# CHAPTER 302. FIELDINDUSTRIAL DISCHARGE LABORATORY ACCREDITATION

# SUBCHAPTER 1. GENERAL PROVISIONS

### 252:302-1-1. Purpose, basis, authority, applicability

- (a) The rules in this Chapter provide standards for accreditation of privately and publicly owned laboratories for performance of analyses of wastewater. This Chapter was promulgated and adopted pursuant to the Oklahoma Environmental Quality Code (Code), 27A O.S. § 2-4-101 *et seq.*, and shall apply to laboratories accredited or applying to be accredited by the Department of Environmental Quality as an field industrial discharge laboratory.
- (1) The available scope of accreditation under this Chapter is generally limited to wastewater analyses that are performed immediately upon sampling.
- (b) As the Board promulgates new rules, accredited laboratories shall incorporate those procedures for all accredited analytes upon the effective date of the rule; July 1 of each year.
- (c) The implementation date of this Chapter is January 1, 2013.

## 252:302-1-2. Field laboratory category [REVOKED]

A laboratory may be accredited in the category of field laboratory. A field laboratory is a small laboratory which does not want to participate in The NELAC Institute accreditation standards and is limited to analysis for pH, residual chlorine (total residual chlorine, free chlorine, total oxidants), turbidity, conductivity, temperature and dissolved oxygen.

## 252:302-1-3. Terms [REVOKED]

Terms used in this Chapter shall have the meanings given to them in this Subchapter or the Oklahoma Environmental Quality Code. Any technical term not defined thereby shall be defined by its generally accepted scientific meaning or its standard dictionary meaning.

#### 252:302-1-4. Definitions

In addition to the definitions contained in the Environmental Quality Code (27A O.S. § 2-1-101 et seq.) <u>Title 27A of the Oklahoma Statutes</u> and OAC 252:004 (Department of Environmental Quality Rules of Practice and Procedure), the following words or terms, when used in this Chapter, shall have the following meaning, unless the context clearly indicates otherwise. <u>Any technical term not defined thereby shall be defined by its generally accepted scientific meaning or its standard dictionary meaning.</u>

- "Acceptable results,"; as defined in 27A O.S. § 2-4-101, means a result within limits determined on the basis of statistical procedures as prescribed by the Department means a result within limits determined on the basis of statistical procedures as prescribed by DEQ.
- "Accreditation" or "accredited" means the process by which the DEQ recognizes a laboratory as meeting certain predetermined qualifications or standards, thereby accrediting the laboratory evaluates an environmental laboratory's quality systems, staff, facilities, equipment, test methods, record, and reports against the requirements of this Chapter. Laboratories determined to meet the qualifications and standards of this Chapter are thereby accredited. The term "certification" as used in 27A O.S. §2-4-101, is synonymous with the term accreditation.
- "Analyte" means the characteristics of a laboratory sample determined by an analytical laboratory testing procedure and is synonymous with "parameter".
- "Applicant" means the owner of a laboratory, or a representative authorized by the owner to act on the owner's behalf, seeking accreditation from the DEO.
- "Applicant laboratory" means the laboratory and its owner or authorized representative for which an application for accreditation has been filed with the DEQ.
- "Approved method" means an analytical test method whichthat has been required by law or is recognized by the DEQ as acceptable for a specific usage.
- "Assessment" means the evaluation process used to measure or establish the performance, effectiveness, and conformance of a laboratory to the standards and requirements of this Chapter. The term "Evaluation" as used in 27A O.S. § 2-4-101, is synonymous with the term "Assessment."
- "Blind audit" means a process whereby the DEQ or any other designated agent submits proficiency testing samples to an accredited laboratory in a manner such that the laboratory is not aware of the process.
- "Certificate" or "Certificate of Accreditation" is a document issued by DEQ acknowledging that an environmental laboratory has met standards of this Chapter for accreditation and identifying those parameters for which the laboratory is accredited. "Certificate" is additionally defined in 27A O.S. § 2-4-101 and means the same as laboratory accreditation.
- "Corrective Action Plan\_(CAP)"\_or "Corrective Action Report" is a written plan of action, including a schedule for implementation, to correct deficiencies\_identified in the DEQ or DEQ approved agent's inspection report, including a timeline for implementation; or It includes a schedule for implementation and actions to eliminate or reduce the cause(s) of an existing nonconformity, defect, or other undesirable situation in order to prevent its recurrence. A CAP may be required in response to identified deficiencies in a DEQ or DEQ-approved agent's assessment report.
- "Critical nonconformity" or "Critical Finding" means a conclusion of noncompliance that would require an immediate corrective action or an immediate stop to testing.
- "DEQ" means the Oklahoma Department of Environmental Quality. For purposes of certifications issued and enforcement matters arising prior to July 1, 1993, "DEQ" also means predecessor agencies of DEQ that had jurisdiction over environmental water quality laboratories on June 30, 1993.
- "Evaluation", as defined in 27A O.S. § 2-4-101, means a review of the quality control and quality assurance procedures, recordkeeping, reporting procedures, methodology, personal qualifications, equipment, facilities and analytical technique of a laboratory for measuring or establishing specific parameters. "Evaluation" is synonymous with the term "Assessment."
- "Field laboratory" is a small laboratory which that does not want to participate in The NELAC Institute accreditation standards and is limited to analysis for pH, residual chlorine (total residual chlorine, free chlorine, total oxidants or free oxidants), turbidity, conductivity,

