



MRRA 2010 Newsletter

Waste-to-Energy (WTE) Plants Continue to Play An Important Role in Minnesota

On June 14, 2010, the Minnesota Pollution Control Agency (MPCA) issued a Program Management Decision Memo related to Waste-to-Energy (WTE) and its role in an integrated solid waste management system. These decisions are used by the MPCA to guide staff and assure consistency amongst the various divisions of the MPCA. The MPCA's conclusion was:

"WTE plants continue to have an important role to play in the integrated solid waste management system."

Analyzing WTE in terms of five criteria the Decision Memo concluded:

Energy recovery per ton: "On a per ton mixed municipal solid waste basis, WTE is clearly superior to landfill gas-to-energy in terms of the amount of usable energy produced."

Effect on recycling rates: "MPCA finds no evidence that the state's WTE system and its recycling system are working at cross purposes."

Costs at existing facilities: "Setting aside uncertainty about the long-term costs of landfills, the out-of-pocket tipping fee charge to haulers delivering a ton of MSW to a large WTE (excluding public subsidies) will be at least twice as much as the tipping

fee charged at a large landfill".

Greenhouse gas emissions: "On a per-ton of waste basis, WTE and landfill gas-to-energy facilities are indistinguishable in terms of greenhouse gas emissions although the calculation has large uncertainty bars." It is MRRA's position that periods of uncollected methane must be counted in a life cycle assessment.

Air pollution other than GHG emissions: "The MPCA's conclusions about the comparative standing of landfills will be quite limited when it comes to air emissions because there has been a persistent lack of actual data about air emissions from the surface area of landfills."

Although the MRRA generally supports the Program Management Decision Memo, the Memo failed to highlight some key facts, such as:

- Landfill gas capture produces only 20 kWh of electricity per ton of waste compared to 520 kWh of electricity per ton of waste produced by WTE.
- The EPA has determined that "The net GHG emissions from incineration of mixed MSW are lower than landfilling."

Special thanks to our Industry supporters:

Wrigley, HDR, TKDA, Wenck, Campbell-Sevey, Stoel Rives, ChemTreat, and SKB

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Mark Your Calendar:
 MRRA's Day at the Capitol
 February 16, 2011

“MRRA members have spent considerable time studying the amount of greenhouse gases that are reduced with WTE...”

Fact:
 Methane (CH₄) from landfills is at least a 21-times more potent greenhouse gas than Carbon Dioxide (CO₂).

Utilize Waste-to-Energy and Decrease Greenhouse Gas (GHG) Emissions

GHG calculations result in different outcomes based upon the model and inputs to the model used. MRRA members have spent considerable time studying the amount of greenhouse gases that are reduced with WTE as evaluated using EPA's WARM model as well as IPCC's (Intergovernmental Panel on Climate Change) model. In both instances, where landfills are net GHG producers, WTE facilities clearly reduce GHG emissions.

Perhaps some will argue it is more art than science. For those individuals,

MRRA suggests you consider the following about landfills and the methane generated and not collected.

Under federal regulations, landfill gas collection is not required for anywhere between two to five years from placement of waste in a cell. Furthermore, landfills are not required to collect methane for the full period of anaerobic digestion and methane generation. After a minimum of 15 years, landfills can turn off methane collection systems once emissions of NMOCs drop below 50 Mg/year.

Ash, Anyone?

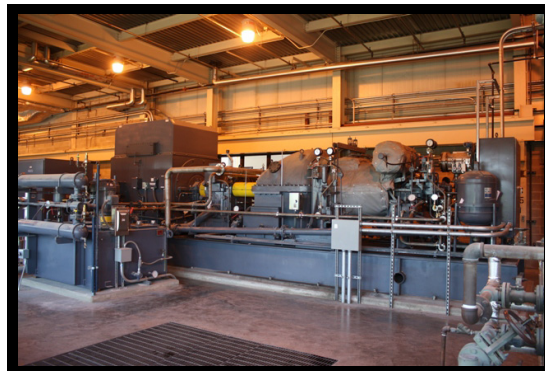
Since 2000, Polk County, Minnesota has performed six waste combustor ash utilization projects including one currently under construction. Three projects used ash as an amendment in asphalt mix. Three used ash as a substitute for the clay binder material in Class 5 base construction. In total, approximately 33,500 tons of screened ash have been utilized with the

majority of this incorporated in Class 5 materials. As a conservative measure, all ash amended materials were totally encapsulated with virgin asphalt and Class 5 mix. Polk County obtained a CSBUD that allows a substitution rate of up to 25%. A waste combustor produces an average of 6,000 tons of ash per year.

Facility News:



The new Pope/Douglas Unit in Alexandria, MN will double the amount of waste to be combusted from 120 tons per day to 240 tons per day.



Olmsted County, Minnesota's new 5 MW turbine generator. Previously a 200 tons per day (tpd), it now operates as a 400 tpd facility.

Important Dates:

- September MRRA Member Meeting: September 24, 2010 at 10:00 A.M., Olmsted County. Come see the County's new generator which doubles the current facility's size.
- Next Operator Training Class: October 12-15, 2010. An unequalled opportunity to tour each of the three incinerator technologies in Minnesota. If interested, contact Peter Torkelson at 507-467-4500.
- November MRRA Member Meeting: November 19, 2010, 10:00 A.M. at Hennepin County/HERC. May have an "Insider Tour" of the Twin's stadium.

For more information, contact Trudy Richter at trichter@rranow.com or visit www.mnresourcerecovery.com.