway ran in a north east to south west direction, to the south of the site. A reservoir was located beyond the railway line approximately 80m south of the site. The River Severn ran approximately 250m north of the site. A number of farm related buildings identified as The Court were located approximately 20-200m north east.

1903 – 1964: A set of three buildings of unknown use were situated approximately 60m to the north west.

1983 – 1984: Two farms were identified as Bryn-y-maes to the north west and Maesderwen to the north east. To the north of the site the A483 and the B4386 were reconfigured.

2000: Maesderwen was expanded to include a large commercial building. A predominantly residential area was located to the east of the

	<p>site, with an associated area of commercial use.</p> <p>2006: Bryn-y-maes farm had a cylindrical structure built on site.</p> <p>2017: No significant change.</p> <p>Historical mapping shows that the site has not undergone significant development since the earliest available maps (1884 – 1885). The most significant change to the site is the abandonment of an unnamed road which ran across the north western area of the site.</p> <p>Potential Sources of Contamination</p> <p>Potential sources of contamination for the site are as follows:</p> <ul style="list-style-type: none">• Made Ground associated with the abandoned roadway, rubble mounds, and use of the site by the farmer to store farm equipment;• Asbestos within the stockpiles stored on the abandoned roadway;• Radon gas (naturally occurring); and• Sulphates – Design Sulphates Class (DS) of DS-1 and an Aggressive Chemical Environment for Concrete Class (AC) of AC-1. <p>Radon</p> <p>The site is located within a medium probability radon area (5% to 10% of homes are estimated to be at or above the action level).</p> <p>The Contamination Remediation Verification Report (Ref: 2395/R01/002), prepared by PCC's Engineering Design Services in April 2021, evidences that the installation of the radon barrier has been undertaken by Jones</p>
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	<p>Bros Civil Engineering UK. The report is included as Appendix SCR6.</p> <p>Asbestos</p> <p>Suspected pieces of Asbestos Containing Material were encountered on site, during ecological works undertaken by Middlemarch Environmental Ltd (Middlemarch). 4 samples were obtained from suspect material and analysed for the presence of asbestos. Asbestos was detected within 3 sampling locations, within stockpiles located adjacent to the north western boundary, and in the additional area of land. Arcadis subsequently undertook 8 no hand dug pits to de-lineate the asbestos findings of Middlemarch. No visual identifications of asbestos were made during the hand pitting investigation, and laboratory testing of the samples did not indicate the presence of asbestos. Therefore, the identified asbestos appeared to be localised and not widespread throughout the stockpiled material. The location of Asbestos Containing Material is illustrated on Drawing 2395/0200.001 Site Clearance Plan, included as Appendix SCR3.</p> <p>A Contamination Remediation Strategy was prepared by PCC's Engineering Design Services in November 2019 and is included as Appendix SCR4. Site clearance works undertaken included the removal of the road surface, and the asbestos contaminated material, in accordance with the Asbestos Management Plan prepared by Jones Bros Civil Engineering UK in November 2019 and included as Appendix SCR5. Asbestos was taken from the site to a licenced tip by Ecoefficiency Ltd.</p>
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	<p>The Contamination Remediation Verification Report (Ref: 2395/R01/002), prepared by PCC's Engineering Design Services in April 2021, evidences that the remediation works to remove the asbestos have been undertaken. The report is included as Appendix SCR6.</p> <p>Sulphates</p> <p>Sulphates – Design Sulphate Class (DS) of DS-1 and an Aggressive Chemical Environment for Concrete Class (AC) of AC-1 were identified on site.</p> <p>The Contamination Verification Report, (Ref: 2395/R01/002), prepared by PCC's Engineering Design Services in April 2021, evidences that all below ground concrete was designed for the stated sulphates class. The report is included as Appendix SCR6.</p> <p>Potential Sources of Contamination</p> <p>Other than the Made Ground and the presence of non-natural materials recorded, no visual or olfactory evidence of contamination was identified on the site during the ground investigation (SCR7).</p>
Evidence of historic contamination, for example, historical Site investigation, assessment, remediation and verification reports (where available)	N/A – no historic ground investigation reports made available.
Baseline soil and groundwater reference data	An intrusive ground investigation was carried out between the 7 th and 22 nd January 2019 by Arcadis, with monitoring completed on 22 nd and 30 th January 2019, and 7 th and 14 th February 2019. The Geo-Environmental and Geotechnical Assessment Report is included as Appendix SCR7 (Ref: 10026414-ARC-00-XX-RP-ZZ-0003-0).

Supporting information	<ul style="list-style-type: none"> • Appendix SCR1 - Abermule Business Park, Site Condition Report, 10026414-ARC-XX-XX-RP-ZZ-0005-03, Arcadis December 2021; • Appendix SCR2 – Phase 1 Geo-Environmental Desk Study for Powys County Council Arcadis, Dated December 2017 (Ref: 0001-UA006590-26-UP32R-01) • Appendix SCR3 – Site Clearance Plan, Drawing No 2395/0200.001, PCC's Engineering Design Services, July 2019 • Appendix SCR4 – Contamination Remediation Strategy, PCC's Engineering Design Services, dated November 2019 (Ref: 2395/R01/001) • Appendix SCR5 – Asbestos Management Plan, Jones Bros Civil Engineering UK, dated November 2019 • Appendix SCR6 – Contamination Remediation Verification Report, PCC's Engineering Design Services, dated April 2021 (Ref: 2395/R01/002) • Appendix SCR7 – Geo-Environmental and Geotechnical Assessment Report, Arcadis, dated May 2019 (Ref: 10026414-ARC-00-XX-RP-ZZ-0003-01)
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3.0 PERMITTED ACTIVITIES	
Permitted activities	<p>North Powys Bulking Facility</p> <p>A11 – Household, Commercial and Industrial Waste Transfer Station.</p> <p>The activities that will be carried out at the site as defined under Annex II of the Waste Framework Directive can be summarised as follows:</p> <p>R3: Recycling/reclamation of organic substances which are not used as solvents'</p> <p>R4: Recycling/reclamation of metals and metal compounds;</p> <p>R5: Recycling/reclamation of other inorganic materials;</p> <p>D9: Physico-chemical treatment not specified elsewhere which results in final compounds or mixtures which are disposed of by any of the operations numbered D1 to D12;</p>

	<p>R13: 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>D14: Repackaging prior to submission to any of the operations numbered D1 to D13; and</p> <p>D15: Storage pending any of the operations numbered D1 to D14.</p>
Non-permitted activities undertaken	There will be no non-permitted activities undertaken on site.
<p>Document references for:</p> <ul style="list-style-type: none"> • Plan showing activity layout; and • Environmental Risk Assessment. 	<ul style="list-style-type: none"> • Drawing 002 – Site Layout • Drawing 003 – Site Drainage • Drawing 004 – Environmental Permit Boundary <p>Environmental Risk Assessment, SLR Consulting Limited (ref: 416.00798.00038), June 2022 for a bespoke Environmental Permit Application.</p>

Note:

In Part B of the application form you must tell us about the activities that you will undertake at the Site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (*Environmental Risk Assessment*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents.

If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater we may need to request further information from you or even refuse your permit application.



**WRAP's vision is a thriving world in which
climate change is no longer a problem.**

Our mission is to make the world a more
sustainable place. We bring people together,
we act on the facts, and we drive change.

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