

production rate data reported in a 1995 industry survey. The final rule is projected to reduce HAP emissions by 86 Mg/yr (95 tpy) and THC emissions by 465 Mg/yr (512 tpy). The final rule will also reduce PM emissions from asphalt processing and asphalt roofing manufacturing facilities. However, we do not have sufficient data to estimate baseline emissions or emission reductions for PM. The baseline emissions and emission reductions do not include contributions from area sources because they are not subject to the final rule.

The final rule will also likely cause an increase in emissions of nitrogen oxides (NO<sub>x</sub>), CO, sulfur dioxide (SO<sub>2</sub>), PM, and volatile organic compounds (VOC) due to the increased use of thermal oxidizers as control devices. The estimated increases of NO<sub>x</sub>, CO, and SO<sub>2</sub> are approximately, 476, 799, and 6 Mg/yr (524, 880, and 6 tpy), respectively. These estimates are based on the amount of exhaust and auxiliary fuel that will be burned at the asphalt processing and asphalt roofing manufacturing facilities that are estimated to be major sources.

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

The total capital cost for the industry to achieve compliance with the final rule for existing facilities is estimated to be \$2.71 million. The capital costs arise from the purchase of emission capture systems and control devices. The total annualized cost is estimated to be \$1.41 million. The total annualized costs for the industry include the annualized capital cost of emission capture systems and control devices and operation, maintenance, supervisory labor, maintenance materials, utilities, administrative charges, taxes, and insurance. It is estimated that the industry will spend an additional industrywide average of \$320,000 per year for monitoring, recordkeeping, and reporting to comply with the final rule. This results in a total annualized cost of \$1.73 million.

#### *C. What Are the Economic Impacts?*

The Agency conducted an economic impact analysis to determine the market- and industry-level impacts associated with the final rule. The compliance costs of the final rule are expected to increase the prices of asphalt processing and roofing products by 0.02 percent or less across the directly affected product markets, and domestic production and consumption of the affected products are expected to decrease by less than 0.01 percent also.

In terms of industry impacts, the asphalt processors and asphalt roofing

manufacturers are projected to experience a decrease in operating profits of about 0.08 percent, which reflects the compliance costs associated with the production of asphalt processing and roofing products and the resulting reductions in revenues due to the increase in the prices of the directly affected product markets and reduced quantities purchased. Through the market impacts described above, the final rule created both gainers and losers within the asphalt processing and asphalt roofing manufacturing industry. The majority of facilities, almost 92 percent, are expected to experience profit increases with the final rule; however, there are some facilities projected to lose profits (about 8 percent of affected facilities). Furthermore, the economic impact analysis indicates that of the 123 existing asphalt roofing and processing facilities, none are at risk of closure because of the final rule. Therefore, none of the companies that own asphalt processing and roofing manufacturing facilities are projected to close due to the final rule.

Based on the market analysis, the annual social costs of the final rule are projected to be about \$1.73 million. The estimated social costs differ slightly from the projected engineering costs of the final rule. These two costs differ because social costs account for producer and consumer behavior. These social costs are distributed across the many consumers and producers of asphalt processing and roofing products. For the final rule, the producers of asphalt roofing and processing products, in aggregate, are expected to incur about \$1.32 million annually in costs, while the consumers of asphalt roofing and processing products are expected to incur approximately \$410 thousand annually across the product markets.

The economic analysis also addressed potential changes in new asphalt processing and roofing facility construction for the year following promulgation of the final rule. This was done by estimating the total annualized costs for new facilities and projecting changes in equilibrium output due to the final rule. The economic impact analysis estimated a very small reduction in the growth of the asphalt industry represented by a small reduction in equilibrium output of asphalt products in the year following promulgation. However, the reduction in equilibrium output was only a small fraction of estimated new plant capacity. Thus, the control costs are not expected to influence the decision to enter the market for asphalt products. For more information, consult the

Economic Impact Analysis report supporting the final rule in the docket.

#### *D. What Are the Non-air Health, Environmental and Energy Impacts?*

Spent filter media from certain types of PM control devices (e.g., high-efficiency air filters (HEAF)) are periodically replaced and disposed of as solid waste. Although many of the emission sources subject to the final rule are already controlled by PM devices, an increase in the generation of spent filter media is expected as a result of the final rule. However, we do not have sufficient data to quantify this anticipated increase in solid waste generation.

No water impacts are anticipated due to the final rule. None of the control devices expected to be used to comply with the final rule require the use of water nor do they generate wastewater streams.

Increased energy usage is expected due to the final rule. Electricity is required to power fans for emission capture systems, and new thermal oxidizers will require supplemental fuel (e.g., natural gas) to efficiently combust the HAP vent streams. The estimated annual increase in electricity consumption is 5.58 million kilowatt hours. The approximate increase in natural gas consumption is 186 million standard cubic feet per year. These estimates are for the 19 facilities considered to be major sources.

#### **V. Statutory and Executive Order Reviews**

##### *A. Executive Order 12866, Regulatory Planning and Review*

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the EPA must determine whether the regulatory action is "significant," and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may:

- (1) Have an annual effect on the economy of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
- (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; or