CHAPTER 301. STATE OF OKLAHOMA LABORATORY ACCREDITATION

[**Authority:**27 O.S. §§ 1-3-101, 2-2-101, 2-2-201, and 2-4-101 et seq.]
[**Source:**27 O.S. §§ 1-3-101, 2-2-101, 2-2-201, and 2-4-101 et seq.; Codified 7-11-08]
[**Source:**Amended at 43 Ok Reg, Number 21, effective 9-15-26]

SUBCHAPTER 1. GENERAL PROVISIONS

252:301-1-1. Purpose, basis, authority, applicability

The rules in this Chapter provide standards for accreditation of privately and publicly owned laboratories for performance of analyses of water and 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 all laboratories certified or applying to be accredited by the Department of Environmental Quality.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-1-2. Accreditation exception

Operational testing analyses for municipal wastewater treatment systems and water supply systems may be submitted to DEQ by an unaccredited laboratory if, at the time of the analyses, the laboratory was operated by an individual certified by DEQ as a laboratory operator and the certified laboratory operator approves and signs the analyses report. For further explanation, refer to and comply with the following rules:

(1) Oklahoma Pollutant Discharge Elimination System Standards (OPDES), OAC 252:606-11-2;
(2) Public Water Supply Operations, OAC 252:631-3-2; and
(3) Waterworks and Wastewater Works Operator Certification OAC 252:710-5-53.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-1-3. Definitions

In addition to the definitions contained in Title 27A of the Oklahoma Statutes and OAC 252:4 (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. Any technical term not defined shall be defined by its generally accepted scientific meaning or its standard dictionary meaning.

"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 DEQ.

"Accreditation" or **"accredited"** means the process by which DEQ 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.

"Accreditation body" means a governmental agency that administers a laboratory accreditation program.

"Analyte" means the characteristics of a laboratory sample determined by an analytical laboratory testing procedure and is synonymous with "parameter." For purposes of this chapter, "analyte" also means one (1) of a set of inorganic or organic chemical, physical, radiochemical or microbiological properties whose value determines the characteristics of a given sample.

"Applicant" means the owner of a laboratory, or a representative authorized by the owner to act on the owner's behalf, seeking accreditation from DEQ.

"Applicant laboratory" means the laboratory and its owner or authorized representative for which an application for accreditation has been filed with DEQ.

"Approved method" means an analytical test method that has been required by law or is recognized by 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."
"Basic environmental laboratory" means a laboratory that is limited to the following analytes: alkalinity, ammonia nitrogen, carbonaceous biochemical oxygen demand, chemical oxygen demand, chloride, chromium, color, copper, cyanide, dissolved oxygen, Escherichia coli, fecal coliform, five-day biochemical oxygen demand, fluoride, free residual chlorine, hardness, hexavalent chromium, iron, nitrate-nitrite nitrogen, oil and grease (n-hexane extractable material), organic nitrogen, orthophosphate phosphorus (reactive phosphorus), pH, phenolics, specific conductance, sulfate, sulfide, temperature, total coliform, total dissolved solids (filterable residue), total Kjeldahl nitrogen, total organic carbon, total phosphorus, total residual chlorine, total suspended solids (non-filterable residue), turbidity, volatile residue, and zinc.
"Blind audit" means a process whereby 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.
"Category" means a set of fields of accreditation subject to a single fee.
"Certificate" or **"certificate of accreditation"** means a document issued by DEQ acknowledging that an environmental laboratory has met standards of this Chapter for accreditation and identifying those fields of accreditation for which the laboratory is accredited. "Certificate" is synonymous with letters of accreditation as defined in 27A O.S. § 2-4-101 and means the same as laboratory accreditation and includes primary accreditation and reciprocal accreditation.
"Corrective action plan" or "(CAP)" means a written plan of action to correct deficiencies. It includes a schedule for implementation and actions to eliminate or reduce the cause(s) of a nonconformity, defect, or other undesirable situation 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 of accreditation" or **"(FoA)"** means those category, matrix, method, and analyte combinations for which DEQ offers accreditation.
"Initial accreditation" means a first-time accreditation granted to a laboratory not currently accredited by DEQ.
"Interim accreditation" means an accreditation issued to a DEQ-accredited laboratory outside of the renewal accreditation process for a FoA or a category not currently accredited by 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.
"Matrix" means the substrate of a test sample, e.g., drinking water, wastewater, other aqueous, or solid.
"Mobile laboratory" means a mobile facility that performs analyses in a self-contained environment with professional analytical instrumentation, excluding field testing of those analytes that require immediate measurement on site (such as, conductivity, residual chlorine, pH, dissolved oxygen, temperature).
"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 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 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 DEQ laboratory accreditation program described in this chapter.
"QA Plan" or **"Quality Assurance Plan"** means a written description of quality assurance 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 laboratory management that includes approved methods, equipment, and instruments used by the laboratory for analyses.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 36 Ok Reg 1595, eff 9-15-19; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-1-4. Terms [REVOKED]

