



July 7, 2004

Office of Water Quality Water-Quality Information Note 2004.12

Subject: Field Methods—turbidity protocol

Chapter 6.7 of the National Field Manual, "Turbidity," has been rewritten to reflect recent substantial advances in measurement technology and calibration, and to introduce new reporting units. The new protocol includes a major change in the way the USGS will report and store turbidity data. This has resulted in changes in the number of different reporting units to be used for turbidity and the addition of corresponding NWIS parameter and method codes. The new reporting units, with corresponding new parameter codes (pcodes), will provide traceability to the instrument design that was used to make the measurement. For example, the use of "NTU" as a reporting unit will be restricted to instruments with a single 90 degree detector and white light source as specified in EPA Method 180.1 (a drinking-water method). The new parameter codes and reporting units are detailed in Table 6.7-4 of the new turbidity protocol, which can be accessed internally at <http://water.usgs.gov/usgs/owq/6.7-online.pdf>. The genesis and much of the background material for this revision is described in USGS Circular 1250, which can be accessed at <http://water.usgs.gov/pubs/circ/2003/circ1250/>. Historical data stored under pcode 00076 or 61028 may be migrated to the new reporting units, pcodes, and method codes on a case-by-case basis, where sufficient information exists to verify the instruments that were used to make the original measurements.

The official start date for the new turbidity protocol will be October 1, 2004. However, project personnel may begin using the new parameter and method codes immediately, as they are included in the current NWIS release. An Office of Water Quality Technical Memorandum that will describe the protocol and provide guidance for its use is in preparation.

Questions about the new protocol should be addressed to Chauncey Anderson (chauncey@usgs.gov). Chauncey is maintaining a spreadsheet containing up-to-date information on turbidity equipment, parameter codes, and method codes.

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