temperature and dissolved oxygen.

- "Finding" means a conclusion of noncompliance of the evaluation process supported by objective evidence.
- "Industrial discharge laboratory" means a laboratory that is accredited to this Chapter.
- "Initial accreditation" means an first-time accreditation granted to a laboratory not previously currently accredited by the DEQ.
- "Interim accreditation" means an out-of-time accreditation issued to a DEQ-accredited laboratory outside of the renewal accreditation process for analytes in which the laboratory is not currently accredited by the DEQ.
- "Laboratory" as defined in 27A O.S. § 2-4-101, means a facility that performs analyses to determine the chemical, physical or biological properties of air, water, solid waste, hazardous waste, wastewater or soil or subsoil materials or performs any other analyses related to environmental quality evaluations. "Laboratory" includes mobile laboratories.
- "Laboratory waste" means by-products of the analytical process, residues of samples analyzed, discarded reagents or standards and any materials contaminated by any of these.
- "Nonconformity" means a conclusion of noncompliance or nonconformity of the evaluation process supported by objective evidence. This term is synonymous with both "deficiency" and "finding".
- "Owner" means the sole proprietor of an individually owned laboratory, the controlling or managing partner of a laboratory held by a partnership, the major stockholders of a corporate owned laboratory, or a municipality or other local government entity which that owns or operates a laboratory.
  - "Parameter" is defined in 27A O.S. § 2-4-101 and is synonymous with "analyte."-
- "Proficiency testing (PT) sample" means a sample submitted to a laboratory by the DEQ or other designated agent for the purpose of assessing the ability of the laboratory to correctly analyze samples using an approved method.
  - "Program" means the DEQ's laboratory accreditation program described in this Chapter.
  - "Residual chlorine" means total residual chlorine, free chlorine, total oxidants, or free oxidants.
- "QA Plan" or "Quality Assurance Plan" means a written description of quality assurance and quality control activities (quality control) that will ensure the generation of data that are scientifically valid, defensible, and of known and acceptable limits of precision and accuracy.
- "SOP manual" or "Standard Operating Procedure manual" means a document approved by a laboratory director management that includes approved methods, equipment, and instruments used by the laboratory for analyses

