face adverse economic impacts associated with installation of pollution control equipment, while general medical waste incinerators could use available alternatives to incineration. For these reasons, the proposed standards and guidelines focus on regulating emissions from general medical waste incinerators and include very minor requirements for pathological MWI's. Under the proposed standards and guidelines, pathological MWI's would only be required to submit quarterly reports of the amount and type of materials charged to the incinerator.

Finally, in addition to developing standards and guidelines for medical waste incinerators, section 129 of the Act directs the EPA to develop standards and guidelines for municipal waste incinerators, commercial or industrial waste incinerators, and other categories of solid waste incinerators. The Agency intends to consider pathological incinerators (along with crematory incinerators) when evaluating the category of other solid waste incinerators for regulation.

C. Modification of Existing MWI's

Previously, the terms "modification" and "reconstruction" were defined under sections 60.14 and 60.15 of subpart A of part 60. Section 129 of the Act has specified a new definition of "modified" that combines and revises the previous definitions of "modification" and "reconstruction." Specifically, "modified" refers to: (1) modifications for which the

* * * cumulative costs of the modifications, over the life of the unit, exceed 50 per centum of the original cost of the construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs * * *

or (2) modification involving

* * * a physical change in or change in the method of operation of the unit which increases the amount of any air pollutant emitted by the unit for which standards have been established under [section 129] or sections 111 * * *.

A special provision has been included in the proposed NSPS and emission guidelines to address certain modifications to existing facilities. This provision states that if an existing MWI is modified for the purpose of meeting the requirements of the proposed guidelines for existing MWI's or State regulations developed to implement these guidelines, then the MWI would not be considered a "modified" MWI and would not be subject to the NSPS (40 CFR part 60, subpart Ec).

On the other hand, if the existing facility is modified in ways not required to meet the emission guidelines, then the facility could be considered a "modified" MWI and could become subject to the NSPS. For example, if an existing pathological MWI, which was not originally designed to accommodate general medical waste, begins burning general medical waste, then that MWI may be considered a modified MWI and, as a result, will be subject to the NSPS.

D. Selection of Pollutants

Section 129 of the Act requires that the standards and guidelines promulgated under sections 111 and 129 and applicable to all solid waste incineration units shall specify numerical emission limitations for the following substances or mixtures: PM (total and fine), opacity, SO₂, HCl, NO_X, CO, Pb, Cd, Hg, and CDD/CDF. For this reason, the MWI standards and guidelines specify numerical emission limits for these pollutants.

E. Selection of Affected and Designated Facilities

As required by section 129 of the Act, the affected facility to which the proposed new source performance standards apply is each individual MWI for which construction is commenced after today's date or for which modification is commenced after the effective date of these standards. The designated facility to which the proposed emission guidelines apply is each existing MWI for which construction commenced on or before today's date. A facility that burns both municipal waste and medical waste could be subject to both the municipal waste combustor standards and guidelines and the medical waste incinerator standards and guidelines.

F. Selection of Format for the Proposed Standards and Emission Guidelines

The format selected for the proposed standards and guidelines is a combination of emission limitations and percent reductions to ensure control of emissions. The specific format of the proposed standards and guidelines and the reasons for selection are discussed below.

As required by section 129 of the Act, the proposed standards and guidelines would establish numerical emission limitations for PM, CO, CDD/CDF, HCl, SO₂, NO_X, Pb, Cd, and Hg. For the purpose of regulating PM and metals (Pb, Cd, and Hg) the format selected is a numerical concentration limit in units of mg/dscm corrected to 7 percent oxygen. For the purpose of regulating Hg an alternative percent reduction is

also proposed. The numerical Hg emission limit reflects the emission level that can be achieved based on a fabric filter (FF) system with activated carbon injection. Emissions of Hg can be highly variable and depend on the Hg input level. In cases where Hg levels are temporarily elevated due to variability in the waste feed, the numerical emission limit may not be consistently achievable. However, the control device is capable of achieving 85 percent reduction of elevated Hg levels.

Under the proposed standards and guidelines, CDD/CDF emissions are measured in units of total ng/dscm or ng/dscm toxic equivalency (TEQ). To arrive at the TEQ, measured emissions of each tetra- through octa-CDD and CDF congener are multiplied by the corresponding toxic equivalency factor (TEF) specified in the standards and guidelines (see Table 6). The products are then added to obtain the total concentration of CDD/CDF emitted in terms of TEQ.

For CO, SO_2 , NO_X , and HCl, the proposed standards and guidelines are volume concentrations corrected to 7 percent oxygen. For HCl, an alternative percent reduction is also proposed. A percent reduction is generally appropriate for acid gases emissions from MWI's. However, in cases where inlet levels are very low and the specified percent reduction would result in concentrations below the specified volume concentration (42 ppmv, which is a 97 percent reduction from typical uncontrolled emissions), these percent reductions may not be achievable. Therefore, the proposed HCl emission limits would require either a 97 percent reduction or a 42 ppmv HCl outlet concentration, which is based on reduction from typical uncontrolled emission levels, whichever is less stringent. An alternative percent reduction is not proposed for emissions of SO₂ because at the low inlet levels associated with medical waste, EPA emission test data shows that acid gases controls are not effective in reducing SO₂ emissions and as a result, SO₂ limits are based on uncontrolled emissions.

Under the proposed standards and guidelines, emission limits for Hg and HCl include stack concentrations as well as percent reductions. The EPA is requesting comments on the appropriateness of including a percent reduction along with a stack concentration limit in the standards and guidelines for these two pollutants.

G. Selection of Classes, Types, and Sizes

Section 129 states that the Administrator may distinguish among