RECOVERY ACTIVITY CAPACITY

As is noted in the application form, Dunlavin Land Restoration Limited is applying for a waste licence in respect of 3 recovery activities at the application site at Usk, specifically

- Activity R03 Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes), which includes gasification and pyrolisis using the components as chemicals. This activity provides for the importation and immediate recovery of topsoil, which by definition is considered to be organic matter. Application is made for importation / immediate recovery of a maximum of 2,000 tonnes of topsoil per day and a maximum of 80,000 tonnes per annum.
- Activity R05 - Recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials. This is the Principal Waste Activity. This activity provides for the importation and immediate recovery of mineral subsoil, stones and broken rock which is deemed to be inert and inorganic. Application is made for importation / immediate recovery of up to 2,000 tonnes of inorganic material per day, up to a maximum of 300,000 tonnes per annum.
- R13 - Storage of waste pending any of the operations numbered R01 to R12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced)". This activity provides for the storage / stockpiling of imported topsoil and/or mineral soil / stone / rock material pending subsequent spreading, placement and compaction in situ at the recovery facility. Application is made for storage of a maximum of 140,000 tonnes of material at the application site at any one time, and for storage of up of to 140,000 tonnes per annum

Capacity Assessment – Daily Intake

The materials imported to the application site for backfilling and recovery will, for the most part, be recovered immediately through placement on, in or over the ground, without the requirement for any further treatment other than spreading, placement and compaction by earthworks plant. There is essentially no restriction on the rate of recovery at the application site, other than the amount of earthmoving plant and equipment at the facility.

The existing planning permission (Ref.19/949) limits waste intake to the recovery facility to a maximum of 300,000 tonnes per annum (for all waste streams combined). This is the key factor limiting or influencing recovery rates at the proposed facility.

If it is assumed that there are 264 working days in a year, the current intake restriction would suggest an average daily intake rate of approximately 1,130 tonnes per day. However, as there will likely be some variability on the rate of importation and the number of HGV / articulated truck movements over the course of the year, it is considered that rate of importation of any material (topsoil or mineral soil / stone) on any given working day should be limited to approximately double the inferred average importation rate, at 2,000 tonnes per day.

Capacity Assessment – Storage

The total volume of topsoil required for restoration purposes at the application site is estimated to be approximately 30,000m^3 (assuming 0.15m topsoil cover over 20 hectares). This is equivalent to approximately 45,000 tonnes in total. As topsoil can only be recovered by placing it over the backfilled ground surface when it is at or close to final design (original) ground level, it will be necessary to stockpile it on site pending its use in final restoration works.

While it is envisaged that the recovery facility will be restored in an ongoing, progressive manner which will require topsoil to be available for intermittent use, it is not possible to predict how and when it will become available for import over the life of the recovery facility, the timing of the final restoration works and how much will be required to be stockpiled at any one time.

Given the area of the application site (c. 26.6 hectares) and surrounding land-use, it is considered that there is considerable capacity for on-site temporary storage / stockpiling of imported materials. Provision will therefore be made for temporary stockpiling of up to 40,000 tonnes of imported topsoil ***at any one time***, a significant proportion of the total volume required for restoration purposes, in order to

(i) facilitate intake from major works projects should they materialise over the lifetime of the facility and

(ii) provide a degree of operational flexibility around phasing of the final restoration works.

As noted previously, soil and stone waste imported for backfilling and recovery purposes will, for the most part, be recovered immediately upon arrival at the application site, with little or no requirement for on-site storage. Notwithstanding this, it is conceivable that operational delays could arise at the facility requiring imported materials to be temporarily stockpiled while earthmoving plant is removed off-site for repair / servicing purposes, periodically diverted to final restoration works. Delays could also arise on account of staff absences or other unforeseen events. As such provision will also be made for importation and temporary stockpiling (pending recovery) of up to 100,000 tonnes of imported soil and stones at any one time.

Having regard to the requirements outlined above means that the total storage / stockpiling capacity to be provided at the waste recovery facility (between topsoil and mineral soil / stone) will therefore be up to 140,000 tonnes.

Capacity Assessment – Annual Intake

As previously noted, the existing planning permission (Ref.19/949) limits waste intake to the recovery facility to a maximum of 300,000 tonnes per annum (for all waste streams combined). This is the principal restriction on the annual recovery rate for mineral soil and stone at the recovery facility (assuming no topsoil is imported in the same year).

As previously noted, the total volume of topsoil required for restoration purposes is up to 40,000 tonnes. In order to provide a degree of operational flexibility and to facilitate the bulk of required topsoil intake from major works projects in a single calendar year (should they ever materialise), application is made for importation of up to 40,000 tonnes of topsoil in any one year.

As previously noted, provision is made for storage of up to 140,000 tonnes of topsoil / mineral soil and stone at any one time at the recovery facility. As the distribution and timing of import consignments or operational delays cannot be confidently forecast or predicted, application is made for importation and storage / stockpiling of up to 140,000 tonnes per annum (ie. the maximum available storage capacity) in any one year.