#### 252:302-1-5. Fees

- (a) **Applicable fees.** The following fees apply:
  - (1) Initial accreditation \$350.00
  - (2) Renewal accreditation \$350.00
  - (3) Interim accreditation \$200.00
  - (4) Renewal late fee \$100.00
  - (5)(4) Accreditation amendment \$70.00
  - (6)(5) On-site evaluation assessment (initial) \$1,000.00
  - (7)(6) On-site evaluation assessment (renewal) \$500.00 annually
  - (8)(7) On-site evaluation assessment (interim) \$1,000.00
- (b) Annual fee adjustment. To assist in meeting rising costs to the DEQ of the environmental services and regulatory programs associated with the laboratory services program, the fees set out in this Section shall be automatically adjusted on July 1st every year to correspond to the percentage, if any, by which the Consumer Price Index (CPI) for the most recent calendar year exceeds the CPI for the previous calendar year. The DEQ may round the adjusted fees up to the nearest dollar. The DEQ may waive collection of an automatic increase in a given year if it determines other revenues, including appropriated state general revenue funds, have increased sufficiently to make the funds generated by the automatic adjustment unnecessary in that year. A waiver does not affect future automatic adjustments.
  - (1) Any automatic fee adjustment under this subsection may be averted or eliminated, or the adjustment percentage may be modified, by rule promulgated pursuant to the Oklahoma Administrative Procedures Act. The rulemaking process may be initiated in any manner provided by law, including a petition for rulemaking pursuant to 75 O.S. § 305 and OAC 252:4-5-3 by any person affected by the automatic fee adjustment.
  - (2) If the United States Department of Labor ceases to publish the CPI or revises the methodology or base years, no further automatic fee adjustments shall occur until a new automatic fee adjustment rule is promulgated pursuant to the Oklahoma Administrative Procedures Act.
  - (3) For purposes of this subsection, "Consumer Price Index" or "CPI" means the Consumer Price Index All Urban Consumers (U.S. All Items, Current Series, 1982-1984=100, CUUR0000SA0) published by the United States Department of Labor. The CPI for a calendar year is the figure denoted by the Department of Labor as the "Annual" index figure for that calendar year.
- (c) On-site evaluation assessment fee. The evaluation fee is \$1000 for initial or interim applications. All laboratories must pay an assessment fee. The on-site evaluation fee will be invoiced with initial, interim, or renewal application fees.

# 252:302-1-6. Accreditation period

The period of accreditation is annual, running from January 1 to December 31. Notwithstanding, an applicant laboratory may apply at any time for initial or interim accreditation. A laboratory applying for interim accreditation shall meet the same requirements as a laboratory applying for initial accreditation. Regardless of when a certificate goes into effect, it shall expire on December 31 of the same year, unless provided specific written exception by DEQ.

### SUBCHAPTER 3. FIELD LABORATORY ACCREDITATION PROCESS

PART 1. APPLICATION

A laboratory may apply at any time for initial, or interim or renewal accreditation. A laboratory applying for interim accreditation shall meet the same requirements as a laboratory applying for initial accreditation.

#### 252:302-3-2. Application required

- (a) **General.** A laboratory shall submit one copy of an application for accreditation to the DEQ. Application forms are available on the DEQ's website. Applications shall be accurately completed, signed and submitted to the DEQ electronically or by mail, with all required attachments. Application requirements are applicable to initial, interim, and renewal applications unless specifically stated otherwise.
- (b) Application fees. Fees shall be submitted to the DEQ at the same time that applications are submitted. Applications shall not be considered until fees are received.
- (e)(b) **Signature and verification.** An application shall be signed by the sole proprietor of an individually owned laboratory, the controlling or managing partner or partners of a laboratory held by a partnership, the authorized agent of a corporate owned laboratory, or the principal executive officer or ranking elected official of a municipality or other local government entity which that owns or operates the applicant laboratory. The signer shall verify in the application that it was prepared under his direction or supervision and that the information it contains is, to the best of his knowledge, true, accurate, and complete.
- (d)(c) Application fees. Following application processing and approval, DEQ will invoice the laboratory. Accreditation certificates will not be issued until fees are paid in full.

#### 252:302-3-3. Contact information

In addition to other information required by this Chapter, an application shall contain the following information:

- (1) The name, mailing address, street address, telephone numbers, e-mail address and telefax number (if any) of the applicant.
- (2) The signature, typewritten name, mailing address, telephone numbers, e-mail address and telefax number (if any) of the authorized representative of the owner.
- (3) The name, mailing address, street address, telephones, e-mail address and telefax number (if any) of the applicant laboratory's authorized technical representative.
- (4) The location(s) (address or legal description) of the laboratory, including county and driving directions and latitude/longitude.
- (5) Identification as a fieldindustrial discharge laboratory.
- (6) The name and address of any owner, stockholder, or officer of the applicant laboratory or any person who receives compensation from the applicant laboratory, who has been or currently is an owner, stockholder, or officer of, or who has received compensation from, any laboratory whose accreditation application has been previously denied or whose accreditation has been previously suspended or revoked in part or in whole by the DEQ.

