LMOP Webinar on LFG Treatment - November 16th!



Save the Date!

The U.S. EPA Landfill Methane Outreach Program (LMOP) is pleased to announce an upcoming webinar, <u>Landfill Gas Treatment Technologies</u>, on <u>Tuesday</u>, <u>November 16</u>, <u>2021</u>, <u>from 2:00 – 3:00 PM (EST)</u>. Removing impurities from landfill gas (LFG) can be costly and complicated. During this webinar, learn about improvements to LFG treatment through easier removal of nitrogen (N_2) and hydrogen sulfide (H_2S).

Designing an LFG-to-renewable natural gas (RNG) upgrading plant involves numerous site-specific variables, particularly raw LFG flow and composition. An elevated N_2 concentration can present challenges for meeting natural gas pipeline specifications and require enhanced management of the LFG collection, or specific treatment to remove N_2 . Air Liquide developed a Nitrogen Rejection Unit (NRU) system to effectively process feed N_2 concentrations up to 12 percent N_2 (optimum range of 5-7 percent) in the raw LFG feed gas while achieving 96 percent methane recovery in the product RNG. Upgraded biogas is compressed, cooled and then treated through a cascaded 3-stage process. Other than the feed compression and a modulating quality control valve, the system does not have any moving parts, which results in simple operation. Air Liquide installed this membrane NRU at two sites in 2019-2020 with an additional four installations planned for 2021-2022. The simplicity, high methane recovery and lower energy consumption of the Air Liquide NRU package can be beneficial to landfills that need to address N_2 concentrations.

Mixed metal oxy-hydroxide (MMO) is a new, field-proven dry media technology from Guild Associates for the removal of H_2S from LFG. Unlike conventional dry media types, which contain both active and inactive components, MMO contains 100 percent active component, providing maximum concentration of active sites and H_2S removal capacity. In a case study that Guild Associates will present in this webinar, MMO media was used to replace a conventional media type at a landfill in Texas. The enhanced media efficiency allowed the landfill to process 15 percent more gas (up to 6,500 standard cubic feet per minute) and extended the media change-out interval by a factor of five, from three to 15 weeks. As a result, operational costs were reduced by 80 percent and revenue increased.

There is no cost to participate in the webinar, but online registration is required – register online at zoomgov.com/webinar/register/WN_eBGzZuE_RdSvmalBs3oClw to receive a confirmation email containing information on how to join the webinar. A time for questions from the audience will follow the presentations.

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