



Datchet Quarry

Environmental Permit Application

Waste Recovery Plan

January 2019

Prepared on behalf of CEMEX UK Materials Limited





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1.0 Introduction

1.1 Report Context

1.1.1 WYG has been commissioned to prepare and submit a Waste Recovery Plan (WRP) on behalf of CEMEX UK Materials Limited (CEMEX) for Datchet Quarry.

1.1.2 The Royal Borough Windsor and Maidenhead has granted Planning Permission for the importation of suitable inert material in order to achieve the restoration scheme as approved under planning permission reference 13/01667 (See Appendix A). CEMEX seeks to gain a bespoke waste recovery permit for the permanent deposit of inert waste to land at Datchet Quarry to facilitate the restoration scheme approved under this planning permission.

1.1.3 CEMEX propose to progressively restore the site to ensure compliance with the approved Plan Reference Numbers detailed within Condition 46 and furthermore Condition 4 of the planning permission which states:

“No development shall commence until a Soil Management Plan (SMP) covering soil stripping, handling, movement and the machinery to be used has been submitted to and approved in writing by the Local Planning Authority. The extraction and restoration shall be carried out in accordance with the approved details and no excavation shall take place nor shall any area of the site be traversed by heavy vehicles or machinery for any purpose or operation [except for the purpose of stripping that part or stacking of topsoil in that part of the site] unless all available topsoil has been stripped from that part of the site and stored in accordance with the details agreed under this condition.”

1.1.4 The Environment Agency Regulatory Guidance on Waste Recovery Plans and Permits, dated 18th October 2016, sets out the Environment Agency's (EA) approach to determining whether an activity involving the permanent deposit of waste on land is waste recovery or waste disposal. This document therefore constitutes a revised Waste Recovery Plan to satisfy the above.



2.0 Site Description

2.1 Site Setting

- 2.1.1 Datchet Quarry is located approximately 900m to the south east of Slough in Berkshire. It is located to the north of the M4 motorway and separated from it by Riding Court Road. The site is centred at National Grid Reference (NGR) SU 98900 77900. The application site is detailed on Drawing Number A097237/LOC/01.
- 2.1.2 Access to the site is gained via a private access road from Riding Court Road.
- 2.1.3 To the south of the site is the M25 motorway with Heathrow Airport located approximately 5.5km from the site. To the north are open fields and the residential area of south west Langley.
- 2.1.4 In order to restore the site to the intended benefit, CEMEX seeks to gain a bespoke waste disposal permit for the permanent deposit of inert waste at Datchet Quarry to facilitate the restoration scheme approved under the aforementioned planning permission.

2.2 Planning History

- 2.2.1 In September 2015, The Royal Borough Windsor and Maidenhead granted Planning Permission for the extraction of minerals at Datchet Quarry. Following mineral extraction, Planning Permission Reference No. 13/01667 also requires the site to be restored in accordance with the restoration scheme as approved. Drawing Number P1/869/8A details the proposed final restoration contours for the site.
- 2.2.2 As identified in the restoration plan, the majority of the site to the western and central areas will be restored to agriculture at original ground levels; the remaining area to the east will be restored to parkland and two small open water areas at levels slightly lower than the existing ground levels.

2.3 Permitting Context

- 2.3.1 In order to facilitate the restoration of the quarry, as approved under Planning Permission 13/01667, CEMEX seeks to restore the facility using inert wastes through the operation of waste recovery activity. In total, a volume of 1,120,850m³ is required to restore the site in accordance with the obligations outlined within the planning permission.



3.0 Proposed Development

3.1 Introduction

3.1.1 The proposed development comprises the importation of inert waste to infill the quarry void at the extended quarry area as approved under planning permission 13/01667. The majority of the site to the western and central areas will be restored to agriculture at original ground levels; the remainder of the east will be restored to parkland and two small open water areas at levels slightly lower than the existing ground levels, as shown on plan P1/869/8A.

3.2 Material Requirements

Volumes

3.2.1 It is proposed that Datchet Quarry will accept only inert waste as stipulated in the Planning Permission.

3.2.2 Permitted wastes accepted at the site will be strictly inert as classified under the Landfill Directive (1999/31/EC) and Council Decision (2003/33/EC) of 19 December 2002 'establishing criteria and procedures for the acceptance of waste landfills'.

