

CONTENTS

1. Introduction

Proposed Development

Purpose of the Non-Technical Summary

2. Scheme Description

3. Summary of Environmental Impacts

1.0 INTRODUCTION

- 1.0.1 This document forms a non-technical summary (NTS) of the Environmental Permit (EP) and is submitted in connection with a submission of details for the environmental permit for the Chadwich Lane Quarry under the Environmental Permitting Regulations 2016.
- 1.0.2 The application is to allow for landfill of inert waste in separate phases.
- 1.0.3 The site has a valid planning permission issued by Worcestershire County Council for restoration by landfill.

1.1 Proposed Development

- 1.1.1 In summary the application at Chadwich Lane Quarry Landfill seeks approval of the scheme to reclaim the site by importation of inert landfill.

1.2 Purpose of the Environmental Permit (EP)

- 1.2.1 The EP application has been prepared on behalf of Chadwich Lane Quarry Limited the operators of the quarry and landfill by Enviroarm Limited in accordance with the Environmental Permitting Regulations 2016.
- 1.2.2 The purpose of the EP is to ensure that:
- the developments details sufficiently describe the proposed scheme;
 - relevant environmental issues are assessed appropriately;
 - potential environmental impacts, associated with either the construction, operational and aftercare phases of the proposed scheme, are identified, together with appropriate mitigation measures;
 - the significance of any residual effects is evaluated; and interested parties are given the opportunity to address any relevant issues.
- 1.2.3 The EP application seeks to present the scheme proposals and the results of specialist assessments in a clear and unbiased manner and has been produced to accompany the application.

- 1.2.4 There have been pre-application consultations with the Minerals Planning Authority, (WCC), and the Environment Agency, undertaken through the formal Pre-Application Discussion (PAD).
- 1.2.5 The key potential environmental and related impacts to be assessed in detail in connection with the working of the landfill and as a result the ES examines the following issues in detail:

Environmental Setting, Site Design
Hydrogeological Risk Assessment
Stability Risk Assessment
Landfill Gas Risk Assessment
Amenity Risk and Nuisance Assessment which has included assessments of:
Particulate Matter/Dust
Noise
Highways and Mud

2.0 SCHEME DESCRIPTION

2.1 Planning History

The site has been historically operated as a sand workings dating back next door with the first recorded operations shown in the east corner. Major workings then recommenced in the late 80's following granting of a new planning permission.

Listed below are the main mineral planning consents relating to and associated with, the extraction of sand and restoration by landfill at the Chadwich Lane Quarry;

404360(B7745)	Extraction of sand at Chadwich Lane issued 28 th May 1983
107108(B98/0082)	Extraction of sand and inert landfill in the extraction of sand in accordance with the Environment Act 1995.9 th July 1998
13/000061CM	Extraction of sand and inert landfill. 11 th July 2013
18/000036/CM	Extraction of sand and inert landfill, next to Chadwich Lane Quarry

2.2 Proposed Operations

2.2.1 In summary the application at Chadwich Lane Quarry Landfill seeks approval of the scheme to reclaim the site by importation of inert waste to restore the site.

2.3 The Proposal

2.3.1 This includes details relating to the following.

- The proposed waste types for the landfill area be inert non-reactive wastes which include Tax Qualifying Exempt Materials.
- The base of the quarry will be set at 162mAOD and the barrier will be 1 metre in thickness meaning that waste will start of 163mAOD.
- A skip will be located on site for load rejection.

- The site will have 4 operational phases in the base and one operational phase above ground to complete the landfill final landform. The time taken for all sand extraction, lining, infilling and restoration is 15 years.
- The site has valid planning permission until 2042.
- The final landform and end use is to be agriculture.
- The site permit requires an engineered geological barrier on the base and sides of the site.
- No groundwater pumping occurs near to the site and the nearest licensed abstraction is 1.5km south of the site located at Wildmoor.
- The site is not within a Source Protection Zone.
- The proposed final landform is to form a dome so as to encourage surface water run-off from the capped and restored areas and is presented at Drawing ESID 5.

2.4 Time Scales

- 2.4.1 The planning permission has been granted and initial development works have commenced so that on issue of the Environmental Permit the site will be fully operational on day one.
- 2.4.2 The scheme as submitted is designed to comply with the permission 18/000036/CM which is extant up to 2042.

2.5 Site Design

Base and Side Wall Engineering

- 2.5.1 It is proposed to re-work clays and mudstones within the Wildmoor Sandstone to form the geological barrier which will be placed in accordance with the Construction Quality Assurance Plan placed in 270mm-300mm layers and compacted as per the Highways Specification. Source testing has been carried out to demonstrate the suitability of the on-site clays for engineering

Leachate Drainage

- 2.5.2 The site does not require leachate drainage due to inert waste acceptance.

Gas Monitoring

- 2.5.3 Internal gas monitoring points are to be retro drilled through the waste mass for completion monitoring of each phase or built up progressively with the waste mass.

Capping System

- 2.5.4 The site does not require an engineered cap.

