

# Case Study: Replacing Iron Sponge with BSR-050 H<sub>2</sub>S Media

A landfill in Texas simultaneously reduces H<sub>2</sub>S removal costs and increases feed flow and revenue with BSR-050





BSR-050® from Guild Associates is a high-capacity granular media for the removal of hydrogen sulfide from landfill gas. Engineered for direct replacement of Iron Sponge and Activated Carbon in systems with lead-lag vessel configuration, BSR-050 is field-proven to treat landfill gas for power generation or Renewable Natural Gas (RNG).

### BEFORE BSR-050

A Texas landfill with a gas flow of 6,500 scfm (800-1,000 ppm  $H_2S$ ) had an existing lead-lag system to remove  $H_2S$  from landfill gas. The 110,000 lbs of media in the vessel could not clean all of the gas without  $H_2S$  breakthrough, so only 5,600 scfm was processed. The additional 900 scfm was flared. The media would last just 3 weeks before changeout, and would typically brick into large pieces, requiring 4-5 days for removal and replacement.

#### AFTER BSR-050

Without changes to the vessels, the existing media was replaced with 33,000 lbs of BSR-050. Since BSR-050 is the highest capacity media on the market, the operator was able to process the full 6,500 scfm without  $H_2S$  breakthrough. The changeout interval was increased to an amazing 15 weeks and since the BSR-050 media is non-bricking, the time for the media removal and replacement was reduced to less than two days.

#### THE ECONOMIC IMPACT

Now being able to process the entire gas flow, the landfill's revenue increased by 15%. The total cost of hydrogen sulfide removal was decreased by an astounding 80%, as the longer time between changeouts and shorter time for executing the changeout significantly decreased the overall operational expenses.

Properly applying BSR-050 to your site involves understanding all aspects of the  $H_2S$  removal process. Contact Guild Associates for a full expert evaluation of your existing process, or have us provide a complete solution including vessels, media, and controls.

BSR-050®is a registered trademark of Guild Associates, Inc.



## **About Guild Associates**

Guild Associates is a manufacturer of biogas processing equipment and BSR-050 Hydrogen Sulfide Removal Media. Guild Associates manufactures the patented BSR-050 media at a factility in Delaware OH.

#### Contact us for more information:

5750 Shier-Rings Rd Dublin OH, 43016 614-798-8215 H2S@guildassociates.com www.guildassociates.com