CHAPTER 19 WATER QUALITY MONITORING REGULATIONS

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1900 PURPOSE AND SCOPE

- 1900.1 The purpose of this chapter is to provide for accurate, consistent and reproducible water quality monitoring data for decisionmaking purposes. This chapter shall apply to ambient surface and ground water quality monitoring, special monitoring studies, compliance monitoring, monitoring required as a part of a permit, or to modify a permit, and self-monitoring of discharges.
- 1900.2 If any provision of this chapter, or the application of any provision of this chapter to any person or circumstance, is held invalid in a court of law, the remainder of the rules of this chapter and its application to any other persons or circumstances shall not be affected.

AUTHORITY: Unless otherwise noted, the authority for this chapter is \$21 of the Water Pollution Control Act of 1984, D.C. Law 5-188, D.C. Code 6-921 *et seq.* (1995 Repl. Vol.); Mayor's Order 89-160, dated July 20, 1989.

SOURCE: Final Rulemaking published at 42 DCR 654 (February 3, 1995).

1901 QUALITY ASSURANCE PROJECT PLAN

- 1901.1 No person shall perform monitoring for the regulatory and decisionmaking purposes of the Act without a quality assurance project plan approved by the Director.
- 1901.2 A quality assurance project plan is not required for water quality monitoring which is unlikely to be used for regulatory decisions under the Act.
- 1901.3 The quality assurance project plan shall contain the following information:
 - (a) Purpose of the monitoring;
 - (b) Location of the monitoring;
 - (c) Frequency of the monitoring;

- (d) Type and number of samples to be collected;
- (e) Parameters to be analyzed;
- (f) Laboratory facilities to be used;
- (g) Start and end dates for the monitoring; and
- (h) Quality assurance manual.

SOURCE: Final Rulemaking published at 42 DCR 654 (February 3, 1995).

1902 QUALITY ASSURANCE MANUAL

- 1902.1 The quality assurance manual shall include the following information for sample collection and field data collection:
 - (a) Procedures for sample container preparation, labelling and quality assurance checks,
 - (b) Methodology and equipment used for sample collection;
 - (c) Chain of custody sheets and procedures for their use;
 - (d) Standardization and calibration procedures for field measurement equipment;
 - (e) Acceptable limits for standardization and calibration of field instruments;
 - (f) Data log sheets or sample formats for recording instrumental field measurements;
 - (g) Sample holding conditions and times; and
 - (h) Percentage of duplicate and split samples to be collected and the procedures for collecting them.
 - 1902.2 The quality assurance manual shall contain the following information for laboratory analysis of samples:
 - (a) Most recent laboratory certification results;
 - (b) A reference for the analytical procedure used for each parameter if the procedure used is from *Standard Methods for the Examination of Water and Wastewater*, American Society for Testing Materials Protection Agency manual, or the U. S. Environmental procedures;
 - (c) If the procedure is not from one (1) of the three (3) sources but is widely used and accepted as accurate by the scientific community, then the details for the entire procedure shall be included;

- (d) For experimental procedures, the entire procedure shall be included and the Director may issue conditional approval of the procedure if it appears to be acceptable;
- (e) Maintenance, calibration and standardization log books shall be maintained and a list of the equipment covered and samples of the logs shall be included in the quality assurance manual;
- (f) The percentage or rate of duplicate, spike and replicate sample analyses for each parameter;
- (g) For biological and taxonomic sampling, the references used and quality assurance methods shall be described;
- (h) Description of the quality control procedures if the data is entered into a computerized data base; and
- (i) The basis and methods for determining whether the data is judged to be acceptable.

SOURCE: Final Rulemaking published at 42 DCR 654, 655 (February 3, 1995).

1903 DISCHARGE PERMIT SELF-MONITORING

- 1903.1 Self-monitoring performed as a requirement of a discharge permit issued under §7 of the Act shall be conducted in accordance with a quality assurance manual.
- 1903.2 The quality assurance manual shall contain the information specified in § 1902 and a description of flow measurement and calibration techniques, methods and frequencies.
- 1903.3 The results of spikes, replicates, standards and duplicates shall be submitted annually by the permittee to the Director.

SOURCE: Final Rulemaking published at 42 DCR 654, 656 (February 3, 1995).

1904 OTHER MONITORING

- 1904.1 The Director may waive part or all of the requirements for written quality assurance information for monitoring needed for oil spills, hazardous material spills, ground water contamination investigations and for other emergency situations; however, the waiver shall not be construed to allow the collection and use of poor quality data.
- 1904.2 The Director may require additional information for special water quality monitoring studies which are unique, attempt to define particular water quality parameter relationships, or which are for the purpose of investigating point source effects.

SOURCE: Final Rulemaking published at 42 DCR 654, 656 (February 3, 1995).

Title 21

1999 DEFINITIONS

1999.1 When used in this chapter, the following words and phrases shall have the meanings ascribed:

Accuracy - the measure of bias or consistent departure from the known true value and is determined by using standards and duplicates.

Act - the District of Columbia Water Pollution Control Act of 1984.

Ambient - those conditions which would be normally expected to prevail in the waters of the District, including any legally permitted point and nonpoint source discharges of pollutants; or, in reference to a particular source of pollution, means those conditions which would be expected to prevail without the source of pollution such as in a free flowing, nontidal stream those conditions upstream of the particular source of pollution.

Director - the Director of the Department of Consumer and Regulatory Affairs or his or her representative.

Duplicate - the repeated analysis of split portions of the same sample.

Field measurement - those physical, chemical, radiological and biological properties of samples which are measured in the field at the site of sample collection.

Laboratory measurement - those physical, chemical, radiological and biological properties of a sample which are determined in a laboratory.

Monitoring - the preparation of equipment, the collection of samples, the field and laboratory measurements, the preservation and preparation of the sample and the reporting and storage of the data collected.

Precision - the measurement of closeness with which repeated analysis of a parameter agree and is determined from duplicate samples.

Replicate - those determinations on samples from the same source environment.

Sample - a discrete quantity of water, sediment, biota or other matter which is representative of the source or place from which it was taken.

Spike - the addition of a known amount of a substance to sample matrix containing a measured background concentration of the substance and is useful for determining precision and accuracy.

Standard - a prepared sample matrix containing a known amount of a substance and is useful for calibration and accuracy determinations.

SOURCE: Final Rulemaking published at 42 DCR **654**, 657 (February 3, 1995).