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 36 Ok Reg 1595, eff 9-15-19; Revoked at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-1-5. Accreditation groups and types
(a) **Groups.** Laboratories may be accredited in drinking water or general environmental laboratory.
(b) **Types of accreditation.** An applicant laboratory may apply at any time for initial, interim, or renewal accreditation. A laboratory applying for interim accreditation shall meet the same requirements as a laboratory applying for initial accreditation.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-1-6. Drinking water laboratory
A drinking water laboratory may be accredited in the following category groups: metals, general chemistry, microbiology, asbestos, non-volatile synthetic organic chemicals (SOCs), volatile organic compounds (VOCs) and/or radionuclides.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-1-7. General environmental laboratory
(a) **Category groups.** A general environmental laboratory may be accredited in the following category groups: metals, nutrients, demands, extractable organics, general chemistry I and/or II, microbiology, pesticides - herbicides - PCBs, purgeable organics, radiological, bioassay, hazardous waste characterization, petroleum hydrocarbons, perchlorate, and/or basic environmental laboratory.
(b) **Basic environmental laboratory analytes.** Basic environmental laboratory analytes include: alkalinity, ammonia nitrogen, carbonaceous biochemical oxygen demand, chemical oxygen demand, chloride, chromium, color, copper, cyanide, dissolved oxygen, Escherichia coli, fecal coliform, five-day biochemical oxygen demand, fluoride, free residual chlorine, hardness, hexavalent chromium, iron, nitrate-nitrite nitrogen, oil and grease (n-hexane extractable material), organic nitrogen, orthophosphate phosphorus (reactive phosphorus), pH, phenolics, specific conductance, sulfate, sulfide, temperature, total coliform, total dissolved solids (filterable residue), total Kjeldahl nitrogen, total organic carbon, total phosphorus, total residual chlorine, total suspended solids (non-filterable residue), turbidity, volatile residue, and zinc.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 36 Ok Reg 1595, eff 9-15-19; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-1-8. Petroleum hydrocarbon laboratory [REVOKED]

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Revoked at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-1-9. Fees
(a) **Applicable fees.** The following fees apply:
(1) Initial accreditation - $1,140.00
(2) Interim accreditation - $671.00

(3) Renewal fee - $34.00
(4) Accreditation amendment - $67.00
(5) Fee per category - $470.00 (5 category fees maximum)
(6) An on-site evaluation is a reimbursable expense.

(b) **Calculation of fees.** In addition to the application fee required for initial, renewal, and interim accreditation, a laboratory must submit the applicable category fee(s) to a maximum of five (5) category fees even if a laboratory requests more than five (5) categories. Fees for accreditation amendment, as described in OAC 252:301-3-32, consist of the accreditation amendment fee. The fees associated with a laboratory assessment shall be calculated at actual cost, not to exceed $10,000 per individual laboratory, and includes, but is not limited to, the following where applicable:

(1) An assessor(s) time, labor, transportation, and per diem as described in OAC 252:301-5-4; and
(2) The onsite assessment will be invoiced at the closing of the assessment.

(c) **Public water supply system fee exemption.** There is no laboratory accreditation fee for public water supply systems that pay the minimum annual public water supply regulatory service rate fee in accordance with 27A O.S. § 2-6-306.

(d) **Annual fee adjustment.** To assist in meeting rising costs to DEQ of the environmental services and regulatory programs associated with the laboratory accreditation 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. DEQ may round the adjusted fees up to the nearest dollar. 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, "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.

