



February 1, 2010

Office of Water Quality Water-Quality Information Note 2010.02

Subject: National Water Information System—Guidance for coding data from tracer studies

This memorandum contains guidance for coding data collected as part of an experimental tracer study and stored in the National Water Information System (NWIS) QWDATA database. This guidance clarifies the policy regarding tracer experiment data described in Office of Water Quality Technical Memorandum 2008.05 (<http://water.usgs.gov/admin/memo/QW/qw08.05.html>).

Samples collected as part of tracer experiments often are analyzed for a variety of chemical constituents in addition to the target tracer chemical. Users typically wish to store all associated results (both environmental and tracer constituents) in the same sample record to facilitate the analysis and publication of the data. However, the results for constituents that are affected by the tracer chemicals do not represent environmental conditions and should not be released to the public without an explanation of those results. Such explanations are not possible with certain data release mechanisms such as NWISWeb.

The following QWDATA coding guidance should be followed for parameters affected by tracers. This coding will prevent the results affected by tracers from being transmitted automatically to NWISWeb and from being included in tables generated from QWDATA using default output settings.

Initial entry into QWDATA:

- Log in the sample and set the Analysis Status (ASTAT) code to “I” (Internal use only). This will prevent all results from this sample from being included in retrievals for NWISWeb or QWDATA publication tables (using default settings).
- Enter parameter 71999 (Sample purpose, code) = 145 (Tracer test).

Managing results:

- For each parameter affected by the tracer, set the Data Quality Indicator (DQI) code to “Q”, as described in OWQ memo 02.15 (http://phoenix.cr.usgs.gov/policy/OWQ_02.15_dqi.html).

- Enter a result-level field comment that describes the tracer that was injected into the environment. Apply this comment to only the tracer-affected parameters.
- Add a value qualifier code = “e” (See result field comment) to the tracer-affected parameters.
- Change the sample-level ASTAT code to “U” (Unrestricted) if appropriate. This will allow all results with DQI = A, S, or R to be published on NWISWeb or included in QWDATA retrievals using default settings.

Please refer to the QWDATA User Manual for additional explanation of these codes and how to set sample and result codes (<http://nwis.usgs.gov/currentdocs/qw/QW.user.book.html>). Questions can be sent to GS-W Help QWDATA.