

TOTAL WASTE CAPACITY ASSESSMENT

The basis of calculated soil and topsoil waste intake volumes / tonnages is presented below.

Inert Waste Disposal Capacity (D5 Engineered Landfill)

The total volume of inert waste materials (principally soil and stone (with minor quantities of other (soil-like) particulate wastes and sludges) required for landfilling and restoration purposes at the proposed landfill facility is estimated to be approximately 3,425,000m³, equivalent to around 6,165,000 tonnes at an assumed average in-situ density of 1.8 tonnes/m³.

Of the total intake requirement, at least 116,000m³ / 208,800 tonnes is required to construct the proposed basal liner, and at least a further 131,000m³ / 235,800 tonnes is required to construct sidewall liners and 25,500m³ / 45,900 tonnes of topsoil is required for final capping purposes.

If the acceptable soils required to construct the landfill liners and cap are recovered and/or imported to site as non-waste materials, the maximum inert waste disposal capacity at the landfill facility is 3,152,500m³, equivalent to 5,674,500 tonnes at an assumed average in-situ density of 1.8 tonnes/m³.

This maximum waste intake volume (tonnage) will be reduced if a higher volume or proportion of non-waste material is imported (under Article 27 by-product notifications) for engineering or operational purposes (e.g. if the landfill sidewall liner is constructed in fewer / higher lifts than currently envisaged).

Recovery Capacity (R3 Organic Material)

The total volume of topsoil required for capping and restoration of the landfill facility is approximately 45,900 tonnes.

This assessment is made on the basis that the landfill facility has a surface area of approximately 17 hectares and an assumed final depth of topsoil of 150mm. The resultant topsoil requirement of 25,500m³ is converted to tonnage assuming average in-situ density of 1.8 tonnes/m³.

Recovery Capacity (R5 Inorganic Material)

Source-Segregated C&D Waste Capacity

The total throughput of source segregated C&D waste at the dedicated onsite waste processing (recovery / recycling) facility is assessed as 2,000,000 tonnes over the lifetime of the proposed development at Ballinclare Quarry. This assessment assumes a consistent maximum permitted C&D waste throughput of 100,000 tonnes per annum, over an operational life of 20 years.

Soil Washing Plant

The total throughput of more granular (i.e. more sandy / gravelly) soil and stone and inert claybound C&D waste intake at the proposed soil washing plant is assessed as 10,000,000 tonnes over the lifetime of the proposed development at Ballinclare Quarry. This assessment assumes a consistent maximum throughput of 500,000 tonnes per annum, over an operational life of 20 years.