

Department of Environmental Quality

Date: July 1, 2003
To: DEQ Managers, Control Authority Managers, Industrial Users, EPA Region X
Cc: EPA Region 10
From: Bruce A. Hammon, DEQ Pretreatment Program Coordinator
RE: Pretreatment Sampling Protocol, Part 413 4-day average

The purpose of this protocol is to clarify DEQ's position on the method for sampling and calculating the 4-day average limitation under Part 413, Electroplating Point Source Category. Understandably, there has been confusion over the correct method of calculating this value which has roots beginning with the vague language in the Code of Federal Regulations. The criteria state "Average of daily values for 4 consecutive monitoring days" without further defining the temporal sequence for monitoring. This has been interpreted as 4 consecutive *calendar* days (Monday, Tuesday, Wednesday, Thursday), or 4 consecutive *monitoring* days over a specified period (e.g. 4 consecutive sampling days over periods ranging from one month to a year). Given the broad nature of the rule and the absence of specific EPA guidance both are correct.

The objective of this sampling protocol is to ensure that control authorities and categorical industrial users comply with Part 413 (first and foremost), maintain equivalency with EPA's program, consider the broad range pretreatment programs in Oregon, and provide state-wide consistency.

The Department is providing this sampling protocol by EPA reference; specifically; Pretreatment Compliance Monitoring and Enforcement Guidance; page C-1, July/September 1986. In the context of the average of daily values for 4 consecutive monitoring days this document states, "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 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 four-day average every 4 weeks, and monthly sampling produces a four-day average every 4 months".

The 4-day average concentration value is determined by averaging the 4 samples obtained over the monitoring period. The EPA Guidance, and EPA Region 10, does not allow a "rolling" average calculation given the language "comparison of the standard with *independent results from 4 consecutive sampling days. (Emphasis added)*". This guidance also precludes the use of a single sample day comparison to the 4-day average because a data set of 4 samples is required to calculate the average. The single sample is to be used for comparison with the "Maximum for any 1 day" criterion of the standards.

Implementation

- For the most part, this is the method used by control authorities in Oregon to determine compliance with the 4-day average limitation. The Department recognizes that some facilities may have been interpreting the method for calculating the 4-day average differently than the above, particularly absent direction from DEQ. Those facilities not in conformance with this guidance need to amend their procedures and document these changes in the Program Procedures Manual. If additional time is necessary for control authorities to implement this change (i.e. permit modifications, sequential sampling etc.), the Department will allow existing methods to continue through the end of the reporting period (December 31, 2003) on a case-by-case basis. Given the confusion, we do not intend to initiate formal enforcement action where a control authority has been using different methods to calculate these values in the past unless there are instances of gross negligence or abuse;
- Careful evaluation of the Department's recent position that monitoring should take place over 4 consecutive calendar days reveals that this method is more stringent than EPA's interpretation of the guidance. While the State has the purview to be more restrictive than the federal program, we choose not to in this instance. Therefore, control authorities and categorical industrial users may use this method at their discretion but it is not mandatory;
- Control authorities should specify the required monitoring regime in the industrial user permits; and,
- When reporting 4-day averages specify the beginning and end dates of the consecutive samples along with average concentration.

If there are questions regarding the above, or require additional time to implement this change, please contact Bruce A. Hammon, DEQ, by telephone: 541-388-6146 x 255 or email: hammon.bruce@deq.state.or.us