252:302-5-2. Laboratory technician
(a) All field laboratories shall have at least one on-site employee meeting the minimum requirements of this chapter.
(b) The laboratory technician shall have at least a high school diploma or equivalent, complete a method training program under an experienced analyst and have six months bench experience in the analysis of process samples.
(c) The laboratory technician shall have knowledge of the use of analytical equipment and support equipment used for the analysis of pH, chlorine residual, turbidity, conductivity, temperature and dissolved oxygen.
(d) Before analyzing compliance samples, the laboratory technician must demonstrate acceptable results on at least four (4) replicates of a known standard. These are analyzed as unknown samples over a period of 3 to 5 days by the technician; after analyzing all required calibration standards. or—Alternatively, demonstrate satisfactory participation on a PT sample, and the technician shall adhere to method required QC procedures specified in the methods for blanks, precision, accuracy, sensitivity, and specificity. The demonstration must be documented according to the laboratory's QA plan.
(e) Laboratory technicians must be under the supervision of a supervisor/consultant until the minimum requirements of this subsection are met.

252:302-7. PROFICIENCY TESTING

252:302-7-3. Initial accreditation
To gain initial or interim accreditation, a laboratory shall have obtained acceptable results for two consecutive proficiency testing (PT) rounds. Proficiency testing (PT) rounds must have been performed within the last twelve (12) months and at least fifteen (15) seven (7) calendar days apart from the date of analysis.

252:302-7-7. PT criteria for laboratory accreditation
The following criteria apply individually to each analyte as defined by the laboratory seeking accreditation in its application:
(1) Results of the PT study shall be considered successful when the results are "acceptable" and are within the acceptable limits established and published by the PT Provider.
(2) The DEQ shall consider PT results along with the other elements of these rules when determining a laboratory's accreditation status;
(3) For initial accreditation or supplemental testing, the studies must be at least fifteen (15) seven (7)-calendar days apart from the date of analysis.

252:302-7-9. Supplemental studies
A laboratory may elect to participate in PT studies more frequently than required by the semiannual schedule. Additional studies are not distinguished from the routinely scheduled studies. They are counted and scored the same way and must be at least fifteen (15) seven (7) calendar days apart from the date of analysis.

**SUBCHAPTER 9. QUALITY ASSURANCE/QUALITY CONTROL**

**PART 1. QUALITY ASSURANCE/QUALITY CONTROL GENERAL CRITERIA**

252:302-9-2. Format
(a) The QA plan shall list the following on the title page:

(1) a document title;
(2) the laboratory's full name and address;
(3) the names, addresses and telephone numbers of all individuals responsible for the laboratory;
(4) the name of the quality manager (however titled);
(5) the identification of all major organizational units which are to be covered by this QA plan; and
(6) the effective date of the version.

(b) The QA plan shall also contain a Table of Contents, applicable lists of references and glossaries, and appendices.

252:302-9-3. Management information required in QA plan
The QA plan and related quality documentation shall state the laboratory's policies established in order to meet the requirements of this rule. The QA plan and related quality documentation shall also contain:

(1) a quality policy statement, including objectives and commitments, by top management;
(2) the organization and management structure of the laboratory, its place in any parent organization and relevant organizational charts;
(3) the relationship between management, technical operations, support services and the quality assurance plan;
(4) job descriptions of key staff and reference to the job descriptions of other staff;
(5) identification of the laboratory's approved signatories; at a minimum, the title page of the QA plan must have the signed and dated concurrence, (with appropriate titles) of all responsible parties including the quality manager(s), technical director(s), and the agent who is in charge of all laboratory activities such as the supervisor/consultant; and
(6) the laboratory management arrangements for exceptional departures from documented policies and procedures or from standard specifications.

**PART 3. STANDARD OPERATING PROCEDURES AND METHODS MANUAL**

252:302-9-23. Test method(s)
Each test method shall include or reference the following, where applicable:

(1) Identification of the test method;
(2) Applicable matrix or matrices;
(3) Detection limit;
(4) Scope and application, including components to be analyzed;
(5) Summary of the test method;
(6) Definitions;
(7) Interferences;
(8) Safety;
(9) Equipment and supplies;
(10) Reagents and standards;
(11) Sample collection, preservation, shipment and storage;
(12) Quality control;
(13) Calibration and standardization;
(14) Procedure;
(15) Calculations;
(16) Method performance;
(17) Data assessment and acceptance criteria for quality control measures;
(18) Corrective actions for out-of-control data;
(19) Contingencies for handling out-of-control or unacceptable data;
(20) References; and
(21) Any tables, diagrams, flowcharts and validation data.