## 252:302-3-4. Operational information

The application shall address the following operational issues:

- (1) A listing of equipment to be used for sample analysis, storage and reporting.
- (2) A description of the methods, equipment and instruments used by the applicant laboratory for specific analytes which that may be in the form of an SOP manual when required.
- (3) A written laboratory QA plan which that includes but is not limited to:
  - (A) A listing of laboratory personnel, including the laboratory supervisor, which gives the academic training, experience and analytical and supervisory responsibilities; and
  - (B) A narrative description of the methods used for sample receipt, storage and disposal.
- (4) Results of the laboratory's two most recent proficiency testing rounds, at least 15 calendar days apart from the date of analysis.
- (5) A report of a laboratory evaluation conducted by the DEQ shall verify data submitted in the application, list any deficiencies and be signed by the DEQ.
- (6) If findings are listed in an evaluation report, the applicant shall submit a Corrective Action Report which that specifies deadlines for correction and correction of the finding. The DEQ may establish conditions, including compliance schedules, for the applicant's Corrective Action Report.
- (7) Hours of operation.

# 252:302-3-5. Reasons to deny an initial application

- (a) An intial application for accreditation shall be denied in the following circumstances:
  - (1) Failure to submit a completed application;
  - (2) Failure to pay required fees;
  - (3) Failure of laboratory staff to meet the personnel qualifications of education, training and experience;
  - (4) Failure to successfully analyze and report proficiency testing samples;
  - (5) Failure to respond to an assessment report from the on-site assessment with a corrective action report within the 30 calendar days after receipt of the assessment report;
  - (6) Failure to implement the corrective actions detailed in the corrective action report within the specified time frame as approved by the primary accreditation body;
  - (7) Failure to implement a quality assurance plan;
  - (8) Failure to pass required on-site assessment(s);
  - (9) Misrepresentation of any fact pertinent to receiving or maintaining accreditation; or
  - (10) Denial of entry during normal business hours for an on-site assessment.
- (b) If the laboratory is not successful in correcting the deficiencies, the laboratory must wait six months before again reapplying for accreditation.
- (c) Laboratory accreditation will not be denied without the right to due process as addressed in OAC 252:-4, Rules of Practice and Procedure.

- (a) **Annual renewal required.** A laboratory <u>that wishes to remain accredited</u> must apply to renew accreditation annually. Renewal applications are available on the DEQ's website. <u>Application forms are available on DEQ's website.</u> Renewal aApplications shall be accurately completed, signed, and submitted to the DEQ electronically on or before June 15 of each yearby regular mail, with all required attachments.
- (b) **Laboratory responsibility.** Each laboratory is responsible for renewing submitting its accreditation application materials by the annual renewal datedeadline. Failure to receive a renewal notification and invoice does not exempt laboratories from meeting the renewal deadline.

  (c) **DEQ invoice date.** By April 15 of each year, the DEQ shall mail invoices to each accredited laboratory.
- (d)(c) Deadline Renewal Deadline. All applicable fees shall be submitted to the DEQ by 4:30 p.m. on or before June 15 or postmarked on or before that date. Any renewal application which is not received electronically by the DEQ on or before June 15 shall be considered only if the electronic application form, renewal fee and a late fee are submitted on or before July 15. Applications and fees received or postmarked after July 15 will be returned and accreditation shall not be renewed. PTs received later than 4:30 p.m. on July 15 of each year will not be considered for accreditation renewal The renewal application shall be accurately completed, signed, and received by DEQ, along with all applicable materials, on or before 4:30 p.m. CST September 15.
- (d) Payment deadline. DEQ will invoice the accredited laboratory following application processing. Full payment of fees must be received on or before December 15.
- (e) PT data deadline. Laboratories shall ensure that the PT provider has submitted all pertinent PT reports to DEQ electronically as specified in 252:302-7-7-5 (b) on or before September 15 of each year. PTs received later than September 15 may not be considered for accreditation renewal. (c)(f) Specified dates. If any date specified in this section falls on a weekend or holiday, the date of the following working day shall be the effective date.
- (f)(g) Failure to renew. To become accredited again, a∆ laboratory that faileds to renew its accreditation in a timely manner must apply for initial accreditation as a new laboratory:submit renewal application materials or payment by the specified deadlines will not be eligible for renewal of their accreditation. They may reapply through the initial application process.
- (e)(h) Specified dates. If any date specified in this section falls on a weekend or holiday, the date of the following working day shall be the effective date.
- (f)(i) Failure to renew. To become accredited again, a laboratory that failed to renew its accreditation in a timely manner must apply for initial accreditation as a new laboratory.