3.2.3 The restoration of the site will require approximately 1,120,850m³ (2,241,700 tonnes) of inert material.

3.3 Waste Types

3.3.1 The proposed waste types will be required to meet the chemical and physical characteristics as stipulated within the landfill directive. As such, the only waste type proposed to be included within the recovery activity is as follows:

Table 1: Proposed Waste Types

EWC Code	Description	Restriction
01	Waste resulting from exploration, mining, quarrying and physical and chemical treatment of minerals	
01 01	Wastes from mineral excavation	
01 01 02	Waste glass-based fibrous materials	Restricted to waste overburden and interburden only
01 04	Wastes from physical and chemical processing of non-metalliferous minerals	



01 04 08	Waste gravel and crushed rocks other than those mentioned in 04 04 06	
01 04 09	Waste sand and clay	
10	WASTES FROM THERMAL PROCESSES	
10 12	Wastes from manufacture of ceramic goods, bricks, tiles and construction products	
10 12 08	Waste ceramics, brick, tiles and construction products (after thermal processing)	
10 13	Wastes from manufacture of cement, lime and plaster and articles and products made from them	
10 13 014	Waste concrete	
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)	
17 01	Concrete, bricks, tiles and ceramics	
17 01 01	Concrete	Selected C&D waste only
17 01 02	Bricks	Selected C&D waste only
17 01 03	Tiles and ceramics	Selected C&D waste only
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	Selected C&D waste only. Metal from reinforced concrete must have been removed.
17 05	Soil (including excavated soil from contaminated sites), stones and dredging spoil	
17 05 04	Soil and stones other than those mentioned in 17 05 03	Excluding topsoil, peat; excluding soil and stones from contaminated sites
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE	
19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified	
19 12 09	Minerals only	Wastes from the treatment of waste aggregates that are otherwise naturally occurring minerals. Does not include fines from treatment of any non-hazardous waste or gypsum from recovered plasterboard.
19 12 12	Other wastes from mechanical treatment of wastes other than those mentioned in 19 12 12	Restricted to crushed bricks, tiles, concrete and ceramics only. Metal from reinforced concrete must be removed. Does not include fines from treatment of any non-hazardous waste or gypsum from recovered plasterboard.
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	
20 02	Garden and park wastes (including cemetery waste)	
20 02 02	Soil and stones	Only from garden and parks waste; excluding topsoil, peat.



- 3.3.2** This waste type is identified by the Environment Agency as suitable for use in the restoration of mineral workings and as general fill material (Environment Agency Guidance: Waste Recovery Plans and Permits: October 2016).



4.0 Justification for Waste Recovery

4.1 Introduction

4.1.1 The Environment Agency's Regulatory Guidance on Waste Recovery Plans and Permits (October 2016), sets out the Environment Agency's approach to determining whether an activity involving the permanent deposit of waste on land is waste recovery or waste disposal. The difference between waste disposal and waste recovery is summarised below:-

Waste Recovery

"Waste recovery is about using waste to replace other non-waste materials to achieve a beneficial outcome in an environmentally sound manner.

The clearest indicator of waste recovery is when it can be shown that the waste used is a suitable replacement of non-waste materials that would otherwise have to be used to achieve the end benefit."

4.1.2 It is clear from these statements that the purpose of the development is a key consideration in determining whether the operations constitute recovery or disposal. In particular, whether the scheme is driven by a need to achieve a beneficial purpose, in which the use of waste materials will assist, or whether it is intended as a means to dispose of waste, from which incidental benefits arise.

4.1.3 The purpose of the scheme for the restoration of Datchet Quarry is set out in the following section.

The Purpose of the Scheme

4.1.4 The purpose of the scheme is to infill the quarry void from mineral extraction activities and restore the site back in accordance with planning permission reference 13/01667.

4.2 The Recovery Test

4.2.1 In order to reach a formal determination as to whether the restoration of the site constitutes a recovery operation, the Environment Agency will apply the tests set out in the guidance which is based upon a legal test derived from the Waste Framework Directive and European case law, and are set out below:-



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- Evidence to show that if you couldn't use waste you would do work to get the same outcome using non-waste;
- It is suitable for the intended purpose;
- Won't cause pollution;
- Purpose of the work;
- Quantity of Waste Used; and
- Meeting Quality Standards.

4.2.2 These questions are answered in the following sections to support the EA's consideration of this Waste Recovery Plan.

