

# H EVASON & CO

# DORRINGTON QUARRY LANDFILL SITE



# NON-TECHNICAL SUMMARY 2021 REF: ARM/HE/DQ/NTS/1.00/2021

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## 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 Dorrington Quarry Landfill Site under the Environmental Permitting Regulations 2016.
- 1.0.2 The application is to allow for landfill of inert waste within two phases at Dorrington Quarry and to have an inert recycling facility to the north of the tributary of the Cound Brook. The site has been proposed with a 1 metre geological barrier and an unsaturated zone above the highest recorded groundwater levels.
- 1.0.3 The site will have a geological barrier on the base which will achieve 1  $\times 10^{-7}$ m/s and a side wall seal that has a permeability of 1 x 10<sup>-7</sup>m/s.
- 1.0.4 The site will accept strictly inert wastes for disposal in the landfill area and will accept up to 25,000 tonnes per annum.
- 1.0.5 The northern part of the site above the tributary of the Cound Brook is to be used for inert treatment of construction and demolition type wastes and will involve crushing and screening of materials and the throughput is designed at 25,000 tonnes per annum.
- 1.0.6 The site has a valid planning permission issued by Shropshire County Council for restoration by landfill and for inert treatment of waste which remains in perpetuity.
- 1.0.7 The site will be supported by a non-hazardous waste treatment facility which under this application including dry screening and crushing of construction and demolition wastes and other inert waste streams.

#### 1.1 **Proposed Development**

1.1.1 In summary the application at Dorrington Quarry Landfill seeks approval of the scheme to reclaim the site by importation of various inert waste types to produce secondary aggregates, and to restore the site by inert landfill.

#### **1.2** Purpose of the Environmental Permit (EP)

- 1.2.1 The EP application has been prepared on behalf of H Evason & Co 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 planning application.
- 1.2.4 There have been pre-application consultations with the Minerals Planning Authority, (Shropshire County Council), and the Environment Agency, undertaken through the formal Pre-Application Discussion (PAD). An informal screening opinion was provided by the EA setting out the basic requirements for the application. It is these responses and subsequent discussions with the respective consultees that have provided the basis for the preparation of the EP Risk Assessments which have been used to develop the site management plans and associated drawings.
- 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 Environmental Permit 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 Environmental Management System Working Plan for Inert Treatment and associated Management Plans

#### 2.0 SCHEME DESCRIPTION

#### 2.1 Planning History

The site has a planning permission allowing for landfill and inert recycling at the site.

#### 2.2 **Proposed Operations**

2.2.1 In summary the application at Dorrington Quarry Landfill seeks approval of the scheme to reclaim the site by importation of inert material up to 25,000 tonnes per annum and to treat inert materials and construction and demolition wastes up to 25,000 tonnes per annum for production of secondary recycled aggregates.

Storage of materials will be up to 2,500 tonnes at any one time.

#### 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.
- A non-hazardous waste treatment facility will be operated to process construction and demolition wastes to recovery secondary aggregates. The site will have a washing plant, mobile crushers and screeners.
- A skip will be located on site for load rejection.
- The landfill site will have 2 operational phases in the base. The time taken for all extraction, lining, infilling and restoration is 15 years.
- The site has valid planning permission until 2042. The layout of the landfill/recycling/treatment area is presented at Drawing ESSD 2.
- The final landform and end use is to be open space and woodland in accordance with Local Development Framework prepared for Shropshire County Council, set out on Drawing ESSD 5.
- The landfill site requires an engineered geological barrier.
- No groundwater pumping occurs near to the site.
- The site is not within a Source Protection Zone 1 or 2.
- The proposed final landform is to reinstate the site to grazing.

- The inert treatment area can remain in perpetuity.
- All soils are to be stripped as per the requirements set out in the Planning Permission and replaced to MAFF/ADAS standards. There is no requirement for importation of soils for restoration and therefore no requirement for a Waste Recovery Plan.

#### 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.

#### 2.5 Site Design

#### General

2.5.1 It is proposed line the base and sides.

#### Base and Side Wall Engineering

2.5.2 It is proposed to import suitable clays and soils with a clay content and 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. The base will achieve a permeability of 1 x 10<sup>-7</sup>m/s and be 1 metre thick and the side walls will be progressively built up and achieve a permeability of 1 x 10<sup>-7</sup>m/s.

#### Leachate Drainage

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

#### Gas Monitoring

2.5.4 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. The site has boreholes outside and a further 3 gas monitoring boreholes are proposed at key receptor sensitive locations

#### Capping System

2.5.5 The site does not require and engineered cap.

Dorrington Quarry Inert Landfill and Inert Waste Treatment Non-Technical Summary Environmental Permit Application

#### Restoration

2.5.6 The site will have a minimum 1.0 metre thickness of soils placed above the cap. 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 dome which when planted is grassland and trees. All soils are to be stripped as per the requirements set out in the Planning Permission and replaced to MAFF/ADAS standards. There is no requirement for importation of soils for restoration and therefore no requirement for a Waste Recovery Plan.

#### Monitoring

- 2.5.7 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 regularly in conjunction with levels and quality of leachate inside the site. The site will also be monitored long term for any potential gas production and to assess migration.
- 2.5.8 During operations regular noise, monitoring, dust monitoring and observations of highways for mud deposition will be undertaken on a regular basis.
- 2.5.9.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. 500 metre long concrete road
Geology	No long term significant adverse impact. SINC to be preserved
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	Existing Baseline	Assessment	Predicted	Mitigation and
Issue		Methodology	Environmental	Management
			Impact	
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	ECIA	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	Existing Baseline	Assessment	Predicted	Mitigation and
Issue		Methodology	Environmental	Management
			Impact	
Noise	Refer to submitted Noise Assessment	The report was prepared in accordance with relevant policies in the Mineral Local Plan, policies contained in	The conclusion is that worst-case scenario noise levels from normal extraction and processing operations	Specific mitigation is not required due to screening bunds to be left in situ.
		MPS 2 "Controlling and Mitigating the Environmental Effects of Mineral Extraction	without exception would not exceed background noise levels by more than	Hours of operation.
		In England <sup>®</sup> and in accordance with relevant British Standards (BS).	10dB(A), which is considered a normally justifiable limit for daytime mineral extraction under MPS 2.Operations are therefore considered acceptable.	Annual monitoring to be put in place to ensure effective site management is maintained.
Dust I 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 meteorological 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



#### Legend





## Legend

Permit Boundary
H Evason Landfill and Inert Treatment Facility
Domestic Dwellings
Open Spaces, Parks and Farmland
Industrial and Commercial Development
Major Highways
Farm
Surface Water Bodies
Shrewsbury to Hereford Railway
 500 Metres from Site

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## Legend

#### Restoration Contours



ENVIROARM LIMITED

ESSD 7



Legend		
$\bigcirc$ <sup>BH 5</sup>	Groundwater Monitoring	

