

EAD Waste Considerations

First, the waste will be non-hazardous and will pass the EPA TCLP leaching test, so it can be land filled without any special requirements or concerns.

Due to the relatively high stoichiometry, a large portion of the waste will be un-reacted lime and some of our customers have used the waste products similarly as hydrated lime would be used, such as for dust control on roads in open pit mines or other dirt roads and for 'sweetening' acid soils.

About ten years ago, Clemson University did a research project, using waste products from one of our EAD scrubbing system to test its impact on crops, specifically a fast-growing species of corn. The waste was added to a baseline South-East US type soil in, if I remember correctly, 5% increments from 5% to 100%, and the corn was tested for a number of parameters, including growth rate and absorption of heavy metals. Clemson discovered zero harmful effects, in fact the waste material acted as a fertilizer, increasing growth rates for the soils with 5% all the way to 90%, as I remember, only at 95 and 100% waste did the product not act as a fertilizer.

Subsequently, our customer sold some of its waste to local farmers in KY; that plant has been shut down nearly three years due to economic conditions. Another customer of us, which is located in an area with less agricultural activity, has been using its waste products on its mine roads; when wetted the lime has excellent dust control properties.

Here is a list of potential uses that an engineer provided some years ago:

- Civil works
- Sealing material
- Base course material
- Fill for landscaping / land reclamation
- Fertilizer for agriculture and forestry
- Reagent for wet FGD and conversion to gypsum
- Raw material for aggregates, cement and brick
 - Sand-lime brick
 - Cellular concrete (autoclaved aerated concrete 'gas beton')
- Cement – special processes
- Aggregates – synthetic gravel

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