

Attachment G1-Resource use and Energy Efficiency

The waste used in the site restoration works comprises inert soil, stone and /or recycled construction and demolition waste. No process related raw materials, intermediates or products etc. are currently or will in future be used or generated by waste activities at this site.

Small scale energy requirements for site offices, lighting, heating etc. will be provided by an ESB supply to the site. Mains water is supplied to the site toilet/Canteen facilities.

Earthworks plant machinery placing and compacting the imported soil and stone will be powered by diesel fuel, as will the crushing and screening equipment used to recycle the inert construction demolition and waste. It will also be used to power the shredder used in to recycle timber and Green Waste on site. All diesel fuel used at the application will be delivered when required to the equipment by the oil company's delivery truck. This will be filled on the hard standing area marked on the site drawing Fig 1.1. A spill tray will be used during the transfer of the fuel.

Assuming inert waste is imported, placed and recycled at the applications site for 50 weeks each year over a 10 year period (500 weeks) the diesel fuel consumed by the placement, compaction and recovery of waste and ancillary activities is assessed as follows:

	Fuel Consumption	Fuel Consumed
Waste placement and compaction		
Bulldozer	350 Litres/Week	175,000 Litres
Mechanical Excavator	300 Litres/Week	150,000 Litres
Waste Recovery		
Crushing Plant	350 Litres/Week	175,000Litres
Screening Plant	300 Litres/Week	150,000 Litres
Shredding plant	300 Litres/Week	150,000 Litres
Other		
Site Vehicles (2 no.)	80 Litres/Week	40,000 Litres
Total Fuel Consumption	1680Litres/Week	840,000 Litres

Note that the assessed fuel consumption is based on the following assumptions:

- (1) Backfilling at the operation continues at the same rate as heretofore
- (2) There will be no improvement in fuel efficiency of mechanical plant and site vehicles over the operational life of the facility
- (3) No alternatives to diesel fuel become commercially available over the operational life of the facility.

The proposed placement and compaction of approximately 1.2 million tonnes of inert soil and stone and recovery of approximately 700,000 tonnes of inert construction and demolition waste over a 10 year period is therefore estimated to consume a total of 840,000 litres of diesel fuel.

*For inspection purposes only.
Consent of copyright owner required for any other use.*