

SNC Determination Guidance  
Criteria for Evaluating Industrial User Compliance  
with Pretreatment Standards and Requirements:  
Criteria Taken from USEPA Guidance Manual  
Pretreatment Compliance Monitoring and Enforcement Guidance  
September 1986, Pages 3-48 to 3-51, and  
40 CFR 403, revised July 24, 1990

Instances of Significant Noncompliance (SNC) are industrial user violations which meet one or more of the following criteria:

1. Violation of Wastewater Discharge Limits

- a. Chronic violations - 66% or more of the sample results for a parameter exceed the daily maximum limit, 4-day average limits, or monthly average limit, in a six month period. (Any magnitude of exceedance).
- b. Technical Review Criteria (TRC) Violations - 33% or more of the test results for a parameter exceed the daily maximum limit, 4-day average limit, or monthly average limit by more than the TRC multiple in a six month period.

There are three groups of TRCs:

- i. Group I for conventional pollutants (BOD, TSS, fats, oil, and grease). TRC equals 1.4 x the standard.
- ii. For all other pollutants (metals, cyanide, and other toxics) TRC equals 1.2 x the standard.
- iii. pH TRC criteria. Please note that on page 30 of the manual that accompanied the USEPA Pretreatment Compliance Monitoring and Enforcement Software that EPA indicated they have mailed to all POTWs with approved programs, the following as stated:

*The significant noncompliance calculation for pH is handled slightly differently than for other parameters. An industrial user is in significant noncompliance for pH based on the Technical Review Criteria (TRC) if 33% or more of the measurements exceed the daily maximum limit by 0.4 pH units or fall below the minimum pH limit by 0.4 units.*

The reference to 0.4 above applies to pH units and not to an exceedance of a standard such as 1.2 times that has been contained in our guidance in the past for determining the significance of the exceedances of the upper and lower pH limit.

NOTE: Regardless of how many pH exceedances occur in a discharge during a calendar day, one violation is counted for that calendar day. The greatest exceedance reported for the calendar day is used when calculating significant noncompliance.

- c. Any other violations of an industrial user discharge limit (average or daily maximum), or any other discharge not meeting general or specific discharge prohibitions in the sewer use ordinance that the control authority knows has caused, alone or in combination with other dischargers, interference (e.g., slug loads) or pass-through; endangered the health of the sewage treatment personnel or the public; or has otherwise impaired or damaged the collection system or treatment processes, sludge quality, or facilities.

- d. Any discharge of a pollutant that caused imminent endangerment to human health, welfare, or to the environment and has resulted in the POTWs exercising its emergency authority to halt or prevent such a discharge.
2. Failure to meet compliance schedule milestone dates or failure to attain final compliance by 90 days or more after the date established in a compliance schedule. Schedules and milestone dates are contained in a wastewater discharge permit or other control documents, or established as a result of enforcement by the control authority, for the user to undertake and complete events necessary to provide any additional pretreatment and/or operation and maintenance, or undertake any corrective actions to meet applicable pretreatment standards.
3. Industrial Users in SNC for self-monitoring includes:  
  
Failure of the industrial user to perform self-monitoring as required by the issued control document issued or other requirements that the POTW has established. These failures can involve:
  - a. Failed to monitor for all regulated pollutants
  - b. Failed to monitor at the frequency established in their control documents or that the POTW has otherwise required, and
  - c. Has not performed any self-monitoring to generate data required for periodic compliance reports or any other reports that the POTW has otherwise required.
4. Industrial Users in SNC for reporting includes:  
  
Failure of the industrial user to provide reports within 30 days of the due date established by the control authority in the issued control document or other date the POTW has established, which includes:
  - a. Baseline monitoring reports
  - b. 90-day final compliance reports
  - c. Periodic compliance reports
  - d. Permit reapplications
  - e. Compliance schedule progress reports
  - f. Any other report or information that the POTW has formally requested an industrial user to submit
  - g. Any other data or information the control authority has requested the user to provide in relationship to the user discharge compliance or other pretreatment requirements.
5. Any other violation or group of violations that the control authority considers to be significant.

Any situation less than total compliance but not meeting the criteria established above for SNC represents marginal or infrequent noncompliance (IM). POTWs should be responding to all individual events of noncompliance identified with pretreatment discharge standards and requirements.

## Application of Average Limitations in Compliance Determinations

### Average Limitations

Categorical standards establish daily maximum limitations and, in most cases, also set maximum average limitations. The structure of these average limits varies among categories. For example, in the Electroplating Category, there is a 4-day average, while the Metal Finishing Category establishes a monthly average. These two types of averages apply to numerous industrial users.

### 4-Day Average

In developing the electroplating 4-day average, EPA performed a statistical analysis that examined independent groups of 4 consecutive sampling days. Implementation of the electroplating 4-day average calls for comparison of the standard with independent results from 4 consecutive sampling days. For the sampling days to be independent, each calculated 4-day average should not include sampling data used in another 4-day average. For example, if there were 11 days of sampling, samples 1, 2, 3, and 4 constitute a 4-day average; samples 5, 6, 7, and 8 produce the next 4-day average; and samples 9, 10, and 11 will have to wait until an additional sample is taken so that the next 4-day average can be calculated. These sampling days are not necessarily calendar days but reflect the sampling frequency; namely, weekly sampling produces a 4-day average every four weeks, and monthly sampling produces a 4-day average every 4 months.

### Monthly Average

A monthly average is used in the Metal Finishing Category and many other categories, such as Porcelain Enameling, Coil Coating, Metal Molding and Casting, Copper Forming, and Aluminum Forming. In developing these monthly averages, EPA performed a statistical analysis based on a fixed number of samples being taken per month (10 for Metal Finishing). To implement these regulations, the average of the samples taken in a calendar month constitutes the monthly average and should be compared to the standard. This could mean a monthly average based on only one sample, or as many as 31 sampling events. As stated in the preamble to the Metal Finishing rule, 48 FR 32478 (July 15, 1983):

"Although it is not anticipated that a monitoring frequency of 10 times per month will always be required, the cost of this frequency of monitoring is presented in the economic impact analysis to the Metal Finishing Regulation. That frequency was selected because if facilities sample 10 times per month, they can expect a compliance rate of approximately 99 percent, if they are operating at the expected mean and variability. Plant personnel, in agreement with the control authority, may choose to take fewer samples if their pretreatment system achieves better long term concentration or lower variability than the basis for the limits, or if plant personnel are willing to accept a statistical possibility of increased violations."