THE DISASTER OF THE MBA-PLANT GOETTINGEN-DEIDERODE MBP / MBT-PLANT

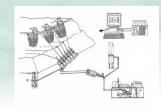
11th International Waste Management and Landfill Symposium / Sardinia 2007 October 1st – 5th

Presentation by Wolfgang H. Stachowitz

DAS – IB GmbH LFG - & Biogas - Technology

Biogas-, Sludge gas and Landfill gas technology:

- · Consulting, planning & design, project management
- · Familiarisation and training of system operators
- Independent Expert & Specialist
- Expert in ATEX Zoning according to 99/92/EG and 94/9/EG

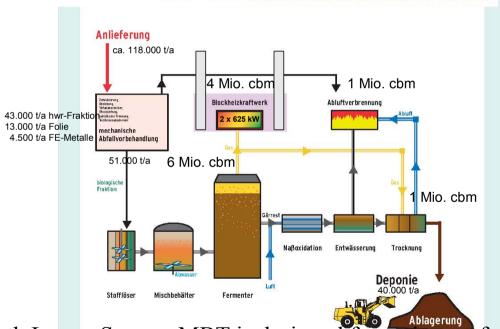


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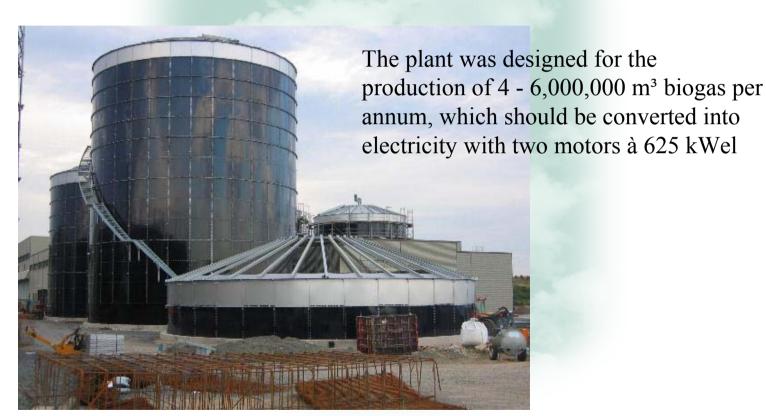
2.X. 2007

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abfallzweckverband



The South Lower Saxony MBT is designed for an input of approx. 130,000 t of waste per annum, whereof approx. 86,000 t of waste are rich in organic substances



The three fermenters during the construction (Abfallzweckverband Südniedersachsen, 2005) each 4,500 m3 size.



On Saturday, 21st of January 2006, at approx. 5:30 h, the disaster starts ... takes its course

DAS – IB GmbH, LFG & Biogas – Technology, www.das-ib.de , phone #49 / 431 / 683814, fax #49 / 431 / 2004137

Photos taken by the fire brigade







Own photos







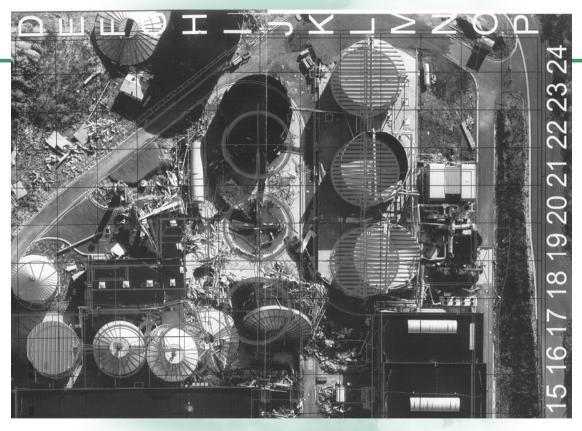


Figure 2. <u>Aerial photo of the MBP-/ MBT-plant after the accident in autumn 2007, showing the drawn layouts of the parts of the plant. Fermenters 1 – 3: 16/IJ – 22/IJ, blending tanks 1 and 2: 16/H – 16/E, wet oxidation 1 – 3: 18/KLM – 24/KLM, waste gas cleaning: 18/N – 20/N, machine house: 17/HGF – 19/HG. (Weser-Bildmessflug, 2007).</u>

The total loss caused by the accident amounts to more than 10 million of Euros plus extra costs for landfilling and transportation each day



Before - after

Time scale:

Disaster: 21st of January 2006, at approx. 5:30 h

The first experts of the insurance companies involved (among those the author, Wolfgang H. Stachowitz) visited the plant already on Monday 23rd and Tuesday, 24th January 2006, to get an overview of the damage

Delays:

- * Aerial photos for the determination of the field of rubble were only taken in autumn 2006
- * Data securing and searching of stored data respectively of the instrumentation and control systems was only implemented at the beginning of March 2007.

As until August 2007, the expert witnesses were still incapable of fixing a date for the handing-in of the expert's opinion and as high regular costs for the intermediate storage of the waste or for further waste disposal continued to arise for the operator, the Abfallzweckverband Südniedersachsen, an amicable solution was

aimed at with all parties involved

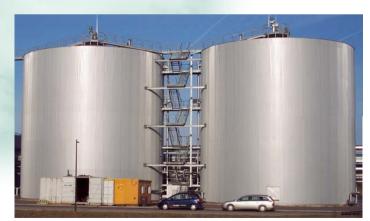
The solution /

Green light for reconstruction instead of an adjourned game and a lawsuit marathon: The expert witnesses stated that the subsoil (base plates) and the method of the MBP technology were not responsible for the accident.

Cleaning and reconstruction works have begun.

However, welded steel plates are used now for the new fermenter instead of screwed enamel plates.





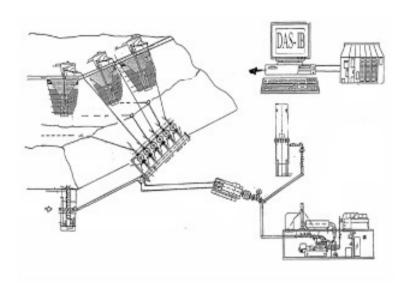


20 month after the disaster – reconstruction with the former general constructor AMB but with a new subcontractor for the fermenters



new fermenter system like MBA / MBT plant Lübeck by HAASE ENERGIETECHNIK AG

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Thank you for your attention

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