

Site condition report template

Document owner: National Services/ Knowledge, Strategy & Planning

Version History:

Document Version	Date Published	Summary of Changes
1.0		Document created
2.0	August 2008	
3.0	October 2014	Rebrand to NRW

Published by:

Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP
0300 065 3000 (Mon-Fri, 8am - 6pm)
enquiries@naturalresourceswales.gov.uk
www.naturalresourceswales.gov.uk

© Natural Resources Wales

All rights reserved. This document may be reproduced with prior permission of Natural Resources Wales

COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION

DURING THE LIFE OF THE PERMIT: MAINTAIN SECTIONS 4-7

AT SURRENDER: ADD NEW DOC REFERENCE IN 1.0; COMPLETE SECTIONS 8-10; & SUBMIT WITH YOUR SURRENDER APPLICATION.

1.0 SITE DETAILS	
Name of the applicant	Breedon Southern Limited
Activity address	Borras Quarry, Borras Airfield, Holt Rd, Holt, Wrexham LL13 9SE
National grid reference	SJ 36913 52480
Document reference and dates for Site Condition Report at permit application and surrender	Site Condition Report BRE_BOc24599scr dated February 2020.
Document references for site plans (including location and boundaries)	Report reference BRE/BO/LBA/5626/01 - Figure 1 – Site Location – drawing reference BRE/BO/11-19/21487

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 A 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

Environmental setting including:

- geology
- hydrogeology
- surface waters

Geology

The geology at the site is based on a review of the British Geological Survey (BGS) digital Geological Map of Great Britain at 1:50000 scale and borehole logs accessed from the BGS website. The site is underlain by superficial deposits which comprise Devensian Glaciofluvial Sheet Deposits of sand and gravel. The superficial deposits are underlain by the Kinnerton Sandstone Formation which comprises a red-brown to yellow, generally pebble-free, fine to medium grained sandstone. The Kinnerton Sandstone Formation is underlain unconformably by the Salop Formation which comprises a red and red-brown mudstone and red-brown sandstone containing beds of pebbly sandstone and conglomerate.

A record of a borehole located approximately 100m south west of the site (reference SJ35SE122) records medium coarse to coarse sand and gravel to a depth of 7.5m below ground level (bgl) underlain by reddish brown stiff silty clay to the base of the borehole at 15mbgl. It is considered that this is the Salop Formation. The records of two boreholes located approximately 120m south south east of the site (references SJ35SE95 and SJ35SE96) record coarse to fine sands and gravels to a depth of 25mbgl and 21mbgl respectively. These deposits are underlain by brown and grey silty clay to the base of the borehole at 27mbgl.

