

subject to today's proposed rule. Of the estimated 223 facilities affected by this proposed rule, an estimated 166 are expected to install add-on control systems to reduce emissions. The remaining facilities already have installed add-on controls, do not have any process units subject to the compliance options, or are expected to comply with work practice requirements only.

The environmental and cost impacts presented in this preamble represent the estimated impacts for the 223 facilities. The impact estimates were based on the use of RTOs (or in some cases a combination WESP and RTO) because RTOs are the most prevalent HAP emissions control technology used in the PCWP industry. However, technologies other than RTOs could be used to comply with today's proposed standards. For a facility that we believe already achieves the emissions reductions required by today's proposed rule, only recordkeeping cost impacts were estimated.

The number of affected facilities presented above (223) does not include major source facilities with lumber kilns that are not otherwise PCWP facilities. Some of these facilities may be major sources of HAP emissions due to lumber drying operations. Because today's proposed rule contains no control requirements for lumber kilns, we expect there to be no cost, environmental, or energy impacts associated with today's proposed rule for these facilities.

#### *B. What Are the Air Quality Impacts?*

We estimate nationwide baseline HAP emissions from the PCWP source category to be 17,000 Mg/yr (19,000 tons/yr) at the current level of control. We estimate that the proposed standards would reduce total HAP emissions from the PCWP source category by about 9,700 Mg/yr (11,000 tons/yr). In addition, we estimate that the proposed standards would reduce VOC emissions (approximated as THC) by about 25,000 Mg/yr (27,000 tons/yr) from a baseline level of 45,000 Mg/yr (50,000 tons/yr).

In addition to reducing emissions of HAP and VOC, the proposed standards would also reduce emissions of criteria pollutants, such as carbon monoxide (CO) from direct-fired emission sources and particulate matter less than 10 microns in diameter (PM<sub>10</sub>). We estimate that the proposed standards would reduce CO emissions by about 10,000 Mg/yr (11,000 tons/yr). We estimate that the proposed standards would reduce PM<sub>10</sub> emissions by about 11,000 Mg/yr (13,000 tons/yr).

Combustion of exhaust gases in an RTO generates some emissions of nitrogen oxides (NO<sub>x</sub>). We estimate that the nationwide increase in NO<sub>x</sub> emissions due to the use of RTOs would be about 4,300 Mg/yr (4,800 tons/yr). This estimated increase in NO<sub>x</sub> emissions may be an overestimate because some plants may select control technologies other than RTOs to comply with the proposed standards.

Indirect air impacts of today's proposed rule would result from increased electricity usage associated with operation of control devices. Assuming that plants will purchase electricity from a power plant, we estimate that the proposed standards may increase secondary emissions of criteria pollutants such as PM<sub>10</sub>, sulfur dioxide (SO<sub>2</sub>), NO<sub>x</sub>, and CO from power plants by about 6,200 Mg/yr (6,900 tons/yr).

#### *C. What Are the Water Quality Impacts?*

Wastewater is produced from WESP blowdown, washing out of RTOs, and biofilters. We based all of our impact estimates on the use of RTOs (with or without a WESP upstream depending on the process unit). We estimate that the wastewater generated from WESP blowdown and RTO washouts would increase by about 43 thousand cubic meters per year (m<sup>3</sup>/yr) (11 million gal/yr) as a result of today's proposed rule. Facilities would likely dispose of this wastewater by sending it to a municipal treatment facility, evaporating it onsite, incinerating it in an onsite boiler, reusing it onsite (e.g., in log vats or resin mix), or hauling it offsite for spray irrigation.

#### *D. What Are the Solid Waste Impacts?*

Solid waste is produced in the form of solids from WESPs and by RTO or RCO media replacement. We estimate that 4,500 Mg/yr (5,000 tons/yr) of solid waste would be generated as a result of today's proposed rule. This solid material may be disposed of in a landfill or used for other purposes. Some PCWP facilities have been able to use RTO or RCO media as aggregate in onsite roadbeds. Some facilities have also been able to identify a beneficial reuse for wet control device solids (such as giving them away to local farmers for soil amendment).

#### *E. What Are the Energy Impacts?*

The overall energy demand (i.e., electricity and natural gas) is expected to increase by about 4.3 million gigajoules per year (GJ/yr) (4.1 trillion British thermal units per year (Btu/yr)) nationwide under the proposed standards. The estimated increase in the

energy demand is based on the electricity requirements associated with RTOs and WESPs and the fuel requirements associated with RTOs. Electricity requirements are expected to increase by about 718 gigawatt hours per year (Gwh/yr) under the proposed standards. Natural gas requirements are expected to increase by about 45 million m<sup>3</sup>/yr (1.6 billion cubic feet per year (ft<sup>3</sup>/yr)) under the proposed standards.

#### *F. What Are the Cost Impacts?*

The cost impacts estimated for today's proposed rule represent a high-end estimate of costs. Although the use of RTO technology to reduce HAP emissions represents the most expensive compliance option, we based our nationwide cost estimates on the use of RTO technology at all of the impacted facilities because: (1) RTO technology can be used to reduce emissions from all types of PCWP process units; and (2) we could not accurately predict which facilities would use emissions averaging or production-based emissions limits or install less expensive add-on control devices, such as RCO and biofilters. Therefore, our cost estimates are likely to be overstated, as we anticipate that owners and operators of impacted sources will take advantage of available cost saving opportunities.

The high-end estimated total capital costs of today's proposed rule are \$479 million. These capital costs apply to existing sources and include the costs to purchase and install both the RTO equipment (and in some cases, a WESP upstream of the RTO) and the monitoring equipment, and the costs of performance tests. Permanent total enclosure costs are also included for reconstituted wood products presses.

The high-end estimated annualized costs of the proposed standards are \$142 million. The annualized costs account for the annualized capital costs of the control and monitoring equipment, operation and maintenance expenses, and recordkeeping and reporting costs. Potential control device cost savings and increased recordkeeping and reporting costs associated with today's proposed emissions averaging alternative standard are not accounted for in either the capital or annualized cost estimates.

#### *G. Can We Achieve the Goals of the Proposed Rule in a Less Costly Manner?*

We have made every effort in developing this proposal to minimize the cost to the regulated community and allow maximum flexibility in compliance options consistent with our statutory obligations. We recognize, however, that the proposal may still