(e) **Onsite assessment fee.** All laboratories must pay an onsite assessment fee, not to exceed $10,000.00 per individual laboratory, for each assessment to continue accreditation or as a result of just cause according to this chapter.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 36 Ok Reg 1595, eff 9-15-19; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-1-10. 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.

[**Source:** Added at 43 Ok Reg, Number 21, effective 9-15-26]

SUBCHAPTER 3. LABORATORY ACCREDITATION PROCESS

PART 1. APPLICATION

252:301-3-1. Application required

(a) **General.** A laboratory shall submit one (1) copy of an application for accreditation to DEQ. Application forms are available on DEQ's website. Applications shall be accurately completed, signed, and submitted to DEQ electronically or by mail, with all required attachments. Application requirements are applicable to initial, interim, and renewal applications unless specifically stated otherwise.

(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 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.

(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.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-3-2. 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 number, e-mail address and telefax number (if any) of the applicant.

(2) The signature, typewritten name, address, telephone number and telefax number (if any) of the authorized representative of the owner.

(3) The name, mailing address, street address, telephone 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 of the accreditation type and categories, analytes, and/or methods sought.

(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 DEQ.

[**Source:** Amended at 43 Ok Reg, Number 21, effective 9-15-26; Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-3-3. 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 that may be in the form of an SOP manual when required.

(3) A written laboratory QA plan that includes but is not limited to:

(A) A listing of laboratory personnel, including the laboratory director, which gives the academic training, experience, and analytical and supervisory responsibilities of each; and

(B) A narrative description of the methods used for sample receipt, storage, and disposal.

(4) Results of laboratory's two (2) most recent PT rounds, at least 15 calendar days apart.

(5) A report of a laboratory evaluation conducted by DEQ or a DEQ-approved assessor within the 12 months prior to the date of filing or, for in-state laboratories only, a letter requesting DEQ to conduct an on-site evaluation. The evaluation report shall verify data submitted in an application, list any deficiencies and be signed by DEQ or DEQ approved agent.

(A) DEQ-approved assessors for out-of-state laboratories are those that perform the assessment as an accreditation to The NELAC Institute standard through a recognized governmental accreditation body.

(B) The report must cover all requested parameters for accreditation. Parameters not covered by the assessment and report will not be considered for accreditation.

(6) If deficiencies are listed in an evaluation report, the applicant shall submit a CAP that specifies deadlines for implementation and completion of the plan. DEQ may establish conditions, including compliance schedules, for the applicant's corrective action plan.

(7) Hours of operation.

[**Source:** Amended at 43 Ok Reg, Number 21, effective 9-15-26; Amended at 36 Ok Reg 1595, eff 9-15-19; Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-3-4. Renewals and expiration

(a) **Annual renewal required.** A laboratory that decides to remain accredited must apply to renew its accreditation annually. Application forms are available on DEQ's website. Applications shall be accurate and complete, signed, and submitted to DEQ electronically or by regular mail with all required attachments.

(b) **Laboratory responsibility.** Each laboratory is responsible for submitting its renewal application materials by the annual renewal deadline. Failure to receive a renewal notice does not exempt laboratories from meeting the renewal deadline.

(c) **Renewal deadline.** The renewal application shall be accurately completed, signed, and received by DEQ 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 OAC 252:301-7-12 on or before September 15 of each year. PTs received later than September 15 may not be considered for accreditation renewal.

(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.

(g) **Failure to renew.** A laboratory that fails to 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.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

PART 3. CONDITIONS OF ACCREDITATION

252:301-3-31. 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 OAC, 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 DEQ, within a time specified, any information that 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 OAC 252:320 and the provisions of its accreditation on file at the accredited facility.
(5) **Reporting requirements.** The laboratory shall give advance notice to DEQ as soon as possible of any planned physical alterations, additions to the accredited facility or planned changes in the accredited facility that may result in noncompliance with accreditation requirements.
(6) **Signatory requirement.** All applications, reports, or information submitted to 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.

