
Project Title: Bovey Basin Ball Clay
Workings – Central Area

Ref: HCE1205.NTS

Site Context & Restoration

The Bovey Basin Ball Clay Workings (Central Area) is a group of existing clay quarries and associated tips located to the north of Kingsteignton. At the current rate of extraction, the permitted mineral reserve has a life of around 100 years. Given the long-term nature of the mineral reserve, the consolidating planning permission (DCC/4344/2023) provides a comprehensive scheme of working for the quarries within the Central Area over the next 15 years in three phases, each comprising five years, including the phased restoration of Rixey Park, White Pit and Heathfield Tips. The planning permission includes an interim restoration strategy at the end of the 15-year period.

A natural by-product of the extraction activities is overburden and non-target mineral or 'interburden'. Whilst the appropriate blending of materials seeks to minimise the amount of material wastage, due to the sedimentary nature of the deposit, some materials do not meet the stringent specifications required and as such the overburden and interburden is currently deposited within the Rixey Park, White Pit and Heathfield Tips which sit within the Central Area application boundary. Restoration cannot be completed exclusively from this material. Additional material is needed to provide a suitable substrate for the establishment of new habitats

It was agreed on 20 August 2024 (EA Ref: EPR/SP3427SW/P001) that the importation of soil to complete the approved restoration would be deemed a recovery activity. The Waste Recovery Plan (WRP) was agreed for the wider Bovey Basin Ball Clay Workings area however this permit application primarily relates to the first two phases of restoration (The Central Area Quarries).

It is proposed to incorporate the existing re-use of mine waste material (i.e overburden and interburden) and imported waste soils (subsoil and topsoil) into one permit rather than to have a separate mine waste facility permit and deposit for recovery permit

Environmental Permit Application

Horizon has produced a Conceptual Site Model report which summarises the sources, pathways and receptors associated with the proposed import and placement of restoration soils. The report identifies potential risks specially associated with slope stability issues and risks to controlled waters. Subsequently a Hydrogeological Risk Assessment and Stability Risk Assessment have been produced to specifically address these risks. Associated mitigations measures to reduce risks to the environment are provided in the Environmental Setting and Site Design Report. In summary:

- The nature of the overburden, interburden and imported material will have a very low to low contaminant potential with strict Waste Acceptance Procedures adopted for imported material.
- The underlying geology is a Secondary A Aquifer however the cohesive nature of the soils and topography will inhibit vertical migration of contaminants through the unsaturated zone with the predominant pathway being via overland flow directly to surface water receptors or via discharge from a settlement lagoon.
- Restoration is undertaken in a phased approach which will mitigate the risk of contaminant migration once habitats have begun to establish. Existing restoration has already been carried out at the toe of some existing slopes which is already attenuating run-off impacts from overland flow.
- Adequate Factors of Safety for long-term stability will be attained for the approved restoration provided all slopes are constructed to a design of 1v in 3h or shallower.