

- A firm-level analysis, which assesses the impact on the financial performance and condition of firms owning MP&M facilities;

- An analysis of impacts on government-owned facilities, which assesses the impact on the financial performance and condition of government entities that own and operate at least one MP&M site;
- An employment effects analysis, which assesses the increase in employment associated with compliance activities, the loss of employment due to facility closures, and the net effect on overall employment;

- A community impact analysis, which assesses the potential impact of employment changes in communities where MP&M facilities are located; and

- A foreign trade analysis, which assesses the effect of the regulation on the U.S. balance of trade.

EPA performed economic impact analyses for three groups of facilities, using different methodologies to evaluate impacts on each group. The three groups are:

- Privately-owned MP&M Facilities, including privately-owned facilities that do not perform railroad line maintenance and are not owned by governments. This major category includes privately-owned businesses in a wide range of sectors or industries, including the segment of facilities that manufacture and rebuild railroad equipment.

- Railroad line maintenance facilities that maintain and repair railroad track, equipment and vehicles.

- Government-owned MP&M facilities operated by municipalities, State agencies and other public sector entities such as State universities and Federal facilities. Many of these facilities repair, rebuild, and maintain buses, trucks, cars, utility vehicles (e.g., snow plows and street cleaners), and light machinery.

The facility impact analysis starts with compliance cost estimates from the EPA engineering analysis and then calculates how these compliance costs would affect the financial condition of MP&M facilities. EPA made several changes to the facility impact methodology between proposal (*see* 66 FR 424) and final regulation. The NODA (*see* 67 FR 38752) and section IV.B.3 of this preamble document these changes, which to a large degree address comments on the proposal impact methodology. The major changes to the economic impact analyses include: (1) Using sector-specific thresholds for the moderate impact analysis tests; (2) using a single financial test, based on net

present value, to assess the potential for closures (this test excludes consideration of liquidation values for all MP&M facilities, including the 219 facilities that reported them in their response to the MP&M survey); and (3) using estimated baseline capital outlays in the calculation of cash flow for the net present value test. Other changes to the economic impact methodology include: (1) Using revised cost pass-through coefficients; (2) using sector-specific price indices in updating survey data; and (3) limiting post-compliance tax shields to no greater than reported baseline taxes.

In conducting the facility impact analysis, EPA first eliminated from the analysis those facilities showing materially inadequate financial performance in the baseline, that is, in the absence of the rule. EPA judged these facilities, which are referred to as baseline closures, to be at substantial risk of financial failure regardless of any financial burdens that may result from the MP&M rule. Second, for the remaining facilities, EPA evaluated how compliance costs would likely affect facility financial health. In this analysis of compliance cost impact, EPA accounted for potential price increases that may help facilities cover the cost of compliance. EPA based its estimate of potential price increases on a cost pass-through analysis that estimates how prices might change in response to regulation-induced production cost increases. EPA identified a facility as a regulatory closure if it would have operated under baseline conditions but would fall below an acceptable financial performance level under the new regulatory requirements.

EPA also identified facilities that would likely incur moderate impacts from the rule but that are not expected to close as a result of the rule. EPA used a different methodology to assess moderate impacts for each of three types of MP&M facilities: privately-owned MP&M facilities, railroad line maintenance facilities, and government-owned facilities. EPA established thresholds for two measures of financial performance—interest coverage ratio and pre-tax return on assets—and compared the facilities' performance before and after compliance under each regulatory option with these thresholds. EPA attributes incremental moderate impacts to the rule if both financial ratios exceeded threshold values in the baseline (*i.e.*, there were no moderate impacts in the baseline), but at least one financial ratio fell below the threshold value in the post-compliance case. EPA refers the reader to the full EEBA report for a detailed discussion of the

economic impact methodology used for each of these types of MP&M facilities.

B. Economic Costs of Technology Options by Subcategory

The TDD for the final rule presents EPA's engineering estimates of costs that will be incurred by facilities to comply with the final regulation, and the costs for other regulatory options. EPA adjusted the engineering costs from 1996 to 2001 dollars using the *Engineering News-Record* Construction Cost Index (CCI), and adjusted the costs to reflect the effect of taxes using a combined Federal/State corporate income tax rate of 39 percent. EPA calculated the annual equivalent of capital and other one-time costs by annualizing costs at a seven percent discount rate over an estimated 15-year equipment life.

The compliance costs of the rule are the costs incurred by those facilities that EPA estimates will continue to operate in compliance with the rule. Aggregate compliance costs presented in this section differ from the costs presented in sections VI and VII because they exclude costs for facilities that are baseline closures or that close due to regulatory requirements (*see* section VIII.D for estimates of baseline and post-compliance closures). Therefore, they represent only the compliance outlays of facilities that are estimated to continue operations. Section VIII.I presents EPA's estimates of social costs, which include costs for regulatory closures. Table VIII-1 shows the total annualized compliance costs by subcategory for the 2,382 OWS direct dischargers that are: (1) Subject to requirements; (2) make the necessary investments to meet the requirements; and (3) continue operating under the regulation. Facilities in all other subcategories are excluded from the final rule and have no incremental compliance costs.

Total annualized costs are the sum of the annual operating and maintenance costs and the annualized equivalent of capital and other one-time costs. Annualized pre-tax compliance costs in 2001 dollars are estimated at \$13.8 million per year for the final rule.

TABLE VIII-1.—TOTAL ANNUALIZED FACILITY* COMPLIANCE COSTS FOR THE OILY WASTES SUBCATEGORY
[pre-tax, million \$2001]

Subcategory	Final rule
Oily Wastes	\$13.8