# PART 3. CONDITIONS OF ACCREDITATION

## 252:302-3-21. Conditions applicable to all accreditations

The following conditions shall apply to all existing accreditations and shall be incorporated expressly or by reference into all accreditations issued or renewed after the effective date of this Chapter.

- (1) **Proper operation and maintenance.** The Laboratory shall at all times properly operate and maintain all facilities and equipment installed or used by the Laboratory to achieve compliance with the laboratory accreditation requirements of the Code, rules of the Board as they relate to laboratory accreditation, and the provisions and conditions of this Accreditation. Proper operation and maintenance includes effective performance of operations and adequate funding, operator staffing and training, and the provision of appropriate sample-handling equipment. All operational practices and procedures used at this site shall conform to the best possible public health and safety practices.
- (2) **Duty to mitigate.** The Laboratory shall take all reasonable steps to minimize or correct any adverse impact on the environment and the public health resulting from noncompliance with this Accreditation and to minimize or correct any adverse impact on the environment arising from its analytical activities.
- (3) **Duty to provide information.** The Laboratory shall furnish to the DEQ, within a time specified, any information which that the DEQ may request to determine:
  - (A) whether cause exists for amending, suspending, or revoking this Accreditation;
  - (B) compliance with this Accreditation; or
  - (C) whether an accreditation should be issued or renewed.
- (4) **Records**. The Laboratory shall keep its Accreditation, the application on which it is based, copies of all records required to be kept by this Chapter and the provisions of its Accreditation on file at the accredited facility.
- (5) **Reporting requirements.** The Laboratory shall give advance notice to the DEQ as soon as possible of any planned physical alterations, additions to the accredited facility or planned changes in the accredited facility which that may result in noncompliance with accreditation requirements.
- (6) Signatory requirement. All applications, reports, or information submitted to the DEQ shall be signed by the applicant.
- (7) Consent to conditions. Commencing analytical activities as an accredited laboratory under DEQ accreditation shall constitute consent to all conditions of accreditation.
- (8) **Transfer of accreditation.** Accreditation is not transferable. An accredited laboratory may apply to amend ownership or change names, provided that facilities, equipment, personnel and all other conditions of accreditation remain unchanged.
- (9) **Duty to apply.** To maintain its accredited status, the Laboratory shall make timely application for annual renewal of accreditation. (10) **Severability.** The provisions of accreditation are severable, and if any of its provisions or the application of its provisions are held invalid, the application of such provisions to other circumstances and the remaining provisions of the accreditation shall not be affected thereby.

### 252:302-3-22. Amendments to accreditations

- (a) **Changes to be reported.** Changes in laboratory name, ownership, form of ownership, location, and other changes, including personnel and/or equipment, which may significantly affect the performance of analyses for which the laboratory was originally accredited shall be reported in writing to the DEQ within 30 days of occurrence. If requested by owner, the DEQ may amend the accreditation to reflect reported changes.
- (b) Amendment fee. An amendment fee shall be assessed in accordance with this Chapter.
- (c) Cause. The DEQ may amend an accreditation for cause, with notice to the affected accredited laboratory and opportunity for hearing.

# 252:302-3-23. Self-reporting

- (a) An accredited laboratory shall promptly submit correct facts or information to the DEQ and/or to the client when:
  - (1) it becomes aware that it failed to submit a material fact or submitted incorrect information in an application or a report to the DEQ or to a client for submission to the DEQ; or
  - (2) the DEQ becomes aware of same and notifies the laboratory.
- (b) Failure to make a prompt submission may result in an enforcement action.

