

**Section 2550.7. General Water Quality Monitoring
and System Requirements.**

Specific Purpose

The specific purpose of this section is to assure that monitoring systems used in monitoring and response programs provide water quality data and statistical determinations which satisfy the performance standards of those monitoring and response programs.

Factual Basis

There are three media which either consist of or contain water that can be affected by a release from a classified waste management unit: the ground water medium; the surface water medium; and the unsaturated zone medium. The performance goal of water quality monitoring systems is to determine the condition of those portions of the monitored medium that either could be affected by a release or have been so affected. This monitoring effort breaks down into three primary approaches: (1) to detect a release from a waste management unit; (2) to evaluate the nature and extent of a release that is known to exist; or (3) to validate the success of applied corrective actions in bringing the unit back into compliance with the Water Quality Protection Standard. In order to achieve this performance goal, the monitoring systems must be placed, designed, constructed, and operated in a manner which produces water samples that are as representative as possible of the in-situ water in the medium being sampled. There are certain minimum standards of placement, design, construction, and operation which have been found to be necessary in achieving this design goal. These standards differ considerably between the various media. In technical work such as the design and installation of monitoring systems, it is important that the person carrying out the work have training and professional experience in such work in order to provide some assurance that monitoring systems will meet the performance standards and other requirements of the regulations. This section is necessary in order to clarify the requirements that any monitoring system or statistical method proposed by the discharger must achieve, at a minimum.

This section is based on 40 CFR 264.95. Certain structural changes from the text of 40 CFR 264.97 were made for the sake of clarity, for incorporating the more-stringent requirements of repealed Article 5, and for including surface water and