GREENHOUSE GAS EMISSION REDUCTIONS FROM U.S. LANDFILL GAS UTILIZATION PROJECTS: LANDFILLS TO THE RESCUE

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ABSTRACT

The landfill gas-to-energy (LFGTE) industry has experienced significant activity over the past two years as projects rushed to take advantage of the Section 29 tax credits prior to their expiration. Todate, there are more than 200 landfills economically using LFG nationwide, with an additional 500 landfills large enough to support a project if an energy customer could be secured. There are approximately 200 in various stages of development. With the Section 29 tax credits expiration on June 30, 1998, the successful LFG utilization project developers will be those who recognize that these changes are permanent departures from past practices, and those who will seek to exploit opportunities created by these changes.

LFGTE and LFG control projects can provide cost effective GHG emission reductions. With landfills being the country's leading controllable methane source, and methane being 21 times more potent a GHG gas than carbon dioxide (CO2), controlling LFG can bring large dividends.

This paper will quantify the GHG emissions reductions potential from LFGTE projects. Estimates of CO2 equivalent reductions from operating and projects under development, as well as other sites large enough to technically support a utilization project will be prepared. The cost per ton of CO2 equivalent controlled will be provided for LFGTE projects. A summary of activities being conducted by the Solid Waste Association of North America (SWANA) to quantify the LFG industry's potential contribution to the national GHG emission reduction effort will be presented.

With Global Climate Change issues receiving both national and international action, landfill methane control may prove to be one of the best strategies to help meet these objectives.

Keywords: **greenhouse gas, landfill gas, landfills, methane, section 29 tax credits, 1605(b) reporting**

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