



TARMAC
A CRH COMPANY

Asphalt Recycling Facility - Coxhoe Quarry

Bespoke Environmental Permit Application

Appendix 6 – Site Condition Report



Document Control

Version	Date	Report Reference	Author
Version 1	May 2025	TM.CH.0062.R02-A6 SCR	Swift Environmental Compliance Limited

This report has been prepared in good faith, with all reasonable skill, care and diligence, based on information provided or known available at the time of its preparation and within the scope of work agreement with the client.

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1 INTRODUCTION

1.1 Report Scope

1.1.1 Swift Environmental Compliance Limited (Swift) have been instructed by Tarmac Trading Limited (Tarmac) to prepare an application for a bespoke environmental permit for an Asphalt Recycling Facility at Coxhoe Quarry, Coxhoe, County Durham DH6 4BB (the Site).

1.1.2 Environment Agency application form B2 section 5b requests that '*provide the relevant sections of a site condition/baseline report if this applies*'. This Appendix of the bespoke environmental permit application includes the Site Condition Report (SCR) for the Asphalt Recycling Facility at the Site.

1.2 Report Content and Structure

1.2.1 This SCR has been prepared using the Environment Agency H5 Guidance and supporting Template. Sections 1-3 of the SCR Template are provided as part of this permit application. During the life of the permit sections 4 - 7 will be maintained.

1.2.2 The following resources have been used in the production of this SCR:

- Envirocheck Report (Order No. 373461224_1_1), presented at Appendix 1
- The British Geological Survey (BGS) geology viewer (https://geologyviewer.bgs.ac.uk/?_ga=2.188592672.921906549.1685955825-1139341888.1685955825);
- The Environment Agency's Flood Map for Planning service (<https://flood-map-for-planning.service.gov.uk/>);
- DEFRA's Magic Map service (<https://magic.defra.gov.uk/MagicMap.aspx>); and
- Department for Environment Food and Rural Affairs website (available at AQMAs interactive map (defra.gov.uk)).

1.3 Site Details

1.3.1 The site details are provided in Table 1 below.

Table 1 **Site Details**

1.0 Site Details	
Name of the Applicant	Tarmac Trading Limited
Activity Address	Coxhoe Quarry, Coxhoe, County Durham DH6 4BB
National Grid Reference	NZ 33979 35521
Document Reference and Dates for Site Condition Report at Permit Application and Surrender	TM.CH.0062.R02-A6 Site Condition Report
Document References for Site Plans (including location and boundaries)	TM.CH.0062.R02-A5 Environmental Management System-Summary

2 CONDITION OF LAND AT PERMIT ISSUE

2.1 Environmental Setting

2.1.1 The Asphalt Recycling Facility is situated in the northwestern section of the wider Coxhoe Quarry complex and is centred at National Grid Reference NZ 33979 35521, as illustrated at Appendix 1, Site Plans. The Site is located approximately 9km southeast of Durham and approximately 500m south of the village of Kelloe in County Durham.

2.1.2 The area surrounding the Site comprises predominately of agricultural and open land with pockets of dwellings and industrial activities beyond. The nearest residential properties are located at approximately 350m northeast of the proposed permit boundary at its closest point.

2.1.3 Access to the Site is via the west, off Brdyll Street and then through a network of internal haul roads within the wider Coxhoe Quarry complex. Brdyll Street connects to the A177 approximately 1km west from Coxhoe Quarry site entrance.

2.1.4 The Site is currently operational as an Asphalt Recycling Facility regulated by the Local Authority with a Part B Permit (Ref. DCC/P221/13/V4) issued to Tarmac Trading Ltd on 5 December 2001 by Durham County Council. This bespoke environmental permit application to the Environment Agency is applied for to replace the extant Part B Permit to enable a larger throughput of asphalt at the Site. The current Asphalt Recycling Facility have not received substantiated complaints from sensitive receptors.

2.2 Environmental Designations

2.2.1 There are **no designated habitats** including Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar or National Nature Reserves (NNR) **within 1 kilometre from the Site** according to information provided in the Envirocheck Report.

