ENVIRONMENTAL PERMIT 'EPR/CP3994ZR' VARIATION APPLICATION

SKELBROOKE QUARRY EXTENSION AREA SKELBROOKE, DONCASTER, SOUTH YORKSHIRE

NON-TECHNICAL SUMMARY:

Darrington Quarries Limited ('DQL'), part of the FCC group of companies, are seeking to vary the Environmental Permit (EPR/CP3994ZR) currently held for closed non-hazardous waste landfill facility to support the restoration of the former limestone quarry extension near Skelbrooke, Doncaster, South Yorkshire, DN6 8LY (National Grid Reference: SE 50964 11690). The site is surrounded predominantly by agricultural land with the residential of Skelbrooke located to the north.

The Environmental Permit for the site was originally issued under the Waste Management Licensing Regulations 1994 in July 2001 (Licence Ref.: EAWML65052). The permit authorised the disposal of biodegradable, non-hazardous waste in fully engineered containment cells. However, no wastes have been deposited within the extension area to date. An EA initiated variation to the permit was determined to 'definitely' close the facility in January 2015. A Closure Plan (Doc. Ref.: 1776/R/025/1) dated October 2014 was incorporated into the permit as part of this variation.

Since the original permit for the extension area was determined, a revised scheme of restoration was subsequently agreed with the Mineral Planning Authority in 2005. This revised scheme incorporates a low-level profile in which the subsequent land use includes agricultural land to in the northern-most section of the site, a wetland habitat in central flooded area surrounded by calcareous grassland, woodland and hedgerows to it south. This consent expired in September 2015 but has been subsequently renewed in 2021 with some minor alterations (reductions) to the final levels, principally to accommodate changes in the guidelines requirements for flood attenuation.

The quarry extension area forms part of the wider former limestone quarry and landfill complex located to the south of the extension area, which has already been restored by landfilling under a separately regulated landfill activity (Environment Permit EPR/BV1470IE).

The main void in the central area of the extension area is partially flooded due to groundwater levels associated with the surrounding geology, although the site also forms part of the surface water management system for the adjacent, closed landfill facility.

DQL are now seeking to vary the existing permit to enable restoration of the extension area to the revised low-level scheme of restoration using a total of ~230,000m³ of suitable wastes for which planning consent has recently been renewed. Under the original approved scheme of restoration for the site, the original quantity of waste required to restore the site was modelled at ~235,100 m³. This volume has been reduced due to guideline changes in the flood attenuation climate change allowances and free board space requirements of the final surface water lagoon. The amount of waste that will need to be imported under the Environmental Permit will be reduced by a further ~6,000m³ through cut and fill balances of existing materials currently in place in the areas surrounding the flooded void.

The proposal will seek the direct tipping of imported wastes into the flooded section of the site without initially dewatering the void. No geological barrier will therefore be formed along the quarry sidewalls consisting of Magnesian Limestone, which is classified as a Principal Aquifer.

To achieve compliance with Schedule 22 of the Environmental Permitting (England and Wales) Regulations 2016 (as amended), only wastes of a quality that presents a pollution potential that is less than, or equal to, the natural quality of the surrounding geology/groundwater will be accepted at the site. Therefore, only non-hazardous waste that will not undergo significant physical, chemical and biological transformation will be deposited at the site. This will comprise of materials with low pollution potential from low contamination risk sources, including quarry, construction product manufacturing, construction, demolition and excavation wastes and products, as well as soils from local greenfield or low-risk brownfield development sites. Site specific waste acceptance criteria and groundwater monitoring schedules have also been derived to protect groundwater.

The current requirement to restore the extension area is currently driven by the public safety risk posed by the deep-water present within the flooded section of the site. Moreover, as the site currently supports the management of surface water run-off from the adjacent restored landfill, direct tipping in water will avoid the requirement to construct a temporary surface water attenuation system whilst filling operations are carried out. Additionally, the wetland habitat that forms part of the restoration scheme for the extension area will continue to provide long-term surface water attenuation capacity to support the management of run-off from the surface of the main restored landfill and the extension area itself. The discharge of managed waters from the site will be made to the current consented discharge point to a tributary of 'The Skell' river.

Amenity risks from potential fugitive emissions associated with the waste related operations have also been reviewed, with appropriate management techniques derived as appropriate to ensure that any residual risks are low.