

wardell-armstrong.com

ENERGY AND CLIMATE CHANGE
ENVIRONMENT AND SUSTAINABILITY
INFRASTRUCTURE AND UTILITIES
LAND AND PROPERTY
MINING AND MINERAL PROCESSING
MINERAL ESTATES
WASTE RESOURCE MANAGEMENT



HELLENS LAND LIMITED

NEWBOTTLE STREET, HOUGHTON-LE-SPRING

HABITATS RISK ASSESSMENT

MARCH 2023

DATE ISSUED: MARCH 2023
JOB NUMBER: NT16098
REPORT NUMBER: 0006
VERSION: V2.0
STATUS: FINAL

HELLENS LAND LIMITED

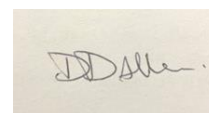
NEWBOTTLE STREET, HOUGHTON-LE-SPRING

HABITATS RISK ASSESSMENT

MARCH 2023

PREPARED BY:

Dominiqua Drakeford- Principal Waste &
Allen Resource Consultant



REVIEWED BY:

Luke Prazsky Service Director – Waste
Resource Management



APPROVED BY:

Luke Prazsky Service Director – Waste
Resource Management



This report has been prepared by Wardell Armstrong LLP with all reasonable skill, care and diligence, within the terms of the Contract with the Client. The report is confidential to the Client and Wardell Armstrong LLP accepts no responsibility of whatever nature to third parties to whom this report may be made known.

No part of this document may be reproduced without the prior written approval of Wardell Armstrong LLP.



CONTENTS

1 INTRODUCTION 1

2 SITE LOCATION AND SITE SETTING 1

3 PRIORITY HABITAT 2

4 CONCLUSION 4

1 INTRODUCTION

- 1.1.1 Hellens Land Limited have instructed Wardell Armstrong to assist in the application for a new bespoke environmental permit for the permanent deposit of waste as a recovery operation.
- 1.1.2 The proposal is for the construction of a suitable development platform for commercial development at Newbottle Street, Houghton-le-Spring, which is within Former Houghton Colliery Site.
- 1.1.3 Given the local presence of Biodiversity Action Plan (BAP) Priority Habitat this report considers the risk from the proposed waste management operations on that receptor. Potential impacts arising from the proposed waste activities are outlined in section 3.3.

2 SITE LOCATION AND SITE SETTING

- 2.1.1 The proposal is for a proposed development of a commercial development at Newbottle Street, Houghton-le-Spring. The site is located to the south of Newbottle Street (A182), northeast of Houghton-le-Spring town centre, in Tyne and Wear. The National Grid Reference (NGR) for this site is NZ 33812 50382.
- 2.1.2 The surrounding areas of the site mostly comprise of mixed commercial and residential developments. To the east of the site there is a quarry, Houghton Hill and open fields. Vehicular access to the site is accessible via Newbottle Street behind a fuel station.
- 2.1.3 The site for the scheme is an irregular, elongated plot orientated roughly northwest to south east, covering an area of approximately 3.35 hectares.
- 2.1.4 The site lies on an historical landfill site, formally known as Houghton Colliery, and it is understood that the historic landfill site was associated with the reclamation of the former colliery and the landfilling of inert waste. The site was operated by the City of Sunderland, and the licence was surrendered on the 7th April 1999.
- 2.1.5 As a result of the former use of land, the made ground is classified as waste, and therefore a permit is required for the cut and fill operation and allow the reuse of materials on site (permanent deposit of material).

3 PRIORITY HABITAT

- 3.1.1 A review of data available on the Defra MAGIC MAP site confirms that there are areas designated as Priority Habitat, specifically mixed broadleaved deciduous woodland. These areas of deciduous woodland designated as Priority Habitat are within 100m of the site, protected under the Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance.
- 3.1.2 The UK Biodiversity Action Plan (BAP) Priority Habitat Description¹ describes Lowland Mixed Deciduous woodland as woodland growing on the full range of soil conditions, occurring largely within enclosed landscapes with relatively low altitudes. There are various canopy variations which fall within the BAP designation. The data providing the exact variation could not be obtained however these habitats are sensitive to smothering from dusts.
- 3.1.3 The three areas of woodland within 100m of the site are show in Plate 1, with the site boundary indicated by a red line boundary. Adjacent to the southwest of the site there is an area of woodland which spans approximately 400m of the site boundary. Approximately 45m to the north of the site is another small area of woodland, and 70m to the northeast of the site lies another small area of woodland.