# PART 5. GROUNDS TO SUSPEND OR REVOKE

### 252:302-3-31. Grounds to take enforcement action

In addition to the grounds listed in 27A O.S. §2-3-501 *et seq.*, § 2-4-305(A) and OAC 252:4-7-15, the DEQ may suspend, revoke or refuse to renew in part or in whole the accreditation of any laboratory for the following grounds:

- (1) consistent and significant errors in analyses, erroneous reporting or evidence of professional or technical incompetence;
- (2) misrepresentation to others regarding the type and conditions of DEQ accreditation and the reliance of others on such misrepresentation;
- (3) failure to perform any of the following:
  - (A) to correct deficiencies, comply with a Corrective Action Report, or take other action required by the DEQ pursuant to these rules:
  - (B) to participate or produce acceptable results in required proficiency testing;
  - (C) to cooperate with or allow on-site laboratory evaluations, or access to records; or
  - (D) failure to notify or submit reports to the DEQ as required by this Chapter
- (4) submission of a proficiency testing sample to another laboratory for analysis, and reporting data received as its own;
- (5) collaboration with other laboratories on results before proficiency testing sample results are submitted to the required agency;
- (6) allowing persons other than qualified laboratory employees to perform and report results of accredited analytes; or
- (7) any other violation, action or inaction presenting good cause for such action.

### 252:302-3-32. Notice

The DEQ may require an accredited <u>fieldindustrial discharge</u> laboratory to give written notice to its clients of the suspension or revocation of any part of its accreditation.

# **SUBCHAPTER 5. GENERAL OPERATIONS**

### 252:302-5-1. Posting of accreditation

An field industrial discharge laboratory shall maintain on file the list of analytes for which it is accredited and shall provide a copy of the list upon request.

# 252:302-5-2. Laboratory technician

- (a) All fieldindustrial discharge 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 oxygenall accredited parameters.
- (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 samples over a period of 3 to 5 days; after analyzing all required calibration standards. Alternately, demonstrate satisfactory participation on a PT sample. The technician shall adhere to method required QC procedures specified 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.

### 252:302-5-3. Data produced while in training

Data produced by laboratory technicians while in the process of obtaining the required training or experience are acceptable only when documented, reviewed, and validated by a fully qualified laboratory supervisor/consultant.

## 252:302-5-6. On-site evaluations

- (a) An on-site evaluation assessment may be unannounced.
- (b) During an evaluation assessment, the DEQ may require on-site analyses of proficiency test samples by laboratory personnel.
- (c) Following the evaluation assessment, the DEQ will provide the laboratory with a copy of the evaluation assessment report within 45 days of the on-site evaluation assessment. The laboratory will be afforded 30 days from receipt of report in which to correct any listed deficiencies. The DEQ may require a laboratory to develop and implement a Corrective Action Report (CAR). The DEQ will provide an evaluation assessment of the CAR within 45 days of receipt of same.
- (d) Prior to granting initial accreditation to a laboratory, DEQ will perform an on-site evaluation assessment of the laboratory.
- (e) Prior to granting a laboratory an accreditation for an additional analyte, DEQ may perform an on-site evaluation assessment of the laboratory.
- (f) DEQ may conduct routine on-site evaluation assessment of a laboratory every other year to ensure compliance with the conditions of this Chapter, or upon receipt of complaint.

- (a) The laboratory shall keep the following records on file in its accredited facility for at least five (5) years:
  - (1) accreditation and the application on which it is based;
  - (2) copies of all records and documentation required to be kept by this Chapter;
  - (3) repair and maintenance records;
  - (4) reports filed with the DEQ or submitted to clients for filing with the DEQ;
  - (5) equipment changes, additions or malfunctions; and
  - (6) QA/QC plans and reports.
  - (7) data reported for regulatory compliance purposes, including:
    - (A) calibration or standardization information, or both;
    - (B) quality controls, including standards and duplicates;
    - (C) calculations;
    - (D) sampling and analytical data; and
    - (E) reports.
  - (8) sampling and analytical data to be retained shall include the following:
    - (A) date, time and location of sampling and analysis;
    - (B) name of the person collecting the sample;
    - (C) name of the analyst; and(D type of analysis, method utilized, and results.
- (b) Any data report by an accredited laboratory shall identify that the laboratory is an field industrial discharge.