2.2.2 There are **two designated Sites of Special Scientific Interest's (SSSI) and one Local Nature Reserve located within 2 kilometres from the Site** listed in the Envirocheck Report:

- **Raisby Hill Grassland SSSI** - The nearest relevant habitat designation is the Raisby Hill Grassland designated as a SSSI in 1984 by Natural England as a 'Local Wildlife Site' located from approximately 60m west of the Site. Durham Wildlife Trust (available at <https://www.durhamwt.com/nature-reserves/raisby-hill-grassland>) states that:

'One of the few remaining examples of primary magnesian limestone grassland left in the country and is of national significance for its flora.

An abandoned quarry site, it has limestone grassland, two ponds surrounded by marsh and fen habitats and areas of developing ash woodland.

The primary grassland contains plants typical of this internationally rare habitat, including blue moor grass, fairy flax, devils-bit scabious, burnet saxifrage and columbine.

The quarry flora includes a large number of orchid species including the rare dark red helleborine, fragrant and pyramidal orchid. Common rockrose is abundant and supports a small colony of northern brown argus butterfly. Other butterflies seen in large numbers include dingy skipper, common blue, ringlet and small skipper.

The marshy grasslands and ponds are dominated by lesser pond sedge and provide good habitat

for dragonflies such as common hawker and darter.

The ash woodland contains a large number of mature wych elm providing food for the larvae white-letter hairstreak butterflies and the scrub and woodland are very good for warblers, in particular grasshopper warbler. Brown hare are regularly seen boxing on the limestone spoil screes.'

- **Raisby Hill Quarry SSSI** - Approximately 66m northeast is of the Site is Raisby Hill Quarry designated as a SSSI in 2020 by Natural England as part of a 'Geological Conservation Review'. Defra (available at [raisbyhillquarrysssicomfirmedcition.pdf](https://www.raisbyhillquarrysssicomfirmedcition.pdf)) states that Raisby Hill Quarry SSSI is considered to be of special interest for its nationally important geological features specifically;
'The principal significance of Raisby Hill Quarry is the presence of an excellent type section of the Raisby Formation showing its full vertical thickness and lateral variation in the northern and eastern quarry faces. The relationship with the underlying Marl Slate and overlying Ford Formation, presence of unaltered limestone, and a suite of secondary minerals provides an important insight into the depositional environment and post-depositional history of the lowermost English Zechstein Cycle 1.'
- **Raisby Way And Trimdon Grange Quarry** - is located approximately 1.7km southeast of the Site, designated as a Local Nature Reserve by Natural England in 2004 Durham Wildlife Trust (available at <https://www.durhamwt.com/nature-reserves/trimdon-grange-quarry>) states that:
'This abandoned quarry provides magnesian limestone flora, complimented by mature hawthorn scrub and developing ash woodland.
The flat quarry floor has been colonised by magnesian limestone grassland flora and dingy skipper butterflies thrive on the short turf, with its blue-moor grass, quaking grass, carline thistle, autumn gentian, and blue fleabane. Look out for the scarce but attractive bee orchid.
Adjacent to the quarry is the Raisby Way disused railway line, which provides excellent habitat for birds and butterflies such as common blue and small copper and also the beautiful burnet moth.
Ash woodland provides excellent breeding and roosting habitat for a variety of woodland birds.'

2.2.3 The Site is **not located in a designated Air Quality Management Area** according to the Department for Environment Food and Rural Affairs (DEFRA) website (available at <https://uk-air.defra.gov.uk/agma>).

2.3 Nitrate Vulnerable Zones

2.3.1 According to the Envirocheck Report the Site is **not located in a Nitrate Sensitive Area** and there is not a Nitrate Sensitive Area recorded within 1 kilometre of the Site boundary. The Site is **located in two Nitrate Vulnerable Zones** and the details are tabulated below.

