

Finishing effluent guidelines at part 433. The remaining three facilities (estimated from a survey weight for one surveyed facility) are currently directly discharging metal-bearing wastewaters (e.g., salt bath descaling, UP-37) but are not covered by existing Metal Finishing effluent guidelines. EPA's review of discharge monitoring data and unit operations for this surveyed non-433 General Metals facility (with a survey weight of approximately three) indicates that this facility is already achieving part 433 limitations because this facility has discharges that closely mirror those required by part 433.

The facilities that are currently subject to part 433 regulations and those facilities achieving part 433 discharge levels, in most cases, have already installed effective pollution control technology that includes many of the components of the Option 2 technology. Approximately 30 percent of the direct discharging facilities in the General Metals subcategory currently employ chemical precipitation followed by a clarifier. Further, EPA estimates that compliance with BPT limitations based on the Option 2 technology would result in no closures of the existing direct dischargers in the General Metals subcategory. EPA also notes that the adoption of this level of control would also represent a further reduction in pollutants discharged into the environment by facilities in this subcategory. For facilities in the General Metals subcategory at Option 2, EPA estimates an annual compliance cost of \$23.7 million (2001\$). Using the method described in Table IV-2 to estimate baseline pollutant loadings, EPA estimates Option 2 pollutant removals of 417,477 pounds of conventional pollutants and 33,716 pounds of priority metal and organic pollutants from current discharges into the Nation's waters.

Evaluated under its traditional yardstick, EPA calculated that the effluent reductions are achieved at a cost of \$18.1/pound-pollutant removed (2001\$) for the General Metals subcategory at Option 2. To estimate all pounds of pollutant removed by Option 2 technology for direct dischargers in the General Metals subcategory, EPA used the method described in Table IV-2 to estimate baseline pollutant loadings, and the sum of Chemical Oxygen Demand (COD) pounds removed plus the sum of all metals pounds removed to measure the pollutant removal as compared to compliance costs. EPA used the combination of COD pounds removed plus the sum of all metals pounds

removed to avoid any significant double counting of pollutants.

As previously stated, EPA received many comments on its estimation of baseline pollutant loadings and reductions for the various options presented in the January 2001 proposal. In response to these comments, EPA solicited comment in the June 2002 NODA on alternative methods to estimate baseline pollutant loadings. Commentors on the NODA were generally supportive of EPA's alternative methods to estimate baseline pollutant loadings. In particular, commentors noted that more accurate estimates of baseline pollutant loadings could be achieved by using DMR data. In response to these NODA comments, EPA combined the alternative methods in the NODA into the EPA Cost & Loadings Model for the final rule (see Table IV-2).

EPA also received comment on the parameter or parameters it should use for estimating total pounds removed by the selected technology option. EPA selected the sum of COD and all metals pounds removed for the final rule to compare effluent reductions and compliance costs. This approach avoided any significant double counting of pollutants and also provided a reasonable estimate of total pounds removed by Option 2 for the General Metals subcategory. As more fully described in the TDD, Option 2 technology segregates wastewaters into at least five different waste streams, each of which have one or two treatment steps. For example, segregated oily wastewaters have two treatment steps under Option 2 technology as they are first treated by chemical emulsion breaking/oil water separation and then by chemical precipitation and sedimentation. These segregated wastestreams can be loosely grouped together as either oily wastewaters or metal-bearing wastewaters. EPA use of COD pounds removed for Option 2 technology generally represents the removal of pollutants from the segregated oily wastewaters. EPA use of total metals pounds removed for Option 2 technology generally represents the removal of pollutants from the segregated metal-bearing wastewaters.

EPA also considered alternative parameters for calculating total pounds removed by Option 2 for the comparison of effluent reductions and compliance costs for the General Metals subcategory. In particular, EPA calculated a ratio of less than \$14/pound-pollutant removed (2001\$) for the General Metals subcategory at Option 2 when EPA used the highest set of pollutants removed per facility with

no significant double counting of pollutants (i.e., highest per facility pollutant removals of: (1) COD plus total metals; (2) oil and grease (as HEM) plus total metals; or (3) oil and grease (as HEM) plus TSS). EPA used the highest per facility pollutant removals as a confirmation of its primary method for calculating baseline pollutant loadings (see Table IV-2) and Option 2 for General Metals subcategory.

Based on the revisions and corrections to the EPA Cost & Loadings Model discussed in the NODA and in section IV.B.1 of today's final rule, EPA has decided not to adopt BPT limitations based on Option 2 technology. A number of factors supports EPA's conclusion that BPT limitations based on Option 2 technology do not represent effluent reduction levels attainable by the best practicable technology currently available. As previously noted, a substantial number of facilities that would be subject to limitations as General Metals facilities are already regulated by BPT/BAT part 433 limitations and other facilities are *de facto* part 433 facilities if characterized by their discharges. Thus, establishing BPT limitations for a new General Metals subcategory would effectively revise existing BPT/BAT limitations with respect to those facilities. In the circumstances presented here where EPA, for a significant portion of an industry, is revising existing BPT/BAT limitations, further review of the character and cost of the effluent reductions achieved by Option 2 is warranted in deciding what is BPT technology. Such an examination shows that, while the Option 2 technology would remove additional pollutants at costs in the middle of the range EPA has traditionally determined are reasonable, the costs of the additional removals of toxic pollutants are substantially greater. EPA has now determined that, in the circumstances of this rulemaking, where a substantial portion of a subcategory is already subject to effluent limitations guidelines that achieve significant removal, it should not promulgate BPT limitations under consideration here because the limitations would achieve additional toxic removals at a cost (\$1,000/PE in 1981\$) substantially greater than that EPA has typically imposed for BAT technology in other industries (generally less than \$200/PE in 1981\$).

EPA also considered transferring limitations from existing Metal Finishing effluent guidelines (40 CFR part 433) to the General Metals subcategory. The technology basis for part 433 includes the following: (1)