	<p>Hydrogeology</p> <p>The Glaciofluvial Sheet Deposits are classified as a Secondary A aquifer defined by the Environment Agency (EA) as <i>“permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.”</i> The Kinnerton Sandstone Formation is classified as a Principal aquifer defined by the EA as <i>“layers of rock or drift deposits 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.”</i></p> <p>The site is located within a Source Protection Zone (SPZ) Zone 3 defined by the EA as <i>“the area around a source (abstraction) within which all groundwater recharge is presumed to be discharged at the source.”</i></p> <p>According to the Envirocheck database there is one licensed groundwater abstraction within 1km of the site located approximately 390m south of the site. The abstraction use is for mineral washing. The rate of abstraction is not recorded. There are a further four licensed groundwater abstractions located within 2km of the site.</p> <p>Hydrology</p> <p>The River Dee is located approximately 4.25km east north east of the site flowing north and discharging into the Irish Sea. The nearest surface watercourse to the site is located approximately 600m south of the site flowing generally south and discharging into the River Dee approximately 6.5km south west of the site. Four surface water bodies are located approximately 750m north west of the site.</p> <p>Based on a review of the Long-Term Flood Risk Map on the Natural Resources Wales website the site is located within Flood Zone 1 which is defined as a land assessed as <i>“having less than a 1 in 1000 annual probability of river or sea flooding.”</i> The nearest Flood Zone 3 designation is located approximately 600m south of the site. Flood Zone 3 is defined as <i>“land assessed as having a 1 in 100 or greater annual probability of river flooding.”</i> The area adjacent to the River Dee is located within Flood Zone 3.</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>Information in respect of the potential pollution history at the site has been assessed from information in the Envirocheck report including historical maps.</p> <p>The site is located at Borrás Quarry which comprises a working sand and gravel quarry. The site is located approximately 1.2km north east of the outskirts of Wrexham.</p> <p>The site and surrounding land are shown as open farmland in 1878. The map from 1878 shows Borrás Hall approximately 100m east of the site and a footpath that runs along the east of the site is located approximately 20m from the site boundary at its closest point. The site and surrounding areas remain as open farmland and footpaths until sometime between 1938 and 1954 at which point Borrás Airfield is shown on the maps built between the perimeters of Borrás Road to the west, Borrás Head Farm to the north, Borrás Lane to the east and Llan-y-pwll to the south. The site is included as part of Borrás Airfield's outer road network in 1962 with roads running along its eastern and southern boundaries and a small paved section inside the south western site boundary surrounded by a soil bund. Between 1954 and 1962 a small building is erected approximately 40m to the east of the site. The maps dated 1964 and 1968 identify the airfield as disused. In 1983 the area to the west north west of the site is recorded as a sand and gravel pit and a new structure is located adjacent to the east of the boundary. The map from 1983 shows that the previous airfield road network and soil bund in the south west corner of the site have been removed along with the building approximately 40m to the east, but the roads along the eastern and southern boundaries remain intact. The airstrip approximately 60m to the south of the site is shown on the 1983 map and is recorded as a private landing strip. Between 1983 and 1992, new buildings were erected inside the north western boundary of the site, the sand and gravel pit and the private airstrip are still shown. At some point between 2000 and 2019, the private airstrip was decommissioned and Wrexham Golf Club was established to the south west of the site. The buildings inside the western site boundary and the building approximately 10m to the east have been removed.</p>
---	---

	<p>The most recent map in 2019 shows the site as clear of any structures. The road adjacent to the southern boundary of the site remains in 2019.</p> <p>Based on the review of the historical map data, the land has been used as part of the road network of an airfield between 1938 and 1983 after which the land was part of a sand and gravel pit workings. The roads adjacent to the southern and eastern boundary of the site remained intact throughout both land uses until some point between 2000 and 2019. In 2019 only the southern road remains. The site has buildings located inside the north western boundary from some point between 1983 and 1992 until some point between 2000 and 2019. It is assumed historic buildings within the site boundary were part of the quarry workings as there were no recorded structures during its time as part of an airfield. Potential contaminants associated with the historic airfield land use include paraffinic, olefinic and aromatic hydrocarbons from aviation kerosene and aviation gasoline, diesel/gas-oil, as well as monoethylene, diethylene and propylene glycols, urea and calcium and magnesium acetates from the potential use of anti-freeze and de-icing agents. Additionally, allophanates, carbamates, hydrolysed proteins, glycols, ether alcohols and fluorinated surfactants used as fire-fighting agents may be associated with historic airfield land use. A number of other potential contaminants arising from the historic operations may include organic solvents and chemicals found in washing agents, wheel cleaners, lubricants, hydraulic fluids, herbicides, paints and solvents, rust removers and corrosion inhibitors.</p>
--	---

<p>Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)</p>	<p>According to the Envirocheck database, there are no Contaminated Land Register Entries and Notices within 1km of the site.</p> <p>The Envirocheck report records no pollution incidents at the site and no pollution incidents within 500m of the site.</p> <p>There were 2 pollution incidents to controlled waters within 1km of the site. Both incidents were Category 3 defined as “minor incidents”. The minor incidents were over 950m east of the site and referred to pollution from “blood and offal” run-off into the River Dee.</p> <p>There are no Substantiated Pollution Incidents recorded within 1km of the site.</p> <p>There are 8 discharge consents within 1km of the site, including 2 within 250m. Both discharge consents within 250m are located approximately 225m NE of the site at Borrás Hall and are operated by Roscom Property Developments and refer to sewage discharges (final/treated effluent to land/soakaway).</p> <p>The Envirocheck report records 2 Licensed Waste Management Facilities between 500m and 600m south of the site. Based on a review of the information available on the Natural Resources Wales public register the Envirocheck entries refer to the same single site which comprises a site for “management of inert or extractive waste at mine” and is relevant to Borrás sand and gravel quarry. Environmental Permit number EPR/XP3695VK was issued originally to Tarmac Limited in May 2011 and was transferred to Breedon Southern Limited in September 2018.</p>
---	--