[**Source:** Amended at 43 Ok Reg, Number 21, effective 9-15-26; Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-3-32. 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 DEQ within 30 days of occurrence. If requested by owner, DEQ may amend the accreditation to reflect reported changes.
(b) **Amendment fee.** An amendment fee shall be assessed in accordance with OAC 252:301-1-9.
(c) **Cause.** DEQ may amend an accreditation for cause, with notice to the affected accredited laboratory and opportunity for hearing.

[**Source:** Amended at 43 Ok Reg, Number 21, effective 9-15-26; Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-3-33. Self-reporting

(a) An accredited laboratory shall promptly submit correct facts or information to 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 DEQ or to a client for submission to DEQ; or
(2) DEQ becomes aware of same and notifies the laboratory.

(b) Failure to make a prompt submission may result in an enforcement action.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

PART 5. GROUNDS TO REVOKE

252:301-3-51. 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, 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 CAP, or take other action required by DEQ pursuant to these rules;
(B) to participate or produce acceptable results in required PT;
(C) to cooperate with or allow on-site laboratory evaluations, inspections, or access to records; or
(D) failure to notify or submit reports to DEQ as required by this Chapter

(4) submission of a PT sample to another laboratory for analysis, and reporting data received as its own;
(5) collaboration with other laboratories on results before PT sample results are submitted to the required agency;
(6) allowing persons other than qualified laboratory employees to perform and report results of accredited analytes;
(7) any other violation, action or inaction presenting good cause for such action, or
(8) failure to make payment when due.

[**Source:** Amended at 43 Ok Reg, Number 21, effective 9-15-26; Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 36 Ok Reg 1595, eff 9-15-19]

252:301-3-52. Notice

DEQ may require an accredited laboratory to give written notice to its clients of the suspension or revocation of any part of its accreditation.

[**Source:** Amended at 43 Ok Reg, Number 21, effective 9-15-26; Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-3-53. Individual proceedings

Proceedings for accreditation revocation, suspension or reinstatement shall be conducted in accordance with 27A O.S. § 2-3-501 *et seq.,* and OAC 252:4, DEQ Rules of Practice and Procedure.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

SUBCHAPTER 5. GENERAL OPERATIONS

252:301-5-1. Posting of accreditation

Each accredited participant in the program shall maintain on file a list of the analytes for which it is accredited and shall provide a copy of the list upon request.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-5-2. Personnel and subcontractors

(a) **All accredited laboratories.** All accredited laboratories shall have at least one full-time on-site employee who has laboratory experience in his area of analysis or works under the direct supervision of an individual who has laboratory experience.
(b) **Drinking water accredited laboratories.** In addition, personnel of drinking water accredited laboratories shall conform with the requirements established by the EPA for laboratories which analyze drinking water. Refer to the Manual for the Certification of Laboratories Analyzing Drinking Water, 5th Edition, January 2005.
(c) **Water quality accredited laboratories.** A general water quality accredited laboratory shall have an employee or supervisor qualified as follows:

(1) **Commercial laboratory.** At least one employee or supervisor in a commercial laboratory shall have an earned bachelor's degree in chemistry or a closely related field from an accredited institution of higher education, plus two years of analytical experience in an environmental laboratory.
(2) **Industrial laboratory, including a branch office or substation of a company's laboratory.** An employee or supervisor of an industrial laboratory, including a branch office or substation of a

company's laboratory, must meet the educational requirements for a commercial laboratory unless the employee or supervisor is and has been performing environmental testing for not less than two (2) consecutive years and demonstrates satisfactory participation on performance evaluation samples.

(d) **Subcontractors.** A laboratory may subcontract with another laboratory (subcontractor) for analysis of analytes. Such subcontracting shall be only for those analytes for which the subcontractor is DEQ-accredited.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-5-3. Facilities, equipment and supplies

(a) **All accredited laboratories.** All equipment, reagents, glassware and supplies necessary for the proper performance of laboratory analyses shall be on hand or readily available on the premises for analytes certified or analytes listed in an application for accreditation. Equipment shall be in good working order and properly maintained and shall consist of, at a minimum, the apparatus and supplies for which the laboratory is accredited. Facilities shall have a sink with hot and cold running water, electricity, a source of distilled and/or deionized water, proper laboratory waste disposal procedures, and other features/equipment necessary to properly perform approved EPA analytical methodologies. Facilities may be physically located apart in separate buildings if the sites are within one (1) mile of each other and under the same direct management.

