

7049.0410 CONSISTENT REMOVAL DATA.

A. Influent and effluent operational data demonstrating consistent removal shall be submitted for each pollutant for which a discharge limit revision is proposed and shall meet the requirements of this part.

B. Twelve pairs of measurements, influent and effluent, must be taken at approximately equal intervals throughout one full year. Sampling must be evenly distributed over the days of the week to include no-workdays as well as workdays. If the agency determines that this schedule will not be most representative of the actual operation of the POTW plant, an alternative sampling schedule will be approved.

C. Upon agency concurrence, a POTW authority may use a historical database, provided that the data otherwise meet the requirements of this item. For the historical database to be approved, it must present a statistically valid description of daily, weekly, and seasonal receiving POTW loadings and performance for at least one year. The historical data shall be representative of present removal.

D. The data shall be representative of:

- (1) yearly and seasonal conditions to which the POTW is subjected; and
- (2) the quality and quantity of normal wastewater flows.

E. The influent and effluent operational data shall normally be obtained through 24-hour flow-proportional composite samples. Composite sampling may be done manually or automatically and discretely or continuously. For discrete sampling, at least 12 aliquots must be composited. Discrete sampling may be flow-proportioned either by varying the time interval between each aliquot or the volume of each aliquot. All composites must be flow-proportional to each stream flow at the time of collection of influent aliquot or to the total influent flow since the previous influent aliquot. Volatile pollutant aliquots must be combined in the laboratory immediately before analysis. If composite sampling is not an appropriate sampling technique, a grab sample shall be taken to obtain influent and effluent operational data. For example, a grab sample will be required when the parameters being evaluated are those, such as cyanide and phenol, that may not be held for any extended period because of biological, chemical, or physical interactions that take place after sample collection and affect the results. A grab sample is an individual sample collected over a period of time not exceeding 15 minutes.

F. If grab sampling is used to collect data to calculate consistent removal, the collection of influent grab samples must precede collection of effluent samples by approximately one detention period. The detention period shall be based on a 24-hour average daily flow value. The average daily flow used must be based on the average of the daily flows during the same month of the previous year. If composite sampling is used to

collect data to calculate consistent removal, effluent sample collection need not be delayed to compensate for hydraulic detention unless:

- (1) the POTW authority elects to include detention time compensation; or
- (2) the agency requires detention time compensation.

The agency may require that each effluent sample be taken approximately one detention time later than the corresponding influent sample when failure to do so would result in an unrepresentative portrayal of actual POTW operation.

G. The sampling under this part and an analysis of the samples shall be performed according to the techniques prescribed in Code of Federal Regulations, title 40, part 136, as amended. If Code of Federal Regulations, title 40, part 136, does not contain sampling or analytical techniques for the pollutant in question, or if the Environmental Protection Agency regional administrator determines that the Code of Federal Regulations, title 40, part 136, sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the POTW authority or other parties, approved by the Environmental Protection Agency regional administrator.

H. All data acquired under this part must be submitted to the agency. Removal for a specific pollutant shall be determined, for each sample, by measuring the difference between the concentrations of the pollutant in the influent and effluent of the POTW and expressing the difference as a percentage of the influent concentration, except when the data cannot be obtained. If the data cannot be obtained, consistent removal may be demonstrated using other data or procedures subject to concurrence by the agency.

Statutory Authority: *MS s 115.03*

History: *33 SR 696*

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