It's not waste. It's energy.

AAT BIOGAS TECHNOLOGY

6960 Wolfurt, Austria
T +43 (0)5574 65190-0
www.aat-biogas.at

Microbial desulphurization

Low operation costs at high degree of purification.

AAT microbial desulphurization is used to reduce hydrogen sulphide in biogas, WWTP and landfill plants on an ecological basis.

Apart from methane (CH_4) and carbon dioxide (CO_2), toxic hydrogen sulphide (H_2S) is produced in fermentation processes as well.
This acts corrosively on the consumers and equipment.

The H_2S containing biogas is passed through a packing tank. Microorganisms settle on the surface of the packing, which by the use of oxygen oxidise the hydrogen sulphide to elementary sulphur and sulphate.

By adding artificial fertiliser as nutritional component for the organisms and circulating water the sulphur and the sulphate is continuously washed out. The sulphate suspension developing is passed to the inlet of the sewage treatment plant or to the fermentation residue tank in case of biogas plants.

Advantages:
- ✓ Material: plastic (PP)
- ✓ Acid-resistant circulation pump
- ✓ Air blower (including non-return valve and deflagration arrester)
- ✓ Water inlet
- ✓ Receiver tank for nutrient solution
- ✓ Flushing lance in tank
- ✓ Heat exchanger
- ✓ Control cabinet
- ✓ Max. H_2S feed 20,000 ppm
- ✓ H_2S reduction down to 50 ppm

Options:
By means of a downstream activated carbon filter, the hydrogen sulphide can be eliminated by > 99 %.

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