

2004 303(d) LIST/DELIST DATA SUBMITTALS MINIMUM DATA REQUIREMENTS

The following quality assurance and quality control (QA/QC) requirements must be met by all data submitted in support of listing or delisting a water body segment in the Oregon 2004 303(d) List

- Identify and document precise sampling site location(s). The sampling location must be documented by latitude and longitude in either decimal degrees or degrees, minutes, seconds.
- Document date and time the samples were collected.

Sampling and analysis must be conducted under a written QA/QC Plan or by established and approved protocols such as contained in the Water Quality Monitoring Technical Guidebook, The Oregon Plan for Salmon and Watersheds, July 1999. The QA/QC plan must contain the data quality objectives (DQOs).

- Chemistry samples must be analyzed in accordance with methods cited in the most recent edition of *Standard Methods for the Examination of Water and Waste Water*, or using EPA approved methods listed in the most recent update of 40 CFR 136 or peer reviewed methodologies used for the determination of contaminant levels in the water column. The analysis must utilize appropriate QA/QC protocols, such as routinely analyzing replicates, blanks, laboratory control samples (LCS) and spiked samples. Data using field kits is only acceptable if the kits use a method approved under 40 CFR 136 and the QA/QC protocols referenced above have been adhered to. (See DEQ Laboratory Field Sampling Reference Guide, and DEQ Laboratory Quality Assurance Manual.)
- Samples analyzed must comply with preservation, transportation and holding time recommendations cited in the most recent edition of *Standard Methods for the Examination of Water and Waste Water* or the *DEQ Laboratory Field Sampling Reference Guide*.
- Data must be reported in standard units recommended in the relevant approved method.
- Instruments (pH, DO, Conductivity, Temperature, etc.) are to be operated and calibrated according to manufacturer's recommendations, or other acceptable, established procedure. Field measurements must be conducted using methods cited in the most recent edition of *Standard Methods for Analysis of Water and Waste Water*. For grab samples, duplicate samples will be taken at a minimum of 10% of the total number of monitoring sites (1 duplicate for every 10 sites).

Reference: Water Quality Monitoring Technical Guide Book, The Oregon Plan for Salmon and Watersheds July 1999. Available from Oregon Plan website at:

http://www.oweb.state.or.us/publications/mon_guide99.shtml

Continuous temperature monitoring must follow standardized field protocols. At a minimum, accuracy checks must be conducted using a NIST (National Institute of Standards and Technology) traceable thermometer. For data to be acceptable it must be bracketed by two acceptable checks; either pre and post deployment checks or two field audits during the deployment period.

Reference: Water Quality Monitoring Technical Guide Book, The Oregon Plan for Salmon and Watersheds July 1999. Available from Oregon Plan website at:

http://www.oweb.state.or.us/publications/mon_guide99.shtml

- Multi-parameter continuous monitors must be calibrated following the manufacturer's calibration procedures prior to field deployment. For data to be acceptable it must be bracketed by two acceptable field audits during the deployment period.

- For macroinvertebrate assessments the Level 3 protocol described in the Oregon Plan Water Quality Monitoring Technical Guide Book, must be followed.

References:

Water Quality Monitoring Technical Guide Book, The Oregon Plan for Salmon and Watersheds July 1999. Available from Oregon Plan website at:
http://www.oweb.state.or.us/publications/mon_guide99.shtml

DRAFT Reference Condition Approach and Site Selection, DEQ, February 2003.