Restoration

- 2.5.5 The site will have a minimum 0.3 metre thickness of soils placed above the inert sub soils which will include original soil stripped as part of the original operations. The soils will be ripped so that this allows underdrainage of soil waters away from the cap and follow the contours. The final design is for a field when planted back to grassland.

Monitoring

- 2.5.6 The site will be monitored during the life of operations and for an agreed post closure period. The impact on groundwater and surface water will be monitored quarterly. The site will also be monitored long term for any potential gas production and to assess migration.
- 2.5.7 During operations regular noise, monitoring, dust monitoring and observations of highways for mud deposition will be undertaken on a regular basis.
- 2.5.8 The site will have a financial provision placed on it pre commencement to ensure that sufficient funds are available to cap the site and to monitor the site for the agreed period post closure.

3.0 SUMMARY OF ENVIRONMENTAL IMPACTS

3.1 The tables below set out the impacts

ENVIRONMENTAL ISSUE	PREDICTED ENVIRONMENTAL IMPACT
Restoration and Phasing	No long term significant adverse impact. Positive impact through the completion of the quarry and increasing biodiversity and new habitat creation. Accords with Special Circumstances for appropriate development in Green Belt.
Ecology	No long term significant adverse impact. Positive gains with overall schemes as proposed
Noise	No adverse impact on the amenity of nearest properties with no additional mitigation required
Dust I Air Quality	No long term significant adverse impact.
Highways	No long term significant adverse impact.
Geology	No long term significant adverse impact.
Hydrogeology	No long term significant adverse impact.
Archaeology/Cultural Heritage	No impact
Flood Risk	No long term significant adverse impact.
Agricultural Land Classification & Soils	No long term significant adverse impact.
Socio-economic	Positive impact on both the local and wider economy.

Environmental Issue	Existing Baseline	Assessment Methodology	Predicted Environmental Impact	Mitigation and Management
Phasing and Restoration	Phasing and Restoration Plan	The methodologies adopted for this Landscape Character and Visual Assessment are based on guidance given in the publication 'Guidelines for Landscape and Visual Impact Assessment' by the L.I. and I.E.M.A.' (Second Edition) 2002, and 'Landscape Character Assessment: Guidelines for England and Scotland' by Scottish National Heritage and The Countryside Agency (Natural England) 2002.	No long term significant adverse affects Positive impact in that landscape character benefits gained from improvements made as part of the final restoration. Acceptable development in Green Development based on Special Circumstances	Operations screened by existing hedgerows and boundary vegetation and enhanced with landscape noise attenuation bunds Progressive restoration of the site. Local landscape enhancement through planting.
Ecology		Recognised methodology, principally based upon a Phase 1 habitat survey (JNCC, 1993) with target notes	In conclusion, given the nature of the site and the proposals, no significant impacts are predicted with a high level of certainty, since the application area is considered to be of low quality and most features have been lost due to quarrying	Opportunity for enhanced habitat creation as part of restoration strategy and ongoing in association for the landfill area.

Environmental Issue	Existing Baseline	Assessment Methodology	Predicted Environmental Impact	Mitigation and Management
Noise	Refer to submitted Noise Assessment	The report was prepared in accordance with relevant policies in the Mineral Local Plan, policies contained in MPS 2 “Controlling and Mitigating the Environmental Effects of Mineral Extraction in England” and in accordance with relevant British Standards (BS).	The conclusion is that worst-case scenario noise levels from normal extraction and processing operations without exception would not exceed background noise levels by more than 10dB(A), which is considered a normally justifiable limit for daytime mineral extraction under MPS 2. Operations are therefore considered acceptable.	Specific mitigation is not required due to screening bunds to be left in situ. Hours of operation. Annual monitoring to be put in place to ensure effective site management is maintained.
Dust Air Quality	Refer to submitted Particulate Risk Assessment	The assessment was undertaken in accordance with the relevant development plan policies and the report prepared having full regard to prominent wind speed and metrological data	The report finds it unlikely that any decrease in local air quality will occur. Dust occurrence will be limited and of a short duration, and will be minimised further by implementation of detailed management plan	The proposed methods of dust suppression are based on Enviroarm’s and operator’s experience of dealing with the current haul road on site in a wide variety of situations. Apply the particulate management plan

Highways	Refer to submitted Mud Management Plan	The methodology applied is bespoke. No major concerns raised by the Highways Department at the pre-application stage.	On balance the expected number of vehicle movements is to be within the permitted levels with no impact on highway network. Mud could be deposited on the Highway. Mud management plan has been developed	New upgraded access to be constructed Wheel wash On site road sweeper Visual daily inspections
Hydrogeology	Refer to submitted Hydrogeological Investigation	Desk based study, site visit and fieldwork, trial pits and borehole data.	None	Mitigation is required. The site is designed with a 1 metre thick engineered barrier. On completion each phase is to be progressively restored. Waste Acceptance Criteria testing and acceptance for imported waste
Socio-economic	Existing business and it's position within the wider economy	Employment records Business Plan	Positive impact through retention of jobs, generation of new jobs and continuation of service to the wider economy	N/A