For existing MWC's, some of the emission limits included in the emission guidelines promulgated today are the same as the final MACT floor levels. For several pollutants, however, the Administrator decided, consistent with section 129(a)(2) after considering costs and non-air-quality health and environmental impacts and energy requirements, to set MACT standards more stringent than the MACT floor, since more stringent levels could be achieved at either no additional cost, or minimal costs. The MACT floor levels for acid gases and PM are stringent enough for existing units at both small and large plants that they require an acid gas/PM control system. Since an acid gas/PM control system also controls emissions of all regulated pollutants except Hg and NO_x, establishing emission limits for acid gases and PM effectively establishes emission limits for the other pollutants (except Hg and NO_x). The cost to comply with the selected emission limits relative to the cost of the acid gas/PM control system are minimal.

For example, the same acid gas/PM control system that owners and operators of MWC's need to meet the MACT emissions guideline levels for SO_2 and PM also controls dioxins/furans to levels more stringent than the dioxin/furan MACT floor level. Thus, the Administrator determined that the final dioxin/furan emission guidelines may be achieved at no additional control costs. In the final rule, for MWC's at large plants, the Administrator distinguished between the dioxin/furan emission guidelines for MWC's equipped with ESP-based control systems and MWC's equipped with nonESP-based control systems. In the Administrator's judgment, it would be prohibitively expensive and unreasonable to require existing ESP's that can meet a limit of 60 ng/dscm to retrofit an SD/FF in order to achieve additional reduction in emissions beyond the MACT floor (see the proposal preamble, 50 FR 48228, September 20, 1994, for a more detailed discussion). For the final rule, the Administrator considered several regulatory options more stringent than the MACT floor; however, because of the high cost of pollution control device retrofit, the Administrator determined that MACT for dioxins/furans emitted from MWC's with ESP-based control systems is 60 ng/dscm, and MACT for dioxins/furans emitted from MWC's with SD/FF systems is 30 ng/dscm.

The MACT floor for Hg is 0.36 mg/dscm, and MACT for Hg is more stringent than the MACT floor at a level of 0.080 mg/dscm. To achieve the Hg emission limit in the emission guidelines, carbon injection will be required (this exceeds MACT floor requirements). Because of the toxicity and bioaccumulation potential of Hg, the Administrator considered the small cost of adding Hg control to be cost-effective. The cost of Hg control is about $0.25 to $0.35 per gram Hg removed ($250,000 to $350,000 per Mg), which translates to approximately $0.05 to $0.07 per month for a household served by an MWC.

2. Social Costs and Benefits

This assessment of the cost and benefits to State, local, and tribal governments of the guidelines is based on EPA's ''Economic Impact Analysis for Proposed Emission Standards and Guidelines for Municipal Solid Waste Combustors.'' Measuring the social costs of the guidelines requires identification of the affected entities by ownership (public or private), consideration of regulatory alternatives, calculation of the regulatory compliance costs for each affected entity, and assessment of the market implications of the additional pollution control costs. Calculating the social benefits of the guidelines requires estimating the anticipated reductions in emissions at MWC's due to regulation, identification of the harmful effects of exposure to MWC emissions, and valuing the expected reductions in these damages to society.

a. *Affected Entities.* For 1996, the base year of the analysis, there are 179 MWC's in the population of operational facilities affected by the guidelines. Of this total, 100 are publicly owned and operated (i.e., facilities owned by State or local governments). There are no MWC's currently owned, or expected to be owned in the near future, by tribal governments, so there is no impact on tribal governments. The remaining 79 MWC's are privately owned and operated. The EPA developed 16 model plants to characterize the existing facilities based on the technologies used for combustion and air pollution control at baseline. Table 5 shows the distribution of publicly and privately owned MWC's and the estimated MSW volumes managed by the existing MWC model plants. Of the 100 publicly owned and operated MWC plants, 38 plants are located in communities with a population less than 50,000, 11 plants are located in communities with a population between 50,000 and 100,000, 21 plants are located in communities with a population between 100,000 and 250,000, and 30 plants are located in communities with a population greater than 250,000. A detailed description of the model plants used to characterize operational MWC's is presented in table 3–4 of the ''Economic Impact Analysis of Proposed Emissions Standards and Guidelines for Municipal Waste Combustors'' (EPA–450/3–91–029, 1994).

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

Model plant[a]	Ownership				
	Public throughput (Mg/yr)	Public share (%)	Private throughput (Mg/yr)	Private share (%)	Total throughput (Mg/yr)
1	813,244	100.0	0	0.0	813,244
2	1,158,112	81.9	256,034	18.1	1,414,146
3	1,397,867	100.0	0	0.0	1,397,867
4	1,914,896	19.3	7,995,967	80.7	9,910,863
5	3,956,410	61.1	2,523,329	38.9	6,479,739
6	374,566	56.7	286,119	43.3	660,685
7	1,008,603	57.5	746,477	42.5	1,755,080
8	1,547,612	66.5	777,981	33.5	2,325,593
9	400,346	73.3	145,661	26.7	546,007
10	425,552	82.5	90,472	17.5	516,024
11	166,082	42.0	228,966	58.0	395,048
12	284,596	72.6	107,219	27.4	391,815
14	343,596	48.4	366,785	51.6	710,381
15	937,280	29.2	2,277,088	70.8	3,214,368