

G&D5 Proposed changes to waste activities

What we are proposing

We are proposing to install a soil wash plant to facilitate additional processing of existing waste materials. The aim is to recover a greater proportion of re-useable materials from our inert and mixed waste streams (namely raw aggregates). The extraction of raw aggregates is expensive both environmentally and economically. This machine will relieve pressure on the extraction of raw minerals by providing a viable, recycled alternative for the construction industry whilst also relieving pressure on land fill by reducing the amount of waste soil. The machinery will provide an enhancement of the construction and demolition waste recycling infrastructure in Sunderland and result in a cheaper alternative to virgin aggregates for construction in the local area. It is considered that the proposed plant and machinery will reduce the reliance on landfill within the Sunderland City Region, it will provide recycled building materials to the local construction industry and it will support the diversification of an existing local business whilst causing little impact or alteration to the existing operation on site.

Changes

All the material that goes through the plant will already have undergone significant physical (manual) and mechanical treatment in-line with the current permit conditions. The new washing plant will not result in additional forms of waste being accepted on the site. Therefore, the provision of the new plant and machinery will not materially alter waste acceptance, waste volumes, daily throughput, vehicular movements or the designated land use

Process

Waste from either the clean inert stockpiles or from the mixed waste streams (typically with a LOI <3% prior to washing) will be loaded into the plant where it is immediately doused with water. The waste then undergoes various automated screening / mechanical / washing processes separating the silts and clays from the "clean" sands and gravels, thereby reducing the volume material requiring further treatment or disposal.

Essentially this will produce:

- a small metal fraction.
- several grades of stones, gravel and sand (aggregates).
- a final silt-like fraction (press) which will go to landfill.

The resultant clean inert aggregates will be tested in-line with the Quality Protocol for the production of aggregates from inert waste and will meet the end-of waste criteria.

The resultant aggregates from the mixed waste stream will under-go the same tests and factory production control as the inert waste stream. These will be independently tested and certified to apply the end of waste test.

The Plant

The wash plant will sit on a self-contained, sealed, concrete surface within an existing building situated within the current permitted area. The plant is entirely independent. It does not require connection to foul sewer (see image below for visual aid).



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