

104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, we generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with “Federal mandates” that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any 1 year. Before promulgating a rule for which a written statement is needed, section 205 of the UMRA generally requires us to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows us to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before we establish any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, we must develop a small government agency plan under section 203 of the UMRA. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

We have determined that the proposed rule contains a Federal mandate that may result in expenditures of \$100 million or more for State, local, and Tribal governments, in the aggregate, or the private sector in any 1 year. Accordingly, we have prepared a written statement entitled “Unfunded Mandates Reform Act Analysis for the Proposed Industrial Boilers and Process Heaters NESHAP” under section 202 of the UMRA which is summarized below.

1. Statutory Authority

As discussed in section I of this preamble, the statutory authority for the proposed rulemaking is section 112 of the CAA. Title III of the CAA Amendments was enacted to reduce nationwide air toxic emissions. Section 112(b) of the CAA lists the 188 chemicals, compounds, or groups of chemicals deemed by Congress to be

HAP. These toxic air pollutants are to be regulated by NESHAP.

Section 112(d) of the CAA directs us to develop NESHAP which require existing and new major sources to control emissions of HAP using MACT based standards. This NESHAP applies to all industrial, commercial, and institutional boilers and process heaters located at major sources of HAP emissions.

In compliance with section 205(a) of the UMRA, we identified and considered a reasonable number of regulatory alternatives. Additional information on the costs and environmental impacts of these regulatory alternatives is presented in the docket.

The regulatory alternative upon which the proposed rule is based represents the MACT floor for industrial boilers and process heaters and, as a result, it is the least costly and least burdensome alternative.

2. Social Costs and Benefits

The regulatory impact analysis prepared for the proposed rule including the Agency’s assessment of costs and benefits, is detailed in the “Regulatory Impact Analysis for the Proposed Industrial Boilers and Process Heaters MACT” in the docket. Based on estimated compliance costs associated with the proposed rule and the predicted change in prices and production in the affected industries, the estimated social costs of the proposed rule are \$780 million (1999 dollars).

It is estimated that 5 years after implementation of the proposed rule, HAP will be reduced by 58,500 tons per year due to reductions in arsenic, beryllium, dioxin, hydrochloric acid, and several other HAP from industrial boilers and process heaters. Studies have determined a relationship between exposure to these HAP and the onset of cancer, however, there are some questions remaining on how cancers that may result from exposure to these HAP can be quantified in terms of dollars. Therefore, the Agency is unable to provide a monetized estimate of the benefits of the HAP reduced by the proposed rule at this time. However, there are significant reductions in PM and in SO₂ that occur. Reductions of 560,000 tons of PM with a diameter of less than or equal to 10 micrometers (PM₁₀), 159,000 tons of PM with a diameter of less than or equal to 2.5 micrometers (PM_{2.5}), and 112,000 tons of SO₂ are expected to occur. These reductions occur from existing sources in operation 5 years after the implementation of the regulation and

are expected to continue throughout the life of the affected sources. The major health effect that results from these PM and SO₂ emissions reductions is a reduction in premature mortality. Other health effects that occur are reductions in chronic bronchitis, asthma attacks, and work-lost days (*i.e.*, days when employees are unable to work).

While we are unable to monetize the benefits associated with the HAP emissions reductions, we are able to monetize the benefits associated with the PM and SO₂ emissions reductions. For SO₂ and PM, we estimated the benefits associated with health effects of PM but were unable to quantify all categories of benefits (particularly those associated with ecosystem and environmental effects). Unquantified benefits are noted with “B” in the estimates presented below. Our base estimate of the monetized benefits in 2005 associated with the implementation of the proposed alternative is \$16.1 billion (1999 dollars) when using a 3 percent discount rate (or approximately \$15.4 billion + B when using a 7 percent discount rate). This estimate, at a 3 percent discount rate, is about \$15 billion (1999 dollars) higher than the estimated social costs shown earlier in this section. The alternative estimate of benefits is \$2.4 billion (1999 dollars) when using a 3 percent discount rate (or approximately \$2.6 billion + B when using a 7 percent discount rate). This estimate, at a 3 percent discount rate, is about \$1.5 billion higher than the estimated social costs. The general approach to value benefits is discussed in more detail earlier in this preamble. For more detailed information on the benefits estimated for the proposed rulemaking, refer to the RIA in the docket.

3. Future and Disproportionate Costs

The Unfunded Mandates Act requires that we estimate, where accurate estimation is reasonably feasible, future compliance costs imposed by the proposed rule and any disproportionate budgetary effects. Our estimates of the future compliance costs of the proposed rule are discussed previously in this preamble.

We do not believe that there will be any disproportionate budgetary effects of the proposed rule on any particular areas of the country, State or local governments, types of communities (*e.g.*, urban, rural), or particular industry segments. This is true for the 257 facilities owned by 54 different government bodies and is borne out by the results of the “Economic Impact Analysis of the Proposed Industrial Boilers and Process Heaters NESHAP,”