

Energy Is a Terrible Thing to Waste

I just returned from US EPA's Landfill Methane Outreach conference (LMOP 2003) in Washington, DC where I listened with genuine astonishment to presentation after presentation that came to the somewhat unexpected conclusion that the future for landfill gas more than good, it's hot.

Keep in mind that these were presentations to an audience composed of landfill owners, energy developers, equipment manufacturers, financial analysts, and regulators who have grown weary watching various governmental bodies hem and haw over how to deal with political, environmental, regulatory, and economic issues that have given industry regulars an ongoing case of heartburn. So I think the largely optimistic tone took many by surprise.

Barely halfway into the first morning's agenda it became clear monumental change was afoot. Point the way to things to come were back-to-back presentations by representatives of the Department of Energy who outlined alternative energy programs that not only included LFG, but proceeded to label the resource the most favorable from several perspectives, including the environment, economics, and—and here's perhaps the most interesting since it occurred to me that it underlay DOE's appearance at the event—LFG's energy contribution to homeland security.

Partnering With Government

Chris Abbuehl, national program representative of the Biomass and Alternative Methane Fuels program (BAMF)—a subset of DOE's Federal Energy Program (FEMP)—led off by explaining the programs involved and what DOE expects to accomplish. Points I feel significant to LFGTE projects are

- (1) the complementary aspects of DOE and EPA programs, especially in the applicability of LFG to their critical objectives
- (2) the Federal Government with its \$10 billion/year energy bill is the nation's largest energy customer , and
- (3) DOE's Super Energy Performance Contracts (Super ESPCs) are designed to reduce costs and bring alternative sources to bear on the government's energy needs.

For more information on FEMP, Super ESPCs, and BAMF go to <http://www.eren.doe.gov/femp/financing/espc/biomass.html>.

Steve Cooke of DOE's National Energy Technology Lab (NETL) in Morgantown, WV, brought the focus home to landfill gas by presenting NETL's program for identifying potential Federal landfill opportunities throughout the US using GIS to pair up candidate landfills with government facilities. Establishing as selection criteria: (1) size and availability of landfills, (2) end-use capacity of the Federal facilities, and (3) the distance separating them, the GIS identified 1,227 candidate pairs that meet the course screening criteria.

The basis for NETL's assessment is that the National Energy Policy Goals, bolstered by Executive Order 13134, "Developing and Promoting Biobased Products and Bioenergy," seeks to stimulate the creation and early adoption of technologies needed to make bioenergy cost-competitive in large markets. DOE is tasked with providing technical assistance as well as helping resource owners obtain private financing and performance contracts through FEMP's Biomass and Alternative Methane Super ESPCs. Additional information on NETL's programs and background data are available at www.netl.coe.gov.

Partnering With Industry

Even before the implications of the DOE presentations had fully sunk in, representatives of two manufacturing concerns—S.C. Johnson and General Motors—made them even more indelible by telling of their companies' success in bringing in gas from nearby landfills to meet their needs. Allow me to paraphrase the mutual and essential messages they conveyed:

1. Reducing GHG emissions is good not only for the environment but it adds luster to the corporate image as well
2. Reducing GHG emissions has positive economic value in emissions credits...both in terms of cash and/or as a regulatory relief trading chip.
3. LFG is presently price-competitive with traditional fuel sources in many parts of the country and destined to become ever more so in the future.
4. LFG provides an enterprise the ability to determine and hold stable long term fuel costs without regard to fluctuations in commercial fuel prices
5. LFG is a 24-hour-per-day, seven-days-a-week resource.
6. LFG provides security from interruption of operations resulting from disruption to commercial fuel delivery activities.

Notice what's going on here. Of the points listed, only the first two are "iffy" or subject to outside acceptance. The last four advantages are "real" with tangible, take-to-the-bank, bottom-line value.

Where To From Here?

What's most apparent to me from this is that on both the Federal and private enterprise fronts, landfill gas is finally being recognized first and foremost for its economic value rather than as an environmental trading chip. However, I think this is only a part of a larger

point...that there is real and increasing value in the organic fraction of waste that needs to be studied. What's to prevent us from dedicating portions of the waste stream to meet energy needs upstream of landfills? Why, for instance doesn't it make sense to site transfer stations or MRFs in the vicinity of candidate businesses or Federal facilities and dedicate a portion of the biomass to serve their energy needs?

Don Warren. In Memorium

SWANA and waste management pioneer, Don Warren, died Suddenly on January 8, 2003. As his long time friend and associate, Lanny Hickman says, "Don probably did more to advance fully automated collection of residential solid waste than all of the rest of us who have worked in solid waste management over the past 30 years. His contributions have never been recognized or fully appreciated. Don was a committed professional who believed in a major role for local government in solid waste management. He was a gentleman, a friend to many of us and he will be sorely missed."