# SUBCHAPTER 7. PROFICIENCY TESTING

#### 252:302-7-1. Participation required

An <u>fieldindustrial discharge</u> laboratory must participate in two single-blind, single-concentration, regularly scheduled Proficiency Testing (PT) studies per calendar year for each analyte in each class of accreditation for which it seeks accreditation or renewal of accreditation. PT samples must be provided by a National Environmental Laboratory Accreditation Program (NELAP) approved PT provider.

# **252:302-7-2. PT sample treatment**

- (a) Samples shall be analyzed and the results shall be returned to the PT study provider no later than before the provider's closing date set by the PT provider. The laboratory shall ensure that all PT samples are handled, i.e., managed, analyzed and reported, in the same manner as actual environmental samples utilizing the same staff, methods as used for routine analysis of that analyte, procedures, equipment, facilities, and frequency of analysis.
- (b) When analyzing a PT sample, a laboratory shall employ the same calibration, laboratory quality control and accestace criteria, sequence of analytical steps, number of replicates and other procedures as used when analyzing routine samples. The laboratory shall ensure that all PT samples are handled and treated in the same manner as environmental samples. This includes utilizing the same staff, methods, procedures, equipment, facilities, and frequency of analysis as is used for routine analysis of that analyte and matrix.

### 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 seven (7) calendar days apart from the date of analysisclosing date of one study to the opening date of another study for the same analyte and matrix.

# 252:302-7-4. PT Requirements requirements

- (a) **General requirements.** FieldIndustrial discharge laboratory proficiency testing samples must be Water Pollution (WP) type testing samples of a non-potable water or wastewater matrix.
  - (1) Laboratories seeking to renew accreditation must obtain acceptable results for vendor supplied, regularly scheduled proficiency testing samples approximately six (6) months apart in each calendar year. Failure to meet the semiannual schedule shall be regarded as a failed study on the last day of the seventh (7th) month.
  - (2) Laboratories shall successfully analyze at least two (2) PT studies within the most recent three rounds attempted (2 of 3) prior to renewal. Laboratories may analyze additional or supplemental studies; however, such studies must be reported to the DEQ.
- (b) Cost responsibility. Laboratories shall bear the cost of any subscription to a proficiency testing program required by the DEQ. The DEQ shall not be charged a fee for the analysis of any proficiency testing samples.
- (c) Alternate program. The DEQ may designate an alternate proficiency testing program if it determines such designation is appropriate.
- (d) **DEQ PT samples.** As part of a laboratory's proficiency testing, the DEQ may also submit blind audit samples to an accredited laboratory.
- (e) **Restrictions on exchanging information.** A laboratory shall not attempt to obtain the prepared value of any PT sample from its PT Provider prior to the conclusion of the PT study.

# 252:302-7-5. Maintenance of PT records

- (a) **Required records**. The laboratory shall maintain copies of all written, printed and electronic records, including but not limited to bench sheets, raw data, instrument strip charts or printouts, data calculations, and data reports, resulting from the analysis of any PT sample for a minimum of five (5) years. The records shall include a copy of the PT study report forms used by the laboratory to record PT results. All of these laboratory records shall be made readily available during on-site inspections of the laboratory.
- (b) **PT report.** The PT study provider shall provide the participant laboratories and the DEQ a report showing the laboratory's DEQ identification number and EPA identification number, prepared value, the acceptance range, and the acceptable/not acceptable status for each analyte reported by the laboratory and any other information the DEQ deems necessary for accreditation purposes. The report and all associated data shall also be made available in electronic format as specified by the DEQ. The report shall be submitted electronically as specified by the DEQ.

# 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 seven (7) calendar days apart from the date of analysisclosing date of one study to the opening date of another study for the same analyte and matrix.

# 252:302-7-8. Failure to perform

The-DEQ shall not renew accreditation for a failed or omitted analyte for a laboratory which that does not meet the requirements of this subchapter. Once accreditation for an analyte has been lost, the procedures for initial or interim accreditation shall apply.

### 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 seven (7) calendar days apart from the date of analysis closing date of one study to the opening date of another study for the same analyte and matrix.

### 252:302-7-10. Corrective action

When a laboratory fails a study, in part or in whole, it shall determine the cause for the failure and take any necessary corrective action. The laboratory shall then document both the investigation and the action(s) in a corrective action report (CAR). The CAR shall be submitted to the DEQ within forty-five (45) days of PT study report issuance.