Table 2 *Nitrate Vulnerable Zones*

Name	Type
Durham	Groundwater
Croxdale Beck from Source to Wear NVZ	Surface water

2.4 Visual and Cultural Designations

2.4.1 The Envirocheck Report indicates that there are **no National Parks, Areas of Outstanding Natural Beauty, Areas of Adopted Green Belt or World Heritage Sites** within 1 kilometre from the Site boundary.

2.4.2 Magic Map records indicate that there are **no registered Listed Buildings** within 1 kilometre from the Site boundary.

2.4.3 Magic Map records indicate that there are **two Scheduled Monuments** within 1 kilometre from the Site boundary and the details and location in relation to the Site are tabulated below.

Table 3 *Scheduled Monuments*

Name	Location	Distance and Direction from Site
Deserted medieval village and field system	Garmonsway	400m, south
Coxhoe medieval settlement	170m south west of East House Farm	535m, northwest

2.5 Geology

2.5.1 The Envirocheck Report indicates that the superficial geology and bedrock and faults underlying the Site and surrounding vicinity include:

Table 4 *Superficial Geology*

Rock Name	Rock Type	Min and Max Age
Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
Till, Devensian	Diamicton	Not Supplied - Devensian
Glaciofluvial Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian

Table 5 *Bedrock and Faults*

Rock Name	Rock Type	Min and Max Age
Raisby Formation	Dolostone	Not Supplied - GUADALUPIAN
Ford Formation	Dolostone	Not Supplied - GUADALUPIAN
Yellow Sands Formation	Sand	Not Supplied - Cisuralian
Pennine Middle Coal - Measures Formation	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
Rock Segments and Faults	-	-

2.5.2 The Envirocheck Report identifies faults and rock segments within 1 kilometre of the Site boundary although none are identified within the Site boundary.

2.5.3 The Envirocheck Report identifies 'infilled ground' within the Site boundary associated with previous quarrying activities, further details are provided in Section 3, Pollution History of this SCR.

2.6 Hydrogeology

2.6.1 The Envirocheck Report has no data available regarding the **superficial aquifer** underlying the Site. The nearest classified superficial aquifer is on the eastern boundary of the Site and is identified as '**Secondary Undifferentiated**' described as: '*assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type*'.

2.6.2 The **bedrock aquifer** underlying the Site and the immediate surrounding area is identified as '**Principal Aquifer**' the Environment Agency website describes a Principal Aquifer as: '*Principal and secondary aquifers provide significant quantities of drinking water, and water for business needs. They may also support rivers, lakes and wetlands.*'

2.6.3 Magic Map indicates that the Site is **located in a Groundwater Source Protection Zone 3**. A Groundwater Source Protection Zone 3 is described as the Total Catchment Zone and the Environment Agency provide the following definition:

'This is the area around a supply source within which all the groundwater ends up at the abstraction point. This is the point from where the water is taken. This could extend some distance from the source point.'

2.6.4 There are no Groundwater Source Protection Zones 1 or 2 (Inner and Outer Zones) within 1 kilometre from the Site boundary.

2.7 Surface Water

2.7.1 The Site is located in the River Wear management catchment. The Envirocheck Report identifies the nearest surface water feature approximately 243m northwest of the Site boundary.

2.8 Water Abstractions

2.8.1 The Envirocheck Report identifies no water abstraction licences within 500 metre of the Site boundary, although 3 water abstraction licences are recorded within 1 kilometre of the Site boundary and these are tabulated below.

Table 6 **Water Abstraction Licences**

Operator	Licence Details	Abstraction Details	Distance and Direction from Site
Tarmac Northern Ltd	Licence No: 1/24/03/025 Abstraction: Mineral Products: Dust Suppression	Source: Groundwater Daily Rate (m3): Not Supplied	504m East

	Abstraction Type: Water may be abstracted from a single point	Yearly Rate (m3): Not Supplied	
Raisby Quarries Ltd	<p>Licence No: 1/24/03/016</p> <p>Abstraction: Extractive: Dust Suppression</p> <p>Abstraction Type: Water may be abstracted from a single point</p>	<p>Source: Surface</p> <p>Daily Rate (m3): 165</p> <p>Yearly Rate (m3): 39600</p>	652m West
Hope Construction Materials Ltd	<p>Licence No: 1/24/03/025</p> <p>Abstraction: Mineral Products: Dust Suppression</p> <p>Abstraction Type: Water may be abstracted from a single point</p>	<p>Source: Groundwater</p> <p>Daily Rate (m3): Not Supplied</p> <p>Yearly Rate (m3): Not Supplied</p>	661m East