4.3 Evidence of substitution for non-waste materials

4.3.1 The Environment Agency's Waste Recovery Plans and Permit Guidance states that:-

"Your plan must show that if you couldn't use a waste material you would do work to get the same outcome using non-waste materials".

4.3.2 There are three main ways that applicants can demonstrate that a waste material will be substituting a non-waste material. These are as follows:-

- Financial gain by using non-waste materials;
- Funding to use non-waste; and
- Obligations to do work.

4.3.3 It is CEMEX's intention to demonstrate, through this Waste Recovery Plan, that there is a legal obligation to restore the site. There is no further requirement within the aforementioned waste recovery guidance or case law that financial gain or funding to use non-waste must be satisfied in the event that an obligation to undertake works is demonstrated.

4.3.4 As detailed above, planning permission (13/01667) was granted by The Royal Borough Windsor and Maidenhead for the extraction of minerals and the subsequent restoration of the site to agriculture and parkland. Minerals can only be worked where they geologically and geographically occur and the primary development at Datchet is mineral extraction. The planning permission enables the extraction of sand and gravel deposits. Planning conditions which require site restoration following extractive operations are attached to planning permissions when a mineral planning authority (MPA) considers that appropriate restoration of the site is a pre-requisite to the principle of mineral extraction being acceptable.



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- 4.3.5 The National Planning Policy Framework (NPPF) states that local planning authorities should 'provide for restoration and aftercare [of minerals sites] at the earliest opportunity to be carried out to high environmental standards, through the application of appropriate conditions, where necessary'. The Minerals Local Plan identifies that 'restoration is a key area where positive benefits can be achieved' and it recommends that the restoration of mineral sites should include at least one of the following aims: improvement to the long-term appearance of the landscape; creation of a greater diversity of habitats for wildlife; provision of new opportunities for public access and recreation; and the alleviation of flooding.
- 4.3.6 Further to the issue of the planning permission, extraction activities have commenced on site with the mineral having been extracted to the far western area of the site. This has therefore enacted the planning permission and all conditions which are contained within this permission must be adhered to. Policy 18 of the Mineral Local Plan provides that prior to the granting of planning permission for mineral extraction, the local planning authority must satisfy itself that the land will be progressively restored within a reasonable timescale to its intended after-use. As such, the planning authority has satisfied itself that the site will be restored and as the mineral extraction phase has commenced this obligates CEMEX to restore the site to ensure compliance with the conditions of the extant planning permission.
- 4.3.7 Furthermore, The Royal Borough of Windsor and Maidenhead have a Local Enforcement Plan (published January 2016) which details the council's policy for the enforcement of planning control within the borough. As specified in the plan, development which has not been carried out in accordance with the approved planning permission is classed as a breach of planning control and therefore would be subject to enforcement action from the council based on whether the council considers that it is expedient to pursue.
- 4.3.8 In order to ensure that the environmental impacts of the quarrying were acceptable, Datchet was granted planning permission for sand and gravel extraction with appropriate restoration for a beneficial after use. The site was not granted planning permission on the basis that it might provide inert waste disposal capacity. As such, it is considered that the MPA would pursue enforcement action in the event of a breach of the planning condition in relation to the restoration of the site thereby demonstrating a legally enforceable obligation.
- 4.3.9 There are no conditions pursuant to planning permission 13/01667 that require the restoration scheme to be completed using inert waste or how the restoration scheme should be constructed.
- 4.3.10 As detailed above, the implementation of the planning permission demonstrates that there is



a statutory obligation to restore the site. This requirement would be obliged to be fulfilled through the use of non-waste, inert waste through the mechanism of a recovery permit or through an inert disposal permit. Failure to restore the site in accordance with the approved planning permission would lead to enforcement action being undertaken by the planning authority owing to the requirement to not leave large areas of open water in areas where there is the potential for bird strike from Heathrow Airport. As such, the use of waste in this instance is a clear substitution for the use of non-waste materials.

4.4 Is the recovered waste material suitable for its intended use?

4.4.1 Many of the proposed waste types are physically similar to the likely primary aggregate non-waste materials to be used e.g. soils, sand, stone, gravel etc., and can be considered direct replacements. They are capable of being sufficiently compacted so that they can form a stable landform for the medium and long term and are will undergo consolidation rapidly to reduce the risk of short term instability.

