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Stage 1 Appropriate Assessment Screening Oughaval, Stradbally, County Laois.

Introduction

The Oughaval former landfill is in the Townland of Oughaval, on private lands along the N80 south of Stradbally, County Laois. The site was originally a worked out limestone quarry that extended up to 4m below ground level (bgl). It was used as a landfill from the 1970's to the late 1980's. The landfill footprint is approximately 0.8 hectares. The waste was placed directly onto the quarried rock surface and brought up to the level of the surrounding lands in the northern section of the site. The waste was brought up to within 2.5m of the original ground level. A section of the southern quarry face is exposed in the southern section of the site.

Following the closure of the site, the waste was covered with subsoils however in the southern part of the site a small area of waste remains exposed. Most of the surface of the fill area is uneven and rough and overgrown with vegetation.

OCM carried out Tier 2 Site Investigation and completed a Tier 3 Risk Assessment in 2011, which concluded the site was a Class B Moderate Risk Site based on the risk posed to the groundwater system and that some remedial measures are necessary to mitigate the relatively low risk posed to the groundwater.

Following the completion of the Tier 2 Site Investigation and Tier 3 Risk Assessment OCM recommended the following measures be undertaken to mitigate the moderate risk posed by the landfill.

Leachate Risk

The site should be levelled, covered with a 0.5m layer of low permeability subsoil graded to a fall to encourage shedding of rainfall to a point down gradient of fill area. The subsoil should be compacted to minimise rainfall infiltration, covered with 0.1m of topsoil and seeded with grass. The use of the land following capping should be restricted to grazing of livestock.

Groundwater

Following completion of the remedial works, groundwater quality should be monitored quarterly in the two down hydraulic gradient wells to assess the effectiveness of the remedial measures over a 12 month period. If the water quality improves over time then the monitoring frequency can be reduced to annually after year 1. If after year 2 groundwater quality is not impacted, then no further monitoring is considered necessary subject to the agreement of the Agency.

Landfill Gas Monitoring

Capping has the potential to increase landfill gas migration risk laterally. It is recommended that landfill gas monitoring be undertaken quarterly in conjunction with the groundwater monitoring. A spike probe survey should also be undertaken between the site and the closest dwelling (100m to the west of the site) at the time landfill gas monitoring is being undertaken in the groundwater/landfill gas wells.

AA Risk Screening Process

The Habitats Directive, which is implemented under the European Communities Birds and Natural Habitats) Regulations 2011 (S.I. No 477 of 2011) requires an “appropriate assessment” of the potential impacts any works may have on the conservation objectives of any Natura 2000 site. Article 6(3) of the Directive stipulates that *any plan or project not directly connected with or necessary to the management of a Natura 2000 site, but likely to have a significant effect thereon...shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives.*

Natura 2000 sites are those identified as sites of European Community importance and designated as such under the EU Habitats Directive (92/43/EC) (Special Area of Conservation) or the Birds Directive (Special Protection Areas). The closest Natura 2000 site is the River Barrow and River Nore SAC (Site Code 002162) which is 1.2km to the northeast of the site at its closest point.

Guidance documents issued by Department of Environment, Heritage and Local Government and the National Parks and Wildlife Services recommend that the assessment be completed in a series of Stages, which comprise:

Stage 1: Screening

The purpose of this Stage is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a Natura 2000 site in view of the site’s conservation objectives.

Stage 2: Appropriate Assessment

This Stage is required if the Stage 1 Screening exercise identifies that the project is likely to have a significant impact on a Natura 2000 site.

Stage 3: Assessment of Alternative Solutions.

If Stage 2 determines that the project will have an adverse impact upon the integrity of a Natura 2000 site, despite the implementation of mitigation measures, it must be objectively concluded that no alternative solutions exist before the plan can proceed.

Stage 4: Compensatory Measures:

Where no alternative solutions are feasible and where adverse impacts remain but imperative reasons of overriding public interest require the implementation of a project an assessment of compensatory measures that will effectively offset the damage to the Natura site 2000 is required.

Stage 1 Screening Methodology

The Stage 1 Screening was conducted in accordance with the guidance presented in the “Assessment of Plans and Projects significantly affecting Natura 2000 sites, Methodological Guidance on the provisions of Articles 6(3) and 6(4) of the Habitats Directive 92/43/EEC” (2001); The Department of Environment, Heritage and Local Government (2009, revised February 2010) Appropriate Assessment of Plans and Projects in Ireland, and the National Parks and Wildlife Services (NPWS) Circular NPW 1/10 & PSSP 2/10 Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.

The closest designated Natura 2000 site (SAC) is the River Barrow and River Nore SAC (Site Code 002162) which is 1.2km to the northeast of the site at its closest point.

SACs are selected for the conservation and protection of habitats listed on Annex I and species (other than birds) listed on Annex II of the Habitats Directive, and their habitats. The habitats on Annex I require special conservation measures. SPAs are selected for the conservation and protection of bird species listed on Annex I of the Birds Directive and regularly occurring migratory species, and their habitats, particularly wetlands.

A report on the Qualifying Interests for which the SAC was selected states that “The Barrow/Nore river system contains a considerable amount of woodland, particularly in the lower reaches where the rivers leave the central limestone lowlands and cut through the uplands. The slates, shales and granites of these uplands produce relatively well-drained, poor, acidic soils which favour the development of sessile oak woodlands on the steep valley sides, although locally ash woodlands occur on more fertile soils. In many places conifer plantations have been planted. The valley floors are narrow and the floodplains are only poorly developed so that alluvial woodland is restricted and localised.

Upstream the rivers flow through fertile lowlands and both have been drained to some extent. In general there is very little native woodland, even in the headwater streams in the Slieve Bloom Mountains where extensive areas have been afforested with conifers. The exception is

the stretch of the Barrow/Erkina between Durrow and Abbeyleix in Laois, where some of the most extensive and important alluvial woodlands in the country are to be found.

This SAC was selected for two woodland types listed in Annex I of the Habitats Directive: 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles, and 91EO Alluvial forests with Alnus glutinosa and Fraxinus excelsior (AlnoPadion, Alnion incanae, Salicion albae).

As required by the regulations any measures proposed to remediate the site must be assessed to determine if they present a significant environmental risk to the SAC.

The remedial measures involve the levelling of the soil layers at the site and the importation of 0.5m layer of low permeability subsoil graded to a fall to encourage shedding of rainfall to a point down gradient of fill area. The subsoil should be compacted to minimise rainfall infiltration, covered with 0.1m of topsoil and seeded with grass. The use of the land following capping should be restricted to grazing of livestock.

These measures have the potential to generate local traffic and dust impacts in the immediate vicinity of the landfill. There will be a need to ensure that surface run-off from the cap prior to revegetation is collected and diverted to ground outside the landfill footprint. This will not however result in the generation of significant impact on the subsoil, surface or groundwater.

As there is no significant pathway between the SAC and site and given distance from the site to the SAC and the moderate environmental risk the proposed remedial measures do not present a significant risk to the SAC.

Stage 1 Conclusion and Recommendations

The proposed remedial measures do not present a risk to the SAC therefore a Stage 2 Appropriate Assessment is not required.

The post remedial groundwater and landfill gas monitoring should be used to confirm that the risk posed to the SAC is not significant.