# SUBCHAPTER 9. QUALITY ASSURANCE/QUALITY CONTROL

# PART 1. QUALITY ASSURANCE/QUALITY CONTROL GENERAL CRITERIA

### 252:302-9-4. Procedures required for QA Plan

The QA plan shall address supporting procedures including technical procedures and shall outline the structure of the documentation used in the quality assurance plans, including but not limited to the following:

- (1) ensuring that all records required are retained
- (2) control and maintenance of documentation through a document control system which that ensures that all standard operating procedures (SOPs), manuals, or documents clearly indicate the time period during which the procedure or document was in force;
- (3) achieving traceability of measurements:
- (4) handling submitted samples;
- (5) feedback and corrective action whenever testing discrepancies are detected or departures from documented policies and procedures occur:
- (6) dealing with complaints;
- (7) protecting confidentiality (including national security concerns) and proprietary rights;
- (8) audits and data review; and
- (9) establishing that personnel are adequately experienced in the duties they are expected to carry out and are receiving any needed training.

# 252:302-9-5. References included in QA Plan

The QA plan shall make reference to the following:

- (1) the calibration and/or verification test procedures used;
- (2) the major equipment and reference measurement standards used as well as the facilities and services used by the laboratory in conducting tests:
- (3) procedures for calibration, verification and maintenance of equipment;
- (4) verification practices which that may include inter-laboratory comparisons, proficiency testing programs, use of reference materials and internal quality control schemes; and
- (5) procedures for reporting analytical results.

# PART 3. STANDARD OPERATING PROCEDURES AND METHODS MANUAL

### 252:302-9-24. Selection of methods

- (a) The laboratory shall analyze water samples in accordance with methods approved by the laboratory accreditation officer as required by the Clean Water Act.
- (b) The laboratory shall use methods for environmental testing, including methods for sampling, which meet the needs of the client and which that are appropriate for the environmental tests it undertakes.

### 252:302-9-25. Methodology incorporated by reference

"Guidelines Establishing Test Procedures for the Analysis of Pollutants" 40 CFR Part 136, effective July 19, 2021, is hereby incorporated by reference. Any other EPA-approved method may also be incorporated by DEO's Laboratory Accreditation Program in writing.

# PART 5. QA/QC PROGRAM REQUIREMENTS

## 252:302-9-31. QA/QC program required

Each accredited <u>fieldindustrial discharge</u> laboratory shall maintain a QA/QC program to demonstrate the precision and accuracy of analyses. The program shall be in place before accreditation is granted. For a minimum of five (5) years, each laboratory shall maintain records of all analyte accredited analyses, including but not limited to those necessary for a QA/QC program. Laboratories shall perform individual quality control for every analyte for which the laboratory is accredited or is applying for accreditation.

### 252:302-9-32. QA/QC documentation

- (a) Documentation shall be kept to ensure quality control has been maintained and that proper methodologies have been used for the preparation and analysis of samples. All documentation shall be maintained and be readily available for reference or inspection.
- (b) The following OC documentation shall be maintained in each laboratory.
  - (1) Bench records. Data associated with analysis, date, time, analyst, method, amounts, calculations, sample matrix, sample identification.
  - (2) Calibration data.
    - (A) Each instrument shall have documented calibration on each day of use.
    - (B) Each calibration shall be verified with a quality control standard that is of a source separate from the calibration source.
    - (C) Each aliquot of a solution used for calibration and quality control shall be used only once.
    - (D) Calibration shall be documented either by the instrument printout or by calculations whichthat show the curve or coefficient of the linear equation or slope.
    - (E) Automated on-line equipment shall be calibrated according to manufacturer's instructions.
  - (3) Maintenance logs. By instrument, dates and description of repairs, preventive maintenance, malfunctions, and other actions or events affecting instrument performance
  - (4) **QC charts.** Quality control procedures for monitoring the validity of each environmental test must be in place. The resulting data shall be recorded in such a way that trends are detectable. Data recorded shall consist of blanks, quality control standards and duplicates
  - (5) **Sample login.** Sample login, including unique sample identification, date, time, source of sample (including name, location and sample matrix), preservative used, analysis required, name of collector and any pertinent field.