4.4.2 The proposed waste types are consistent with those which are considered acceptable for construction and reclamation activities within Standard Rules SR2015 No39: use of waste in a deposit for recovery operation.

4.4.3 It is considered that the proposed wastes are suitable for use in creating the proposed landform.

4.5 Will the material cause pollution?

4.5.1 A Hydrogeological Risk Assessment has been undertaken in support of the application which demonstrates that there is no impact on the surrounding groundwater through the use of these wastes for the purpose of restoring the site.

4.5.2 Strict waste acceptance, including careful screening of materials entering the site, will be undertaken on site as detailed within the Environmental Permit application. These procedures will be employed on site to ensure that no prohibited materials which are likely to cause a risk to the environment will be accepted at Datchet Quarry.

4.5.3 It is considered that in following the strict criteria detailed above, the material is unlikely to cause pollution.

4.6 Purpose of the use



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4.6.1 The purpose of the scheme is to allow the infilling of the quarry void generated from mineral extraction activities. The site will subsequently be restored back to agricultural land and parkland with small water features in accordance with the approved restoration scheme.

4.7 Is the minimum amount of waste being used to achieve the intended benefit?

4.7.1 The proposed landform has been carefully designed to take into account the physical and technical requirements for the restoration (e.g. land stability, drainage, etc.) and also the inclusion of landscape features that would fit in with the surrounding landscape character.

4.7.2 A volume of 1,120,850m³ of imported material is required to achieve the profiles provided under the approved restoration scheme (Drawing Number P1_869_5).

4.7.3 Throughout the restoration of the site, CEMEX has sought to re-incorporate as much of the unwanted silt materials and any overburden back into the restoration landform. However, there is insufficient site won material which can be incorporated back into the site to complete the restoration scheme in accordance with the conditions of the planning permission. As such, this material is required to be imported from off site sources.

4.7.4 In determining whether the minimum volumes of waste is being used, consideration has been given to alternative schemes through the preparations of an Environmental Impact Assessment, including lower level restoration. However, given the nature of the water table at the site and the proximity to the Heathrow flight zone, a lower level restoration is unacceptable on account of the risk of attracting birds which may lead to bird strike incidents. As such, it is considered that the proposed landform is the minimum volume required to provide the restoration scheme as approved.

4.8 Meeting quality standards

4.8.1 The proposed development has been carefully and professionally designed, taking into account any physical constraints, such as land stability, land condition and drainage.

4.8.2 The fill materials will be placed in accordance with the Specification for Highways Series 600 for general fill materials

4.8.3 All works, including construction and landscaping, will be carried out in accordance with current industry best practices and the Environmental Permit. Efforts will be made to minimise



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disruption to local amenity and measures will be taken to cause as little nuisance as possible (e.g. dust emissions or noise) to local receptors which are controlled through the planning permission.

- 4.8.4 Therefore the restoration of Datchet Quarry, in accordance with the planning permission and associated conditions, is considered to be a recovery operation.



5.0 Conclusion

- 5.1.1 The restoration scheme for Datchet Quarry has been approved by The Royal Borough of Windsor and Maidenhead under planning permission 13/01667. CEMEX are seeking to restore the site under the conditions of a bespoke waste recovery permit. This Waste Recovery Plan seeks to demonstrate that the approved restoration scheme should be considered a waste recovery activity.
- 5.1.2 Section 2.0 of this report sets out the requirements of planning permission at Datchet Quarry. In order to ensure that the environmental impacts of the quarrying were acceptable, Datchet Quarry was granted planning permission for sand and gravel extraction with appropriate restoration for a beneficial after use. The site was not granted planning permission on the basis that it might provide inert waste disposal capacity. Indeed, had the restoration scheme been designed as a means for the disposal of waste, planning permission is unlikely to have been granted.
- 5.1.3 This Waste Recovery Plan provides information relating to the benefits of the scheme and confirms that the minimum amount of waste is being used to confer these benefits. In addition, the information provided above shows clearly that the scheme meets the test as detailed within EA Waste Recovery Permit and Plans Guidance and that it should be considered as a recovery activity in line with EU Case Law.



Drawings

CEM/A097237/CS/01– Indicative Cross Section

P1_869_5 – Restoration Masterplan



Appendices



Appendix A – Planning Permission 13/01667