

TABLE IV-2.—CURRENT POLLUTANT CONCENTRATIONS USED TO ESTIMATE POLLUTANT REDUCTIONS ASSOCIATED WITH THE MP&amp;M TECHNOLOGY OPTIONS

	433 regulated parameters	433 unregulated parameters
Treated Wastewater Streams .....	LTAs from part 433 .....	LTAs from Technology Option 2 of Today's rule.
Untreated Wastewater Streams Regulated by 413 or 433.	Monthly Average Limitations from part 433 .....	Concentrations from Subcategory-Specific Unit Operations Data.
Untreated Wastewater Not Regulated by 413 or 433.	Concentrations from Subcategory-Specific Unit Operations Data.	Concentrations from Subcategory-Specific Unit Operations Data.

**Note:** See Section VI and Section 9 of the TDD for further discussion of Technology Option 2.

**Note:** EPA assigns Option 2 LTAs to all wastewater streams for all pollutant to model facilities TIP equal to or greater than BAT treatment

For the final rule, EPA assumed that facilities currently treating their wastewater discharges (regardless of their regulatory status) operate their wastewater treatment systems to achieve the long-term average concentrations of the part 433 regulations. Furthermore, in the case of pollutants of concern not regulated in part 433, EPA made the conservative assumption that facilities with wastewater treatment operate their wastewater treatment systems to achieve the long-term average concentrations for such pollutants from MP&M Option 2 (see section VI and section 9 of the TDD for further discussion of Technology Option 2).

For untreated streams at facilities currently regulated by parts 413 or 433 for the parameters regulated by part 433, EPA assumed for its evaluations for the final rule that facilities achieve the monthly average limitation of part 433. As discussed in the NODA, EPA concluded it is appropriate to use the monthly average limitation, as opposed to the long-term average concentration, for streams that are not being treated or for parameters that are not being targeted for treatment. Finally, for untreated streams (regardless of regulatory status) for the parameters not regulated by part 433, and for regulated parameters for untreated streams at facilities not subject to parts 413 or 433, EPA has assumed the baseline concentrations are equivalent to the raw waste load using subcategory-specific unit operations data.

For all direct discharging facilities in the General Metals subcategory, EPA has assumed the facilities achieve permit limits for non-conventional pollutants Chemical Oxygen Demand (COD), Total Kjeldahl Nitrogen (TKN), and Ammonia as Nitrogen (NH<sub>3</sub>-N). EPA received several comments that the Agency overestimated concentrations of COD. While this parameter is not regulated by Parts 413 or 433, comments stated that it is typically regulated in National Pollutant Discharge Elimination System (NPDES) permits. Additionally, EPA notes that COD

removals had a significant impact on the cost and removal comparison ratio (\$/lb-removed) for the General Metals subcategory. While these parameters are also not regulated by Parts 413 or 433, limits for these parameters are found in EPA's Permit Compliance System (PCS). To reduce overestimation of pollutant removals for COD, TKN, and NH<sub>3</sub>-N, EPA did not allow the pollutant concentrations discharged from the facility to exceed permit limits. EPA modeled the limits based on data from EPA's Permit Compliance System (PCS) for these types of facilities. Because EPA could not determine which sites in PCS were MP&M sites, for the purposes of this analysis, EPA calculated the average permit limit concentrations for process wastewater discharged from each facility in the 3000 series of SIC codes. Based on these data, EPA set the maximum concentration for the commingled MP&M wastewater discharged from each model site at 175, 35.67, and 19.3 milligrams per liter (mg/L) for COD, TKN, and NH<sub>3</sub>-N, respectively (see DCN 17846, section 24.7).

#### d. Unit Operations Data

EPA used unit operations data from the questionnaires, sampling episodes, and commentors data, to estimate baseline pollutant loading for some untreated wastewaters at certain facilities. As described in section IV.B.1, and as discussed in the NODA (see 67 FR 38756), in response to proposal commentors, EPA changed its proposal methodology to account for subcategory-specific differences in pollutant concentrations for the same unit operations. EPA received additional comments on the unit operations data from commentors on the NODA. In particular, comments on the NODA focused on three specific areas: (1) Requests to subdivide the "testing" unit operation to better reflect various types of testing wastewaters; (2) requests to remove additional "outliers" from the data set used to estimate the average pollutant concentrations for certain unit

operation; and (3) requests to re-evaluate the ratio of pollutant concentrations in unit operation baths and the corresponding rinse. For direct dischargers, EPA also compared the baseline pollutant loadings from the pollutant loading model to available Discharge Monitoring Report (DMR) data (see section IV.B.2.b).

For the proposed rule, EPA combined testing unit operations from wastewater sampling of hydraulic testing, hydrostatic testing, dye penetrant testing, and alpha-case detection into a single pollutant concentration set for the "testing" unit operation (UP-42). Commentors explained that EPA should not group all testing operations together because these operations produce non-similar wastewaters. For example, commentors noted that dye penetrant testing produces wastewater with high pollutant concentrations while hydrostatic testing produces wastewater with low pollutant concentrations, but very large flows.

For today's final rule, EPA re-evaluated its data sets. EPA has concluded that it should divide the testing unit operations into subcategory-specific unit operations. Furthermore, EPA found no clear indication that facilities continue to perform alpha-case detection. Consequently, EPA's final database included separate, subcategory-specific data for two testing operations: Hydrostatic and dye penetrant. EPA reviewed each survey questionnaire and made a case-by-case determination of which of the two types of testing is being performed at a site (if any). See section 12 of the TDD for more information.

EPA has also addressed commentors concerns regarding the ratio of pollutant concentrations in unit operation baths (e.g., electroplating baths) and their corresponding rinses. EPA has reviewed all bath-rinse pairs and ensured for the final analysis that the data used do not include any cases where a rinse is more concentrated than its bath.