CASE STUDIES OF SELECTED
WASTE-TO-ENERGY FACILITIES

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INTRODUCTION

The following case studies are a series that examine selected communities and waste-to-energy plants in the United States that convert municipal solid waste (MSW) into energy, whether electricity or steam. Conducted by Governmental Advisory Associates, these case studies were sponsored by the American Chemistry Council (ACC) to better understand a community’s decision to use or incorporate waste to energy (WTE) as a major waste disposal strategy and to examine both the positive and negative ramifications. The series examines different types of facilities in different parts of the country. The plants also vary by size and by the type of technology that is used from a relatively small, publicly owned and operated facility in the upper Midwest to one of the largest publicly owned and privately operated plants in the South. Table 1 shows the plants to be included as well as some pertinent information about them.

TABLE 1: Basic Characteristics of Suggested WTE Case Studies

<table>
<thead>
<tr>
<th>Region</th>
<th>Location</th>
<th>Facility</th>
<th>Pop. Served</th>
<th>Start Up Date</th>
<th>Type of Process</th>
<th>Owner</th>
<th>Operator</th>
<th>Tons Per Day (tpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>South</td>
<td>Palm Beach County</td>
<td>North County Region Resource Recovery Project</td>
<td>1,400,000</td>
<td>1989</td>
<td>RDF</td>
<td>Solid Waste Authority</td>
<td>Babcock &amp; Wilcox</td>
<td>2000</td>
</tr>
<tr>
<td>Midwest</td>
<td>Olmsted County, MN</td>
<td>Olmsted County</td>
<td>143,000</td>
<td>1987</td>
<td>Mass Burn</td>
<td>Olmsted County</td>
<td>Olmsted County</td>
<td>200</td>
</tr>
<tr>
<td>West</td>
<td>Marion County, OR</td>
<td>Marion County WTE Plant</td>
<td>314,870</td>
<td>1987</td>
<td>Mass Burn</td>
<td>Covanta Energy</td>
<td>Covanta Energy</td>
<td>550</td>
</tr>
<tr>
<td>East</td>
<td>Westchester County, NY</td>
<td>Wheelabrator Westchester</td>
<td>851,000</td>
<td>1984</td>
<td>Mass Burn</td>
<td>Wheelabrator</td>
<td>Wheelabrator</td>
<td>2250</td>
</tr>
</tbody>
</table>

Each case study will examine:

1) the background of the community or communities using the waste to energy plant;
2) the reasons that WTE selected as a waste disposal option; and
3) the impact of WTE on the community.

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1 As defined by the EPA, MSW consists of everyday items such as product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, appliances, and batteries. Not included are materials that also may be disposed in landfills but are not generally considered MSW, such as construction and demolition materials, municipal wastewater treatment sludges, and non-hazardous industrial wastes.