differential retrofit costs of these two alternative control technologies.

In addition, as noted above, EPA is considering further subcategorization by size. If EPA decides to establish a subcategory of "very small MWI's" in the final rule, it is possible that one or more additional control approaches (in addition to fabric filters) would be able to achieve (or exceed) the MACT floor levels for this subcategory. The Agency would then undertake a careful review of the alternative control approaches available for this category of "very small MWI's" by considering the incremental emission reductions of the more stringent control options with the differences in retrofit cost across alternatives.

The Agency requests comment on the appropriate emission limits under these alternative options.

## B. Alternatives to Onsite Incineration

As discussed in sections III and IV of this notice, in evaluating costs associated with MACT for each MWI, it was determined that many facilities would have the option of using an alternative method of treatment and disposal that would be less expensive than onsite incineration under the proposed standards and guidelines. The most common alternatives to onsite incineration are offsite contract disposal (most commonly commercial medical waste incineration) and onsite autoclaving. While data are available to estimate costs for these two alternatives and to estimate emissions from commercial medical waste incineration, data are not available to quantify emissions or energy requirements from onsite autoclaving of medical waste. The EPA solicits emissions data, energy use data, and cost information on the use of autoclaves and other nonincineration methods to treat and dispose of medical waste.

Several concerns related to the use of alternatives to onsite incineration have been raised. One concern is the ability of alternative technology manufacturers to meet the increased demand for installations. Also, questions have been raised about the general stability in the alternative technology marketplace. Specifically, questions have been raised about whether vendors of alternative technologies will be able to service the equipment that has been installed over the life of that equipment. To respond to these concerns, the EPA solicits information on the number of companies that currently manufacture alternatives to onsite incineration, the number of U.S. installations, the number of installations the individual companies are capable of on an annual

basis, and the number of years the individual companies have been in business.

Concerns about environmental impacts associated with the use of these alternatives have also been raised. Specifically, questions have been raised about air and water pollution impacts. As discussed earlier, data are not available to quantify air emissions from the use of alternative technologies. Data are also not available to quantify other environmental impacts resulting from the use of alternatives. In addition to air emissions data (requested earlier), the EPA solicits data related to other media impacts, including water pollution impacts, resulting from the use of alternative technologies.

## C. Definition of Medical Waste

As discussed above, the definition of medical waste included in today's proposed regulations is very broad. Medical waste is any solid waste generated in the treatment, diagnosis, or immunization of humans or animals, or research pertaining thereto, or in the production or testing of biologicals.

Section 129 of the Clean Air Act directs the EPA to adopt regulations for solid waste incineration units burning medical waste. This section also states that "\* \* \* "solid waste" and "medical waste" shall have the meanings established by the Administrator pursuant to the Solid Waste Disposal Act."

The Solid Waste Disposal Act was amended extensively and, for all practical purposes replaced, by the Resource Conservation and Recovery Act (RCRA) in 1976. The RCRA, in turn, was amended in 1984 and, as it pertains to medical waste, was amended again in 1988 by the Medical Waste Tracking Act (MWTA). The MWTA included a definition of medical waste, which was added to the RCRA. In implementing the amendments to the RCRA, this statutory definition of medical waste was adopted by the Administrator. The definition of medical waste included in today's proposal, therefore, is in EPA's opinion the definition of this term established by the Administrator pursuant to the Solid Waste Disposal

As mentioned above, some have suggested the definition of medical waste included in today's proposal is inappropriate and the EPA requests comment on this definition. It appears the basis for this suggestion stems from the following concern. If the impact of today's regulation is as widespread as the EPA believes, in terms of the large number of medical waste generators who may decide to switch from the use

of onsite incineration to the use of alternative waste disposal techniques, there may not be enough medical waste disposal capacity currently available to safely and properly dispose of this medical waste.

To reduce the amount of medical waste covered by today's proposed regulations, some have suggested that the EPA narrow the definition of medical waste. Various definitions have been offered, such as "regulated medical waste" (a term used by the EPA in implementing the MWTA amendments to the RCRA), "red bag medical waste", "infectious medical waste", etc. These wastes are included under the broad definition of medical waste, but are generally viewed as constituting only about 15 to 20 percent of the total quantity of medical waste. If today's proposal covered only these types of medical wastes, as opposed to all types of medical wastes, the amount of medical waste which might be displaced from onsite incineration at medical waste generators to alternative waste disposal techniques would be much less and, as a result, more easily handled by these alternative techniques.

It appears to the EPA, however, that there are several reasons to believe there is or would be sufficient capacity available to safely and properly treat and dispose of all the medical waste that might be displaced from onsite incineration at medical waste generators as a result of today's proposed regulations. Since this issue concerns medical waste presently being treated by onsite medical waste incinerators at medical waste generators, it concerns existing incinerators, not new incinerators. Thus, the focus of this issue is today's proposed emission guidelines, not the proposed new source performance standards.

Today's proposed emission guidelines provide time for medical waste generators currently using onsite medical waste incinerators to consider alternatives for treating and disposing of their medical waste. The guidelines will not be adopted by the EPA for at least 1 year (the EPA is under Court Order to adopt final regulations by April 15, 1996). States are provided 1 year by the Clean Air Act to adopt plans for implementing the guidelines and to submit these plans to the EPA for approval. The Act then provides EPA 180 days to review and approve these State plans. Finally, today's proposed guidelines provide 1 year following EPA approval of the State plan for existing medical waste incinerators to comply with the proposed emission limits.

Medical waste generators currently operating onsite incinerators, therefore,