requirement, the final CO requirements include an additional category of combustor technology referred to as 'spreader stoker coal/RDF mixed fuelfired combustors," which are assigned the same CO limit and averaging time as RDF stoker combustors (150 ppmv, 24hour averaging time). The final standards further clarify that the category of combustors referred to in the proposed standards as coal/RDF mixed fuel-fired combustors only includes pulverized coal/RDF mixed fuel streams, and the CO limit and averaging time remains the same as proposed (150 ppmv, 4-hour averaging time).

4. Operator Training and Certification

The proposed standards required full ASME certification of chief facility operators and shift supervisors within 6 months of startup of an affected MWC. Various commenters including ASME pointed out that the proposed standards did not include sufficient time for ASME to conduct full certification exams for all MWC operators. After considering these comments, the EPA revised the operator training requirements to allow additional time for ASME (or State) certification exams. In the final standards, chief facility operators and shift supervisors at new MWC plants must obtain ASME or State-approved provisional certification within 1 year after promulgation or 6 months after startup, whichever is later. In addition, by this same date (1 year after promulgation or 6 months after startup, whichever is later), the same personnel must be either fully certified or scheduled with ASME or the State to take a full certification exam (instead of actually obtaining full certification within 1 year, as proposed).

5. Air Curtain Incinerators

No changes were made to the proposed standards for air curtain incinerators. As discussed above in section IV.B.1, the final standards do not cover combustion of clean wood; therefore, air curtain incinerators combusting only clean wood are not covered by the standards.

6. Siting Analysis/Materials Separation

Various commenters said the proposed siting analysis was not consistent with section 129 of the Clean Air Act. Commenters also argued that

the proposed siting requirements were either too stringent or not stringent enough. The siting analysis in the final rule has been reworded to allow for a consideration of alternatives, on a sitespecific basis, to minimize to the maximum extent practicable potential risks to the public health or the environment. These changes ensure consistency with section 129(a)(3) of the Clean Air Act.

7. Compliance and Performance Testing

Both the proposed and final standards require all plants to perform annual performance tests for dioxin/furan emissions. However, a provision for less frequent dioxin/furan testing has been added to the final rule to encourage MWC plants to achieve emission levels significantly lower than 13 ng/dscm. By achieving low dioxin/furan emissions, they would qualify for less frequent testing and thereby reduce their testing costs. If all MWC units at an MWC plant achieve 7 ng/dscm dioxins/furans or less during performance testing for 2 consecutive years of operation, the plant can elect to conduct dioxin/furan testing on one unit per year. The plant must test units in sequence (e.g., a 3-unit plant would test unit 1 (year 1), unit 2 (year 2), unit 3 (year 3), unit 1 (year 4), etc.). If an annual performance test conducted on any unit indicates total dioxin/furan emissions are greater than 7 ng/dscm, the plant must revert to testing all units annually beginning the following year until the 2-year compliance record is reestablished.

For small plants, two options are provided. The one-unit incentive schedule discussed above is provided for dioxin/furan testing. An alternative 3-year testing option is also provided for small plants. The alternative 3-year testing option allows small plants to conduct performance tests for dioxins/ furans, as well as PM, HCl, Cd, Pb, and Hg only once every 3 years if the plant demonstrates compliance with all pollutant emission limits for 3 consecutive years and continues to demonstrate compliance every third year. The owner or operator of a small plant may choose either option for performance testing.

8. Reporting and Recordkeeping Requirements

Reporting requirements have been changed from quarterly as proposed to

annual (semiannual if any emission limits or operating parameters are violated) to reduce the burden on affected plants. In recognition of the cost associated with reporting requirements, the EPA reconsidered the effectiveness of quarterly versus annual reporting for the purpose of determining compliance. After careful reconsideration, the EPA has concluded that annual reporting will provide adequate information for most plants. [The EPA notes, however, that once an MWC is required to obtain a Title V Operating Permit, the Title V reporting requirements given in Section 504(a) of the Act will supersede the annual reporting requirements presented above. Section 504(a) requires permittees to submit monitoring reports to the permitting authority no less often than every six months. See 42 U.S.C. 7661c(a).]

C. Impacts of the Standards

The final standards can be achieved by utilizing any technology. The basis for the MACT-based limits at both proposal and promulgation remain the combination of GCP/SD/FF and carbon injection for new large and small plants, and the additional use of SNCR at large plants. Because the technology basis for the final standards is the same as at proposal, the impacts analysis presented at proposal has not been revised. Table 2 provides a brief summary of the air and cost impacts of the standards. The summary in table 2 provides impacts estimates relative to two baseline scenarios: a pre-1989 baseline (typical control prior to the 1991 subpart Ea standards) and a 1991 baseline (typical control under the 1991 subpart Ea standards). Refer to the preamble to the proposed standards (59 FR 48198) for a detailed summary of these air and control cost impacts, as well as a discussion of the water, solid waste, energy, and economic impacts of the rule. The national impacts estimates provided in table 2 and discussed in the proposal preamble represent the EPA's estimate of the worst case of impacts that would result from implementation of the standards. Recent data suggest a reduction in the construction of new MWC's. This would reduce the cost of the standards.