

process conditions and treatment performance. For example, if one facility has substantially more concentrated effluent than the others, a detailed engineering review might reveal conditions that would justify excluding the less concentrated effluent data from other facilities from the calculations of limits.

For the larger self-monitoring data sets, EPA intends to review graphical displays of the daily measurements to evaluate patterns in the data, such as steadily increasing or decreasing values over time or during certain time intervals. The plots may also indicate data values that should be reviewed further and possibly excluded if they appear to reflect conditions other than normal operations. For example, EPA might exclude a value which was substantially lower than the other measurements if an extremely high flow value was recorded for that day.

Where both influent and effluent are available for an episode, EPA intends to investigate the impact on the performance of the technology due to the influent levels. In this investigation, EPA might evaluate whether the influent concentrations are at treatable levels and whether the treatment system had efficient removal capability. For the proposal, this treatable level was defined as five times the nominal quantitation limit that generally was associated with the analytical method most frequently used to measure samples collected during EPA's sampling episodes. (The nominal quantitation limit is the smallest quantity of an analyte that can be reliably measured with a particular method. The record items for the proposal generally refer to the "nominal quantitation limit" as the "baseline value.") If the influent data were below the treatable level or just slightly above, EPA may exclude the effluent data from the analyses for the final limitations and standards. EPA's purpose in excluding these effluent data sets would be to ensure that the effluent concentrations resulted from treatment and not simply from the absence or extremely low levels of that pollutant passing through a treatment system.

For most facilities in the MPP concentration database, EPA has data from either a sampling episode or the facility's self-monitoring (DMR) data. However, for a few facilities, EPA has data from both a sampling episode and self-monitoring data. The statistical analyses for the NODA treat each sample episode and self-monitoring data set separately. For example, if EPA had sampling episode and self-monitoring data sets for a facility, it would have

calculated two long-term averages from the facility's data, one from the sampling episode data set and the other from the self-monitoring data set. This practice is consistent with other guidelines and is used because the data tend to be associated with different time periods and/or analytical methods. For any facilities with EPA sampling data and self-monitoring data for the same time period, EPA intends to evaluate whether the data should be combined into a single data set or continue to be analyzed as two separate data sets for the final rule. For facilities that submitted self-monitoring data over an extended period, if there are substantial differences between certain time intervals, EPA intends to reevaluate whether each time interval should be treated separately in the data analyses.

In its review of the self-monitoring data, EPA will verify that the concentrations were determined by an analytical method approved for compliance monitoring in 40 CFR part 136. If the facility has identified a different method, EPA may decide to contact the facility for more information about the laboratory analysis to determine if the results would be comparable to those generated by approved methods. It is likely that EPA would need to perform a full review of the laboratory reports such as initial precision and recovery (IPR) analyses, instrument tunes, calibrations, blanks, laboratory control sample (LCS) analyses, matrix spikes, surrogates, and all sample data. Without the necessary information, EPA may choose to exclude measurements from non-approved analytical methods.

D. Evaluation of Final Variability Factors

As explained in the introduction to Section VIII, the NODA record does not include the option-level variability factors used to calculate limitations/standards. For the final rule, EPA intends to use the same data and methodology described in Section VIII.A. The section below describes EPA's plans for reviewing and possibly transferring option-level variability factors for the final limitations and standards.

To identify situations producing unexpected results, EPA reviews all of the episode variability factors and compares daily to monthly variability factors. One criterion is that the daily and monthly variability factors should be greater than 1.0. A variability factor less than 1.0 would result in a unexpected situation where the estimated 99th percentile would be less than the long-term average. A second

criterion is that the daily variability factor should be greater than the monthly variability factor so that the daily limitation will be numerically greater than the monthly average limitation. A third criterion is that not all of the measured (non-censored) results can be below the sample-specific detection limits. While such data sets can be modeled using statistical techniques, the results can be difficult to interpret because the model is generally used for data sets where non-censored values are expected to be larger than non-detected values. A fourth criterion relates to the reasonableness of calculated variability factors. For example, EPA may further evaluate data sets for daily variability factors less than 1.1 and above 7 to determine if any anomalies existed in the data. As a result of this review, EPA may determine that a variability factor does not represent a reasonableness range of variation from well-operated systems, but rather may indicate a situation where better process control is needed. Any reduction in variability factors based on tighter operational control would also be reflected in higher cost estimates to achieve this control if necessary.

For some subcategories, EPA may be unable to calculate variability factors. This could occur for a pollutant in an option where the episode data sets had too few noncensored measurements (e.g., the pollutant was not detected at measurable levels) or no data were available. For example, if a pollutant had all nondetected values for all of the episodes in an option, then it would not be possible to calculate the variability factors for that option. In such cases, EPA will transfer the variability factors from other options, subcategories and/or similar pollutants as appropriate.

E. Evaluation of Achievability of Final Limitations and Standards

If a facility operates the model technology for an option to achieve the relevant long-term average, EPA expects that the facility will be able to reliably and consistently comply with the limitations EPA may promulgate. Because EPA's option variability factors account for reasonable excursions above the option long-term average, the limitations promulgated by EPA are intended to correspond to levels (above the actual long-term averages) that well-operated systems can reliably and consistently achieve. In order to meet the monthly average limitation, a facility would need to counterbalance a value near the daily maximum limitation with one or more values well below the daily maximum limitation.