Tacoma Environmental Services Laboratory

The City of Tacoma Environmental Services Laboratory offers the following comments regarding Lab Accreditation Rulemaking in the proposed changes to WAC 173-50:

WAC 173-50-040 Definitions., p.8

Tacoma ES_Lab suggests the following edits:

"**Drinking water certification manual"** - The Environmental Protection Agency Manual for the Certification of Laboratories Analyzing Drinking Water, ~~5th Edition, January 2005~~ current approved edition.

WAC 173-50-060 Responsibilities of environmental laboratories. Item (2), p.15

Tacoma ES_Lab suggests the following edits:

(2) For laboratories to be accredited for drinking water parameters, the laboratory must follow requirements designated in the current approved drinking water certification manual.

WAC-173-50-061: Required Quality Control Practices item (2), p.16

Comment: Midpoints should be allowed to be removed if there is a demonstratable error with the preparation/injection and the point is removed for ALL analytes in the calibration.

Tacoma ES_Lab suggests this section read:

A laboratory must not remove any midpoints from a calibration curve with the exception of consecutive points at either end of the curve OR there is a demonstratable error with the preparation/injection and the point is removed for ALL analytes in the calibration.

WAC-173-50-061: Required Quality Control Practices item (3), p.16

Comment: This language is confusing and appears to be missing some words.

Tacoma ES_Lab suggests this section read:

Unless otherwise specified in the method, each calibration point must have its percent error meet the calibration verification acceptance limits from the method; with the exception *of* calibration points at or below the LOQ, it which case ~~where~~ the limit is 50-150%.

WAC-173-50-061 Required Quality Control Practices item (4), p.16

Tacoma ES_Lab recommends removing this section because standard calibration acceptance criteria (including the standard at the limit of quantitation) is covered in the preceding section (3).

Note: The word "standard" is not defined in the definitions section and we read this with the understanding that the term "standard" as used here is synonymous with "calibration point" used in item (3) in this section, assuming a "calibration point" is one the "series of solutions of known analyte concentrations…" that make up a "Calibration Curve".

WAC-173-50-061: Required Quality Control Practices. Item (6), p.17

Consideration should be given to analyses with multi-component analytes for example, PCB aroclors, or toxaphene.

Tacoma ES_Lab suggests the following edit:

(6) For single component analytes, Laboratory control samples and matrix spikes must include all analytes of interest in the respective analysis, unless there are method specified exceptions.

WAC-173-50-061: Required Quality Control Practices. Item (7), p.17-18

Tacoma ES_Lab requests that this section be removed.

This section is confusing, contradicts other EPA method guidance, and is not consistent with some of our Ecology approved project specific requirements for demonstrating NPDES compliance. It too broadly stated and will unnecessarily sensor useful information.

WAC 173-55-069 Data and record traceability. (should be WAC 173-50-069) Item 1 (d), p. 20

Tacoma ES_Lab suggests the following change:

(d) Document that all temperature-based equipment such as a refrigerator, oven, or incubator is both within control ~~and checked manually~~ as required by the relevant method; and

Reason: The only way to properly "Document" that these items are operating within control is to check them and record the data. This can be accomplished with a digital logger or manually writing down the value at the date(s) times required to demonstrate "control". Tacoma ES_Lab recommends removing "and checked manually" from this sentence because it is not necessary.

WAC 173-55-069 Data and record traceability. (should be WAC 173-50-069) Item 1 (c), p.20

Tacoma ES_Lab suggests the following change:

(c) Document proper storage of samples and sample extracts as required by the specific method;

WAC 173-55-069 Data and record traceability. (should be WAC 173-50-069) Item 1 (e), p.20

Tacoma ES_Lab suggests the following change:

(e) Keep a log~~books~~ for any and all instruments, including documentation of installation, setup, maintenance, and removal from service.

Reason: By removing "books" from the word log this more clearly allows either a hand-written record in a logbook or an electronic record aka an electronic log. *Note that item 2 in this section states "When records are hand-written,…" – the key word to us is that electronic records are acceptable since the first word in this sentence is "when" which implies there is a when not. This is reinforced in item (3) in this section that states "When records are kept electronically,…"*

WAC 173-55-069 Data and record traceability. Item (3), p20-21

Tacoma ES_Lab suggests the following edits:

(3) ~~When records are kept electronically~~, Electronically captured records ~~they~~ must include the date and time the record was captured~~. be populated at the time of record~~, using a fully traceable and secure format. Use of continuous data-loggers is not an acceptable substitute ~~for~~ where method-required temperature checks must be performed manually.

WAC 173-50-070 Proficiency testing (PT). Item (7), p.22

Tacoma ES_Lab suggest the following edits:

(7) When two or more approved PT providers ~~are~~make available a PT sample for a parameter in the appropriate matrix, the laboratory must analyze and pass a PT to gain or maintain accreditation.

WAC 173-50-140 Denying accreditation. Item (2), p.36

Tacoma ES_Lab suggest the following edits:

(2) A laboratory may be denied accreditation for a specific ~~parameter~~ analyte in a matrix for ~~unsatisfactory~~ unacceptable proficiency testing results.