2.9 Discharge Consents

2.9.1 The Envirocheck Report identifies 7 licenced discharge consents to controlled waters within 500 metres from the Site boundary. In addition, there are 4 revoked licences listed in the Envirocheck Report and these are all tabulated below.

Table 7 Discharge Consents

Operator	Licence Details	Discharge Details	Distance and Direction from Site
Breedon Trading Limited	<p>Reference: Eprmp3027xk</p> <p>Discharge Type: Trade Discharges - Site Drainage</p> <p>Discharge Environment: Land/Soakaway</p>	<p>Receiving Water: Land Via Wetland System</p> <p>Status: New issued under EPR 2010</p>	114m Southeast
Northumbrian Water Limited	<p>Reference: 243/A/0698</p> <p>Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company</p> <p>Discharge Environment: Freshwater Stream/River</p>	<p>Receiving Water: Coxhoe Beck</p> <p>Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)</p>	282m Northwest

Northumbrian Water Limited	Reference: 243/A/0699 Discharge Type: Unspecified Discharge Environment: Freshwater Stream/River	Receiving Water: Coxhoe Beck Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)	282m Northwest
Northumbrian Water Limited	Reference: 243/E/0256 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River	Receiving Water: Coxhoe Beck Status: Transferred from Rivers (Prevention of Pollution) Act 1951-1961	357m North
Northumbrian Water Limited	Reference: 243/0965 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River	Receiving Water: Coxhoe Beck Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)	357m North
Northumbrian Water Limited	Reference: 243/1004 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River	Receiving Water: Coxhoe Beck Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)	459m North
Northumbrian Water Limited	Reference: 243/1014 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River	Receiving Water: Coxhoe Beck Status: Varied under EPR 2010	465m North

2.10 Flooding

2.10.1 The Environment Agency provide flood maps (available at <https://flood-map-for-planning.service.gov.uk/>) showing river and sea flooding data.

2.10.2 The Environment Agency's Flood Map identifies the Site to be in a Flood Zone 1. **Flood Zone 1** is defined as '*has the lowest risk, indicating a less than 0.1% annual probability of flooding from rivers and the sea*'.

2.10.3 The Envirocheck Report confirms the risk of groundwater flooding is recorded as '*limited potential for groundwater flooding to occur*'.

3 POLLUTION HISTORY

3.1.1 The Envirocheck Report, at Appendix 1, shows that there have been no reported pollution incidents within the Site boundary. There are 2 pollution incidents recorded by the Environment Agency in 1990's within 1 kilometre of the Site boundary.

Table 8 *Pollution Incidents*

Distance and Direction from Site	Details	Classification
352m North	Incident Date: 01/10/1996 Incident Identification: NW960303, Water Company Sewage: Storm Overflow. Pollution found, no fish killed.	Water Impact: Category 3 (Minor incident)
772m North	Incident Date: 17/08/1992 Incident Identification: 243/002743 Pollutant: Not given. Receiving water: freshwater stream/river.	Water Impact: Category 3 (Minor incident)

3.1.2 The Envirocheck Report states that there are no sites determined as 'Contaminated Land' or 'Regulated Explosive Sites' within 500 metre of the Site boundary. In addition, there are no Planning Hazardous Substance Consents or Enforcements; Control of Major Accident Hazards (COMAH) sites or Notification of Installations Handling Hazardous Substances (NIHHS) within 500 metre of the Site boundary.

3.1.3 The Envirocheck Report identifies 2 licenced waste management facilities within 500 metres of the Site boundary and these are tabulated below.

