TABLE 5.—SUMMARY OF TOTAL MSW THROUGHPUT AT PUBLIC AND PRIVATE MWC'S BY MODEL PLANT—Continued

Model plant[a]	Ownership				
	Public throughput (Mg/yr)	Public share (%)	Private throughput (Mg/yr)	Private share (%)	Total throughput (Mg/yr)
16	58,462	6.7	819,320	93.3	877,782
17	745,501	52.9	662,673	47.1	1,408,174
Total:	15,078,823	45.9	17,737,993	54.1	32,816,816

[a] There is no model plant that matches model plant #13 in the Economic Impact Analysis (EPA–450/3–91–029, March 1994).

b. *Regulatory Alternatives Considered.* The two broad categories of regulatory standards available include design standards and emission standards. Design standards specify the type of control equipment polluters must install, whereas emission standards specify the maximum quantity of a given pollutant that any one polluter may release.

Design standards offer the least flexible approach considered in this analysis. Municipal waste combustors would have to install the specified control equipment regardless of the additional emission reductions achieved or the relative cost of alternative means of emission reductions.

Emission standards allow greater flexibility in the methods used to reduce emissions. Municipal waste combustors are free to meet the emission limit in the manner that is least costly to them. Consequently, for a given level of emission reductions, emission standards are generally less costly than design standards. Furthermore, emission standards give MWC's an incentive to develop more effective means of controlling emissions. In addition, the Act requires the Administrator to promulgate emission standards unless such standards are not feasible. See 42 U.S.C. §§ 7411(h) and 7429(a)(1). Since emission standards for MWC's are feasible, the EPA is barred from promulgating design standards for MWC's.

Even though emission standards generally result in a more efficient allocation of costs than design standards, uniform emission standards can be more costly than necessary. Uniform emission standards require the same level of emission control of every discharger. Because marginal control costs differ for plants of different sizes, different technologies, different levels of product recovery (i.e., in the chemical industry), and different levels of baseline control, an effective solution can be reached if standards are carefully tailored to the special characteristics of each discharger. This type of standard is referred to as a differentiated standard.

In formulating its MWC regulatory alternatives, EPA selected candidate regulatory alternatives that contain control limits for MWC's differentiated by MWC size classification. Large facilities are defined as MWC plants with aggregate plant capacities over 225 Mg/day. Small facilities are defined as MWC plants with aggregate plant capacities between 35 and 225 Mg/day. Plants with aggregate plant capacities less than 35 Mg/day are not covered by today's rulemaking. The lower size threshold of 35 Mg/day aggregate plant capacity for controlling MWC emissions under today's rulemaking was selected after reviewing the population distributions of MWI's and MWC's. Most incinerators at medical waste facilities are smaller incinerators that fire segregated medical waste with general hospital discards (MSW), and these incinerators would have the potential to be covered by today's rulemaking. To avoid overlap with the upcoming MWI rulemaking, this rulemaking includes the lower size cutoff of 35 Mg/day plant capacity and MWC plants with aggregate capacities less than or equal to 35 Mg/day will be addressed under a separate rulemaking. With a lower size cutoff of 35 Mg/day, today's promulgated MWC rulemaking will cover over 99 percent of the total U.S. MWC combustion capacity but will exclude 97 percent of the total MWI combustion capacity.

The regulatory alternatives for the two selected size classifications did not specify a particular control technology; rather, they specified emission limits that facilities would be required to meet. Current practice indicates that the emission guideline limits for acid gases, PM, and metals will likely be met with one of six different types of control technologies, depending on the applicable emission limits. Table 6 presents acid gas, PM, and metals control technologies listed in order of increasing efficiency.

TABLE 6.—CONTROL TECHNOLOGIES ASSOCIATED WITH ACID GAS, PARTICULATE MATTER, AND METALS CONTROL

GCP + ESP
GCP + DSI/ESP
GCP + DSI/FF
GCP + SD/ESP
GCP + SD/FF

In designing MWC regulatory alternatives, the EPA considered emission limits consistent with the combinations of the acid gas control technologies listed in table 6. Small plants may be required to meet one control limit and large plants another under a given regulatory alternative. Under the final guidelines, more stringent control requirements are in fact applicable to large plants than to small plants. This was done in an attempt to equalize the cost impact on small and large plants. Under the final guidelines the unit cost for air pollution control retrofit for large plants would be about $16 per Mg of waste combusted. For similar small plants the retrofit costs would be about $17 per Mg of waste combusted. Table 7 shows the control technologies evaluated for the guidelines regulatory alternatives under two compliance scenarios for acid gas, PM, and metals control. The control technology bases identified in this table are not intended to imply a design standard. Rather, the technology bases are identified only for the purpose of estimating costs and emission reductions.