

Kilnwood Vale: Environmental Permit application for the deposit of waste for recovery (EPR/FB3704GH/A001)

NON-TECHNICAL SUMMARY

1.1 Introduction

This Non-Technical Summary (NTS) has been prepared in support of question 5C to Environmental Permit application form Part B2 and seeks to provide a concise summary of the application in non-technical language.

Dunton Environmental Ltd (Dunton Environmental) is seeking permission from the Environment Agency (EA) to allow the treatment of existing site soils with Cement Kiln Dust (CKD), to control the moisture content in order to meet the engineering requirements, within Phase 2 of the Kilnwood Vale development, west of Crawley, Essex (the Site). The use of CKD waste means the waste is being recovered for an alternative purpose and is classed as a "waste deposit for recovery".

The Site measures c.32 hectares and is located approximately 2 km west of Crawley, West Sussex centred upon national grid reference TQ 23654 35321, see Figure 1.

The wider Development covers an area of c.140 hectares and is subject to planning permission DC/15/2813, issued by Horsham District Council, which allows the construction of approximately 2,500 dwellings, associated infrastructure and civic amenity.

The documents which form this Environmental Permit application seek to provide sufficient information in order for the EA to determine and issue a Permit which allows the importation and use of CKD under a waste recovery operation so that the approved built Development can be constructed.

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Figure 1: Site location

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A Waste Recovery Plan (WRP) (ESI report reference 66444R2) was submitted to, and approved by, the EA as being a waste recovery operation on 04 January 2018.

The Site previously formed an inert (mainly soil and stones) landfill, referred to as 'Land off Horsham Road'. A number of other landfills (largely inert) are also recorded in the vicinity of the Site.

The Development construction has already commenced, with Phase 1 complete and works ongoing in Phase 2.1 and Phase 2.2A. Prior and current control of soil moisture is currently undertaken with lime which is not a waste material. The use of CKD waste will be instead of lime but will have the same benefit of controlling moisture in the site soils in the remaining phases within Phase 2 (see Figure 2).

Permit boundary :: Approximate estimate of in-filled area 2.4D 2.10.18 2.60 25.10.21 Japon Grove 05.07:21 2.58 2.4C 12 10 20 30.04.18 5:09:1 2.6B 28.09.20 2.4E 2.6A 16.09.19 19.10.18 24.06.19 2.4R 16.10.17 2.4F 16:07:18 2.3A 16,10,17 2.2B 2:3B 01.10.18 16:07:18

Figure 2: Development areas

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1.2 Waste Recovery

It is proposed that the CKD is applied to in-situ soils in order to reduce the moisture content, to that required to meet the agreed engineering requirements of the Development platform. This treated material will then form "a deposit of waste for recovery" operation.

It is estimated that between 1% and 6% CKD will be required to be applied to the in-situ soils to achieve the target moisture content. It is estimated that the treatment operation will require the use of 72 tonnes of CKD per day resulting in the deposit of approximately 1.5 Million tonnes during the construction of the Development.

The waste recovery operation will be undertaken to a very high standard in order that the requirements of the planning permission are achieved.

1.3 Waste Acceptance and Permitted Activities

All waste will be accepted on to the Site in strict accordance with the Waste Acceptance Procedure. Checks will ensure the quality of the incoming waste material before it arrives on Site.

The application seeks to permit the treatment of the soils within the Site with CKD instead of lime to achieve the correct moisture content, under the waste recovery code 'R5'.

1.4 Staffing and General Maintenance

Access to the Site will be through a gated entrance from the A264 Horsham Road.

The standard operating hours of the Site will be:

0800 – 1800 Monday to Friday; and

0800 - 1300 Saturday.

The Site will not undertake operations on Sundays, Public or Bank Holidays unless otherwise agreed with the EA in writing.

Staff will have clearly defined roles and responsibilities. Appropriate training will be undertaken and appropriate written instructions will be given, where necessary. Copies of any such written instructions will be retained and used to investigate any incidents. Any Contractors present on Site will be provided with necessary information and training before commencing work.

All Site-based machinery and equipment will be serviced and maintained in accordance with the manufacturers' recommended maintenance schedules.

The Site will be fully fenced with lockable gates and gates will be kept locked at all times when the Site is not operating. The Site will be fully manned during the operating hours given above and outside these operating hours by the Developer, Crest Strategic Project Ltd.

All waste CKD will be imported to Site in sealed containers and be transferred to sealed silos by pumping it through sealed hoses. Mud is unlikely to present an issue, as HGVs will travel on paved areas only. A pressure washer is provided to clean site equipment and vehicles, if required, preventing the transfer of mud on to the paved areas. A roadsweeper will be available to deal with any mud or dust building up on paved surfaces.

Due to the nature of the materials that will be received at the Site there will not be a significant odour, litter, pest, vermin or fire risk.

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Fuels will only be stored for the purpose of refuelling on-Site equipment and vehicles and will be provided with a second containment system in the event of failure of the main containment. Appropriate firefighting equipment will be available at the Site.

A noticeboard will be displayed near the Site entrance and will include: the company name, emergency contact details, the Site Permit number and the EA's contact details.

Any complaints received, and subsequent action undertaken will be recorded in accordance with the Environmental Management System for the Site.

1.5 Operator Competence

Dunton Environmental is a market leader in the design and construction of ground and water cleanup solutions for land development and restoration. Relevant persons of Dunton Environmental have not been convicted of any relevant offences or subject to insolvency or bankruptcy.

The Site will be operated by a technically competent person for the waste management operations under an Industry Standard Operator Competence Scheme, under the Waste Management Industry Training and Advisory Board (WAMITAB). The Site will be operated under Dunton Environmental's Environmental Management System (EMS), which is accredited to ISO 14001.

1.6 Environmental and Hydrogeological Risk Assessment

A hydrogeological (groundwater) risk assessment (HRA) has been prepared for the Site. It sets out information relating to the Site's surface and sub-surface setting and Conceptual Site Model (CSM) with regard to the proposed use of CKD.

Risks to "controlled" (groundwater and surface water) waters have been assessed by ESI under report reference 66444R1, dated November 2017 which concludes that the proposed waste operation will not create an unacceptable risk to groundwater or surface water (Bewbush Brook).

The risk from substances not already controlled by limits (odour, noise, vibration, ground gas, dust, mud, litter and pests) have been assessed in the Environmental Risk Assessment (ESI report reference 66444R5) which concludes the risk from these substances to be low.

1.7 Environmental Monitoring

As discussed above, the Site ERA concludes that the risk from the incoming waste will not cause an unacceptable risk to controlled waters and as such, no groundwater or surface water monitoring is proposed. Similarly, odour, dust, and gas emissions are deemed to be controlled by planning and the Operator's environmental management system and procedures and hence no additional monitoring is proposed.

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