	<p>The Envirocheck report identifies 2 historical landfill sites between 500m and 1000m from the site.</p> <p>United Gravel Company Ltd operated a landfill site named Borrás Airfield between 1982 and 1987 approximately 510m west of the site. The landfill accepted 'waste including inert waste'. Borrás Airfield Landfill Site is also included in the Envirocheck as a Local Authority Recorded Landfill site with reference 6955/0009 which is reported as closed.</p> <p>Wrexham Maelor Borough Council (WMBC) operated a landfill site approximately 770m south of the site which was authorised to accept inert, industrial, commercial, household and special waste between 1984 and 1988. The WMBC landfill site is also recorded in the Envirocheck report as being registered on 1 December 1983 and its status is recorded as licence lapsed/cancelled/defunct/not applicable/surrendered/cancelled.</p> <p>The Envirocheck report records the site as being "in an area which may be affected by coal mining activity".</p> <p>The closest Local Authority Pollution Prevention and Control Permit (LAPPC) is located approximately 180m south of the site on Holt Road which is for PG3/1 (blending, packing, loading and the use of bulk cement) by Hanson Concrete Products Ltd. A further LAPPC permitted site is located on Holt Road approximately 235m south west of the site for "general mineral process", also operated by Hanson Concrete Products Ltd. A third LAPPC permitted site is located 840m south west which is also for PG3/1 and also operated by Hanson Concrete Products Ltd.</p>
Baseline soil and groundwater reference data	<p>There is no baseline soil and groundwater reference data.</p>

Supporting information	<p>Envirocheck Report number 226394344_1_1 dated 26 November 2019 with historical maps supplied by the Landmark Information Group.</p> <ul style="list-style-type: none"> • Source information identifying environmental setting and pollution incidents (Envirocheck report) • Historical maps (Envirocheck report) <p>A copy of the Envirocheck Report is presented at Annex A to this SCR.</p>
-------------------------------	---

3.0 Permitted activities	
Permitted activities	<p>Standard rules SR2008No11 - inert and excavation waste transfer station with treatment. Treatment consisting only of manual sorting, separation, screening or crushing of waste into different components for disposal, (no more than 50 tonnes per day) or recovery.</p> <p>D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced).</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 13.</p> <p>D9: Physico-chemical treatment not specified elsewhere in Annex IIA which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D8 and D10 to D12.</p> <p>R3: Recycling/reclamation of organic substances which are not used as solvents</p> <p>R5: Recycling/reclamation of other inorganic materials.</p>
Non-permitted activities undertaken	There are no non-permitted activities undertaken.
<p>Document references for:</p> <ul style="list-style-type: none"> • plan showing activity layout; and • environmental risk assessment. 	<p>Site Location – Figure 1 (drawing reference BRE/BO/11-19/21487).</p> <p>Environmental Risk Assessment – Generic risk assessment for standard rules set number SR2008No11 v4. Dated 25 June 2012. Published by Natural Resources Wales on www.naturalresources.wales.</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 the guidance (*Environmental Risk Assessment - EPR H1*) 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.

4.0 Changes to the activity	
Have there been any changes to the activity boundary?	N/A
Have there been any changes to the permitted activities?	N/A
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	N/A
Checklist of supporting information	N/A

5.0 Measures taken to protect land	
N/A	
Checklist supporting information	of N/A

6.0 Pollution incidents that may have had an impact on land, and their remediation	
N/A	
Checklist supporting information	of N/A

7.0 Soil gas and water quality monitoring (where undertaken)		
N/A		
Checklist supporting information	of	N/A

8.0 Decommissioning and removal of pollution risk		
N/A		
Checklist supporting information	of	N/A

9.0 Reference data and remediation (where relevant)		
N/A		
Checklist supporting information	of	N/A

10.0 Statement of site condition

Using the information from sections 3 to 7, give a statement about the condition of the land at the site. This should confirm that:

N/A

- the permitted activities have stopped
- decommissioning is complete, and the pollution risk has been removed
- the land is in a satisfactory condition.

For full details, see H5 *SCR guide for applicants* v2.0 4 August 2008.

ANNEX A

Envirocheck Report number 226394344_1_1 dated 26 November 2019