### **Attachment H1- Materials Handling**

This waste licence Application provides for the restoration of a former quarry in the townland of Grannagh, Kilmacow, Co Kilkenny using imported inert soils and recycled inert construction and demolition waste.

The total volume of inert material to be placed at the site is 1,200,000 million tonnes. The breakdown of this volume amongst the various the various restoration phases is shown on the site phasing drawings Figure 1.4. Assuming backfilling continues at current rates the estimated life of the waste facility will be approximately 10 years.

The applicant estimated that approximately 50% of the inert materials imported to the existing waste facility comprises construction and demolition waste and is recovered using conventional crushing, shredding and screening plant. Accordingly a provision is made in the waste licence application to import and recover up to a maximum of 1,200,000 tonnes of inert construction and demolition waste in any one calendar year. Assuming that construction and demolition waste continues to account for approximately 50% of the materials imported to site, approximately 700,000 tonnes will be recovered at the application site over the operational lifespan of the facility.

The inert materials to be accepted at the site for use of backfilling/recovery activities are identified by their European Waste Catalogue reference number below

EWC Code	Description cector to the control of
17 05 04	Soil and stones other than those mentioned in 17 05 03
17 01 01	Concrete Concrete
17 03 02	Bitumous materials other than those in 17 03 01
17 01 02	Brick Meet
17 04 07	Mixed Metals
17 01 03	Tiles and ceramics
17 01 07	Mixture of concrete ,bricks, tiles and ceramics other than
	those mentioned in 17 01 06
17 02 01	Wood
17 08 02	Gypsum
17 05 08	Track Ballast
17 05 06	Dredging spoil
10 01 01	Bottom ash slag and boiler dust

# **Attachment H.2-Waste Acceptance Procedures**

Only inert, uncontaminated soils and construction waste shall be accepted at the application site. All loads that arrive on site must first report to site office and sign the record sheet assigned to their company documenting the relevant details (See Section D.1d). Inert materials shall be accepted at the site between 08.00 hours and 17.00 hours each weekday and 08.00hours to 14.00 on Saturday. No materials shall be accepted at any other time.

Insofar as practicable, the source of each consignment of soil imported to site for backfilling purposes shall be identified in advance and subject to basic characterisation testing to confirm that soils at the location can be classified as inert. Limit values for inert soils shall be in accordance with those set by *Council Decision 2003/33 of December 2002 establishing criteria for the acceptance of waste at landfills.* Ideally characterisation testing will be undertaken in advance by clients and/or contractors forwarding soil to the application site.

All inert soils imported to the site shall be unloaded from trucks at the active backfilling face. It will be visually inspected by site personnel at that point to ensure that there is no intermixed non-hazardous or hazardous waste placed within it. Should there be any concern about the nature of the waste being tipped it will be segregated (if required), reloaded onto the truck and directed to the waste inspection and quarantine area for closer inspection and classification. A detailed record will be kept of all such inspections. Should inspections and/or subsequent testing indicate that the material are non-inert and cannot be accepted and used for restoration purposes at this site, they will be placed in skips and covered pending removal off site by permitted waste collectors to a suitably licensed/permitted waste disposal or recovery facility.

In addition to the above, a representative sample shall be taken from one in every 200 loads of inert soil accepted at the facility and subjected to a less extensive scope of testing(compliance testing) focusing on key contaminant indicators. These data shall be used to confirm that the accepted soils are inert and comply with acceptance criteria.

### **Attachment H.3 Waste Handling**

## **Recovery Activities**

It is envisaged that the processing and/or recovery of construction and demolition waste activities at the application site will be restricted to stones, granular fill, concrete, blocks, bricks, ceramic tiles, timber and green waste. Metal will be stored on site on impermeable concrete slab with interceptor to collect any run off the material. Should any non inert construction and demolition waste (principally metal, plastic pipes and plastic) occur amongst the waste imported to site it shall be separated out and temporarily stored in skips prior to removal off site to appropriately licensed waste disposal facilities.

It is a requirement of the existing operation that all construction and demolition waste forwarded to the site for recovery purposes has been pre-sorted at source, that it is inert and largely free of any no-hazardous/hazardous domestic, commercial or industrial wastes. Any consignments of construction and demolition waste which have such materials.

Consent of copyright owner required for any other use.

### **Attachment H.4 Waste Arising**

The list of Waste materials generated on site would be

- Plastic
- Plastic Pipes
- Metal
- Timber

The amounts of these materials generated on the basis of experience in operating the existing facility to date are very low. As stated previously all will be stored in skips and removed off site by licensed operators to relevant facilities. See appendix 5 for acceptance letters from the facilities.

## **Recovery Activities**

It is envisaged that the processing and/or recovery of construction and demolition waste activities at the application site will be restricted to stones, granular fill, concrete, blocks, bricks, ceramic tiles, timber and green waste. Metal will be stored on site on impermeable concrete slab with interceptor to collect any run off the material. Should any non inert construction and demolition waste (principally metal, plastic pipes and plastic) occur amongst the waste imported to site it shall be separated out and temporarily stored in skips prior to removal off site to appropriately licensed waste disposal facilities. Gypsum will be stored in a covered container and will be sent for recovery off-site at an approved facility.

It is a requirement of the existing operation that all construction and demolition waste forwarded to the site for recovery purposes has been pre-sorted at source, that it is inert and largely free of any no-hazardous/hazardous domestic, commercial or industrial wastes. Any consignments of construction and demolition waste which have such materials