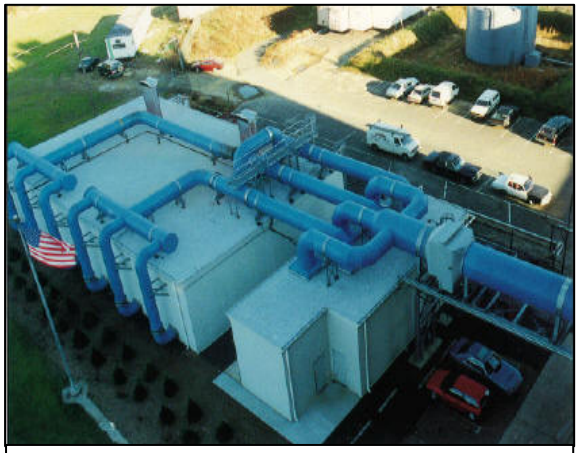

A biofiltration odour control facility treating process off-gas from a *yeast fermentation plant*

Rage biomass filtration is proven to be a reliable and cost effective technology for odour abatement. *Hydrogen sulphide, VOC* and *other odour emissions* is a major issue for most of the wastewater treatment plant. *Chemical scrubber* or *carbon filter* is the most common way for controlling odour. The advantages of biofiltration over these traditional applications are its low operating and maintenance cost. In addition, such technology is also environmental friendly. Since no hazardous chemicals are generated, there is no need for frequent replacement of carbon required, in other words. Biofiltration is well-known for cost effective and environmental friendly way in eliminating odour and VOC. It is a Green Technology for today.

The technology combines biodegradation and absorption in one system. A metal or GRP house packed with wood chips as bed for the microorganisms. pH, humidity are monitored and controlled to provide an ideal environment to support a thriving microbiological population. When odiferous air is drawn into the system and passed through the biobed. The microorganisms will uptake H_2S or VOC as part of their respective metabolic pathway. These pollutants will be oxidized to form odourless compounds. In most case, the removal efficiency can be over 97%.

Benefits

- No chemical use
- No nutrient addition for most applications
- Virtually maintenance free
- Low operating cost
- Low maintenance cost
- Complete breakdown of odour compounds
- No secondary pollution

Treating the air from a *composting plant*