

EPA recognizes the importance of promulgating achievable limitations; thus, as described in this section, EPA intends to perform a series of steps to compare the available data and information to the limitations and standards. The following paragraphs describe those steps.

First, EPA intends to perform statistical reviews of the data and its statistical model. In this step, EPA intends to compare the limitations and standards to the data used to calculate the limitations and standards. EPA performs this comparison to determine whether it used appropriate distributional assumptions for the data used to develop the limitations and standards (*i.e.*, whether the curves EPA used provide a reasonable “fit” to the actual effluent data). This comparison should not be interpreted to mean that EPA expects values that exceed the limitations to occur at some fixed rate. Furthermore, because EPA has used data from facilities that were not required to comply with the final limitations at the time the data were collected, the observed data cannot be interpreted as supporting estimates of compliance rates. Rather, in conjunction with the engineering review (step 2 below), the results from this step allow EPA to determine if it has used reasonable statistical assumptions in developing the limitations. This is also explained in Section 13.6 of the proposal development document.

Second, EPA intends to perform a detailed engineering evaluation of the data and facilities used as a basis for the final limitations and standards. For facilities with higher or consistently lower discharges than the option long-term averages used to calculate the limitations/standards, EPA will verify that the facilities have the relevant treatment technology and are operating it appropriately. For example, upon contacting a facility with considerably less concentrated discharges, EPA may discover that the facility has a component in its treatment train that is not part of the model technology. In such a situation, EPA would be likely to exclude the facility's data from its final calculation of the limitations and standards, because the facility's treatment capabilities are better than the model technology. For facilities with more concentrated discharges that are operating the model technology, EPA may determine that such values can be eliminated through improved operation of the treatment system. In such cases, EPA may adjust its cost estimates for the facility for any upgrades and improved operations and maintenance (O&M) necessary to reliably and consistently

meet the final limitations/standards. As part of the engineering evaluation, EPA also will investigate excessive variations that could indicate exceptional incidents or upsets that are not typical of good performance. Based on thorough technical review of the data, EPA may exclude data that do not represent proper process operations or treatment control and would adjust its cost estimates appropriately. For the final rule, the record will clearly state which, if any, data points were excluded and the rationale for the exclusion.

Third, in some cases, EPA calculated the arithmetic average of the concentration values from two or more samples to obtain a single daily value that could be used in other calculations. EPA's approach of averaging multiple analytical results to obtain a single daily value is consistent with standard, conventional practice in environmental analytical work. This approach also gives one day's sampling information appropriate weight in determining effluent limitations and is consistent with requirements of NPDES regulations at 40 CFR part 122 which define the daily discharge. Multiple daily values resulted from measurements of field duplicates and grab samples during EPA sampling episodes. As explained in Section 13 of the proposal technical development document, field duplicates are two samples collected for the same sampling point at the same time, and thus, characterize the same conditions at that time at a single sampling point. Also as explained in Section 13, EPA collected multiple (usually four) grab samples for HEM during a sampling day at a sample point, because Method 1664 requires that grab samples rather than composite samples be used in the laboratory analysis. For the final rule, EPA will continue to model daily values in calculating the limitations and standards. EPA also intends to: (1) review the individual measurements from field duplicate pairs and individual grab samples; and (2) compare the individual measurements to the final limitations and standards. If EPA finds extreme discrepancies, EPA may reevaluate its data aggregation procedure (*i.e.*, arithmetic averaging) or data selection used to develop the final limitations and standards.

Fourth, EPA intends to compare the limitations and standards to other EPA sampling data that were not used as a basis of the limitations and standards. For example, EPA would expect that a more sophisticated treatment system would result in effluent concentrations that have lower concentration values than the limitations based upon the less sophisticated, model technology. If EPA

notes a different trend, it may perform a more detailed engineering review of the treatment technologies and data selection.

Fifth, EPA intends to verify that 40 CFR part 136 contains approved analytical methods that will be appropriate for compliance monitoring with the final limitations and standards. If EPA determines that the limitations are based upon data from some laboratories that, under certain conditions, had measured to levels lower than the nominal quantitation limits specified in some methods, EPA will evaluate whether those results are quantitatively reliable. In some cases, EPA may discover, for example, that the laboratory had used an approved technique that can reliably measure lower levels, but might not be commonly used. If EPA concludes that the results are quantitatively reliable, it will continue to use the data to calculate loadings, long-term averages and variability factors. To ensure the final limitations and standards reflect “typical” laboratory reporting levels for approved methods, EPA may choose to establish the option long-term averages or limitations at values equal to or greater than the nominal quantitation limits specified in the analytical methods. Or, EPA may instead choose to provide guidance about the appropriate set of method options and a calibration range that will provide sufficient sensitivity to meet the effluent guideline limitations and standards.

Sixth, EPA intends to compare the limitations and standards to averages and daily values from discharge monitoring reports (DMRs). In the preamble to the proposal, EPA referred to this as a “real-world” check, although it is important to remember that many facilities for which DMR data are available may not have the technology installed on which the limits were based. For this reason, EPA intends to classify the facilities into three groups using the information in the detailed surveys and responses to the request for individual weekly/daily DMR data. The groups would contain the DMR data from facilities with: (1) The model or comparable technologies; (2) more sophisticated technologies; and (3) treatment that would require upgrades as a consequence of the rule. For the first group, EPA would expect the DMR data to have values generally less than the limitations and standards. For the second group, EPA would expect generally lower values than group 1. For the third group, EPA still intends to evaluate the data, although it expects that the data will generally have higher concentration values than the