Table 9 *Waste Management Facilities*

Location	Details	Status
90m Southwest	Operator: Hope Construction Materials Ltd Installation Name: Coxhoe Quarry, Physical Treatment Facility Permit Number: 402735	Issue Date: 06/06/2016 Status: Effective
144m Southwest	Operator: Breedon Trading Limited Installation Name: Raisby Quarry, Management of inert or extractive waste at mine Permit Number: 102839	Issue Date: 17/06/2011 Status: Effective

3.2 Evidence of historic contamination

3.2.1 On the Site itself, there have been historical land-uses identified that were potentially contaminative. These

records have been digitised from historical Ordnance Survey mapping from the original un-grouped map features in the Envirocheck Report provided at Appendix 1. Land-uses identified within 250 metres of the Site boundary in the Envirocheck Report provided at Appendix 1 that were potentially contaminative are tabulated below. The Site is currently operational as an Asphalt Recycling Facility regulated by the Local Authority with a Part B Permit (Ref. DCC/P221/13/V4) issued to Tarmac Trading Ltd on 5 December 2001.

3.2.2 Historical maps of the Site obtained from the Envirocheck Report, provided at Appendix 1 have been reviewed as part of this SCR. The historical plans date back to 1857 and details on the land-uses are provided, refer to the Table below.

Table 10 Sequence of Historical Activities on Site

Date and Map Scale	Land Use
1857-1888 - 1:2,500	The site is within woodland with no development present.
1861 - 1:10,560	As above. An area labelled 'quarry' is located within 250m northeast of the Site boundary. Pockets of woodland and agricultural land are the primary land-uses surrounding the site. The Eastern Railway Hartlepool Branch is located over 250m south of the Site. Approximately 250m north east 'East Hetton' is labelled. Coxhoe Wood and Coxhoe Hall are located circa. 750m northwest of the Site.
1897 - 1:2,500	The woodland is largely removed. 'East Hetton' residential properties are developed. A 'mineral railway' is located circa. 250m northwest of the Site.
1898 - 1:10,560	The Site is within the Quarry footprint. The wider locality is largely unchanged.
1919 - 1:2,500	Quarry extension to the south section of the Site.
1923 - 1:10,560	Largely unchanged.
1939 - 1:2,500	Largely unchanged.
1951 – 1952 - 1:10,000	The site is unchanged. Residential housing developed between 500m to 1km north of the Site at Kelloe. Sewage treatment works is located circa. 300m north of the Site. East Hetton not labelled.
1962 – 1:2,500	Quarrying activities throughout the site boundary.
1966 – 1967 - 1:10,000	Largely unchanged. Coxhoe Hall and East Hetton have been removed.
1978 - 1:2,500	Largely unchanged.
1980 – 1983 - 1:10,000	Largely unchanged.
1984 - 1:2,500	Largely unchanged.
1990 - 1:2,500	Largely unchanged.
1992 – 1993 - 1:10,000	Largely unchanged. Conveyors labelled to the east of the Site. Mineral Railway to the north labelled as 'dismantled'.
1996 - 1:2,500	Tanks and Hopper labelled within the southeast of the Site.
1999 – Aerial	Aggregate storage, associated tanks and infrastructure on Site.
2000 - 1:10,000	Largely unchanged.
2006 - 1:10,000	Largely unchanged.
2024 - 1:10,000	Largely unchanged, two buildings erected within Site boundary.

3.2.3 The summary of historical maps indicates that Coxhoe Quarry has been quarried from prior to 1861 and quarrying activities were recorded on the Site from 1898.

4 CONDITION OF LAND AT PERMIT ISSUE

4.1 Overview

4.1.1 The permitted activities on Site are tabulated below.

Table 11 Permitted Activities

Permitted activities	Environmental Permit for an Asphalt Recycling Facility
Non-permitted activities	Activities associated with the wider Coxhoe Quarry.

4.2 Substances

4.2.1 Oils, grease and flocculants will be required for maintenance of the treatment facility. These substances are stored appropriately on Site.

4.2.2 No substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) Regulations will be used or stored at the Site.

APPENDIX 1 – ENVIROCHECK REPORT



S W I F T

ENVIRONMENTAL
COMPLIANCE