¹ [Lowland mixed deciduous woodland \(UK BAP Priority Habitat description\) \(jncc.gov.uk\)](https://jncc.gov.uk/lowland-mixed-deciduous-woodland-uk-bap-priority-habitat-description)



Plate 1: Site boundary indicated in red, areas of green show location of protected deciduous woodland. Copyright Ordnance Survey©

3.2 Waste Activities

- 3.2.1 The waste activities to be carried out on site comprise of excavation of existing in-situ deposited waste materials and treatment of the materials prior to re-deposit. Treatment of materials will include screening and crushing, which may generate fugitive dust emissions. The treated waste materials will then be re-deposited and compacted to form a suitable level of fill for the construction platform.
- 3.2.2 Due to the former land use, waste handled on site will comprise of former colliery spoil, and likely to contain other waste materials associated with inert landfill including concrete, bricks, tiles, ceramics, soils, stones.
- 3.2.3 The timescales for the waste activities to be completed is sixteen weeks and the entire project 12 months, during that time the work will be carried out in stages.
- 3.2.4 There is a risk of fugitive dust emissions from the activities during the works, through the excavation, treatment (including crushing), and tipping/compaction works. The risk of dust and the impact on the BAP habitat is described in the following section.

- 3.3 Potential Harm Arising from On Site Activities - Potential Fugitive Emissions of Dust
- 3.3.1 While there will be no point source emissions to air, there is a potential for fugitive emissions of dust to arise from the waste activities, as outlined in section 3.2.
- 3.3.2 The Environment Agency's technical Guidance Note, 'M17: Monitoring Particulate Matter in Ambient Air around Waste Facilities'², describes the bulk generation of dust can cause smothering to occur which has potential to impact on vegetation through the build-up of dust emissions. The effects of general, non-toxic particulate matter on ecological receptors have not been subject to extensive research and therefore little published guidance is available. The guidance summaries that 'relatively insensitive vegetation species will not be significantly affected by smothering at dust deposition levels below about 200 mg m⁻² day⁻¹, i.e. the human nuisance custom and practice guideline'.
- 3.3.3 As part of the environmental controls to be in place at the site, a Dust Management Plan has been developed which outlines the dust monitoring regime, and suppression systems such as dampening down of stockpiles should that be required, to mitigate dust emissions exceeding any levels which may cause human nuisance beyond the site boundary.
- 3.3.4 The wind is predominantly directed from the west, away from the southwestern area of deciduous woodland adjacent to the site. The site will operate in accordance with the Dust Management Plan, which includes a dust monitoring regime to monitor dust through the phases of the development.
- 3.3.5 During prolonged periods of dry weather, additional mitigation will be put into place including an increase in dust monitoring at the site boundary, including the area of the boundary that is adjacent to the deciduous woodland.

4 CONCLUSION

- 4.1.1 The woodland is most likely to be impacted by fugitive dust emissions. However the site will operate in accordance with the Dust Management Plan, which includes mitigation and suppression measures to avoid the generation of dust ensuring no impact on the receptor.

² [NEW M17 TEXT \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

4.1.2 Through the mitigation measures set out during the waste operations, it is therefore considered low risk to the deciduous woodland.

STOKE-ON-TRENT

Sir Henry Doulton House
Forge Lane
Etruria
Stoke-on-Trent
ST1 5BD
Tel: +44 (0)1782 276 700

BIRMINGHAM

Two Devon Way
Longbridge Technology Park
Longbridge
Birmingham
B31 2TS
Tel: +44 (0)121 580 0909

BOLTON

41-50 Futura Park
Aspinall Way
Middlebrook
Bolton
BL6 6SU
Tel: +44 (0)1204 227 227

BRISTOL

Temple Studios
Temple Gate
Redcliffe
Bristol
BS1 6QA
Tel: +44 (0)117 203 4477

BURY ST EDMUNDS

Armstrong House
Lamdin Road
Bury St Edmunds
Suffolk
IP32 6NU
Tel: +44 (0)1284 765 210

CARDIFF

Tudor House
16 Cathedral Road
Cardiff
CF11 9LJ
Tel: +44 (0)292 072 9191

CARLISLE

Marconi Road
Burgh Road Industrial Estate
Carlisle
Cumbria
CA2 7NA
Tel: +44 (0)1228 550 575

EDINBURGH

Great Michael House
14 Links Place
Edinburgh
EH6 7EZ
Tel: +44 (0)131 555 3311

GLASGOW

24 St Vincent Place
Glasgow
G1 2EU
Tel: +44 (0)141 428 4499

LEEDS

36 Park Row
Leeds
LS1 5JL
Tel: +44 (0)113 831 5533

LONDON

Third Floor
46 Chancery Lane
London
WC2A 1JE
Tel: +44 (0)207 242 3243

NEWCASTLE UPON TYNE

City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP
Tel: +44 (0)191 232 0943

TRURO

Baldhu House
Wheal Jane Earth Science Park
Baldhu
Truro
TR3 6EH
Tel: +44 (0)187 256 0738

International office:

ALMATY

29/6 Satpaev Avenue
Hyatt Regency Hotel
Office Tower
Almaty
Kazakhstan
050040
Tel: +7(727) 334 1310