Reexamining the Recycling and WTE Compatibility Issue

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Overview
This paper provides an updated look at whether materials recycling and waste-to-energy (WTE) operations are compatible in 19 communities across the United States. Research results, completed in December 2005, address compatibility concerns raised by some regulators and members of the environmental community. They also answer how communities with operating WTE plants respond to such concerns, based on what they have observed and actually experienced managing municipal solid waste. New statistics are provided on the type and amount of materials recovered on-site at WTE operations for subsequent recycling, the recycling rates in featured WTE communities (i.e., including off-site programs), what materials are included in such rates, and whether WTE is preventing or facilitating higher recycling percentages. The paper also provides specific evidence demonstrating other ways the two management options compliment or work against one another, from the community perspective.

Primary Findings
The full range and depth of topics covered by the 2005 research goes beyond the time limitations of the conference session. The complete research results are available from the author. Key paper findings include:

- 95% of the WTE communities contacted specifically reported that their WTE plant has not limited the community recycling rate;
- 95% of the WTE communities reported that their investment in WTE capital infrastructure has not limited their investment in recycling infrastructure;
- A community’s recycling rate does not appear to be negatively influenced by a WTE plant’s demand for municipal waste, or by the existence of put or pay contracts. Ten of the 12 communities contacted (83%) with put or pay contracts also reported that their recycling programs are expanding. Further, two of the three WTE communities reporting no recycling growth do not have put or pay contracts;
- When asked to comment on the notion that WTE is not compatible with recycling since it burns paper and plastic, all but one WTE community provided a response indicating that the two are compatible;
- 11% (i.e., two) of the communities noted that a low WTE tip fee results in less financial incentive to recycle. This suggests that a community must sometimes be willing to pay more to recycle if the WTE tip fee is low;

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• The theory that communities with pay-as-you-throw (PAYT) waste reduction programs will have high recycling rates (or conversely, that communities without PAYT programs will have low recycling rates) drew mixed results among the 19 WTE communities surveyed. A high recycling rate was defined to be greater than the EPA national average of 31%. The stated theory held true in 47% of the WTE communities surveyed (i.e., six communities with high recycling rates also had PAYT, and three communities with low recycling rates did not have PAYT); and failed in 53% of the cases (i.e., nine communities with high recycling rates did not have PAYT, and one community with a low recycling rate did have PAYT);

• The theory that WTE communities will have a high recycling rate only if the WTE service fee is high and there is no put or pay contract in place (or conversely, that the WTE community recycling rate will be low if the WTE service fee is low, and a put or pay contract is in place) does not hold up well among the 17 communities for which complete data were available. More specifically, the stated theory did not hold true for 76% of the communities surveyed and held true in 24% (i.e., 4 communities) of the cases. For purposes of the analysis, a high WTE service fee (i.e., tip fee plus transportation cost) was defined to be greater than the service fees of alternative disposal options in the greater region; and

• All recycling coordinators, municipal officials, and waste management professionals responding to the compatibility portion of the survey indicated why they believe recycling and waste-to-energy are compatible in their community.

**Speaker Biography**
Jonathan Kiser, President of Kiser Environmental Consulting, offers services in program management, full cost accounting, due diligence, benchmarking surveys, technical research, writing & analysis, environmental audits/assessments, health and safety, regulatory compliance, strategic planning, public affairs, business development, and photography. Mr. Kiser has nearly 30 years of experience working on behalf of public and private sector organizations on assignments throughout the U.S. and internationally. Since 1995, Jonathan has completed a diverse range of projects as an independent contractor. From 1991 to 1995, Jonathan served as a founding Director for the Integrated Waste Services Association (IWSA) in Washington, D.C. Prior to this, he worked as a Manager at the National Solid Wastes Management Association (NSWMA) and Directed the Waste Combustion Equipment Institute. During the period of 1984 to 1987, the consulting firm Gershman, Brickner & Bratton, Inc. (GBB) in Falls Church, Virginia employed Jonathan. From 1982 to 1984, he served as Project Liaison for an Energy Conservation Program sponsored by University Circle, Inc./Case Western Reserve University in Cleveland. Jonathan received his M.B.A. from George Washington University, and B.S. in Resource Economics from the University of New Hampshire. He has more than 60 publications and has lectured/taught on environmental topics across the U.S., in Europe, Australia, and Thailand. Mr. Kiser has also served on numerous technical peer review committees and coalition group efforts, and is an active member of SWANA.