(b) **Drinking water accredited laboratories.** In addition to the general facilities, equipment and supply requirements, equipment required of a drinking water accredited laboratory shall include the apparatus and supplies listed by EPA or DEQ or identified by the EPA for laboratories that analyze drinking water.

[**Source:** Amended at 43 Ok Reg, Number 21, effective 9-15-26; Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-5-4. On-site assessment

(a) On-site assessments may be unannounced.

(b) During an on-site assessment, DEQ may require on-site analyses of PT samples by laboratory personnel.

(c) Following the on-site assessment DEQ will provide the laboratory with a copy of the assessment report. The laboratory will be afforded a designated time period in which to correct any listed deficiencies. DEQ will require a laboratory to develop and implement a CAP.

(d) Out-of-state laboratories already in the program may be required to have an on-site assessment performed by a DEQ-approved assessor. The laboratory shall be solely responsible for costs associated with the on-site assessment, if any. The assessment report shall be submitted to DEQ along with any CAP if needed.

(1) DEQ-approved assessors for out-of-state laboratories are those that perform the assessment to The NELAC Institute standard through a recognized governmental accreditation body.

(2) The assessment must cover all requested parameters for accreditation. Parameters not covered by the assessment and report will not be offered for accreditation.

(e) The laboratory shall have an on-site assessment prior to granting an initial accreditation.

(f) Prior to granting accreditation for an additional field of accreditation to a laboratory, DEQ may perform an on-site assessment of the laboratory. All laboratories must pay an appropriate on-site assessment fee for each evaluation requested by the laboratory for the additional fields of accreditation.

(g) DEQ or DEQ-approved assessor may conduct on-site assessment of a laboratory to ensure compliance with this chapter approximately triennially, or upon receipt of complaint.

[**Source:** Amended at 43 Ok Reg, Number 21, effective 9-15-26; Amended at 36 Ok Reg 1595, eff 9-15-19; Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-5-5. Recordkeeping and reporting

(a) The laboratory shall keep the following records on file in its accredited facility:

(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 DEQ or submitted to clients for filing with DEQ;
(5) equipment changes, additions or malfunctions; and
(6) QA/QC plans and reports.

(b) Any data report given to a customer by an accredited laboratory shall identify:
(1) the parameters for which the laboratory is DEQ-accredited;
(2) the class of DEQ-issued accreditation of each analyte; and
(3) which analytes were subcontracted out for analysis and the subcontracting laboratory's DEQ-issued accreditation number for each of the subcontracted analytes.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

SUBCHAPTER 7. PROFICIENCY TESTING

252:301-7-1. Applicability

The requirements of this subchapter shall apply to proficiency testing for drinking water accredited laboratories and general water quality accredited laboratories.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-7-2. Participation required

A laboratory must participate in two (2) single-blind, single-concentration, regularly scheduled PT studies per calendar year for each analyte and matrix 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.

[**Source:** Amended at 36 Ok Reg 1595, eff 9-15-19; Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-7-3. PT sample treatment

(a) Samples shall be analyzed and the results shall be returned to the PT study provider before the closing date set by the PT provider.

(b) 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.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-7-4. Initial accreditation

To gain initial or interim accreditation, a laboratory shall successfully analyze two (2) consecutive PT rounds. PT rounds must have been performed within the last 12 months and at least seven (7) calendar days apart from the closing date of one (1) study to the opening date of another study for the same analyte and matrix.

[**Source:** Amended at 39 Ok Reg 1063, eff 9-15-22; Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-7-5. General requirements

(a) Laboratories seeking to renew accreditation must successfully analyze vendor supplied, regularly scheduled PT 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.

(b) Laboratories shall successfully analyze at least two (2) PT studies within the most recent three (3) rounds attempted (2 of 3) prior to renewal. Laboratories may analyze additional or supplemental studies; however, such studies must be reported to DEQ.

(c) PT samples must be of appropriate matrices for the accredited parameters.

(d) Drinking water PT samples must be of drinking water matrix.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-7-6. Cost responsibility

Laboratories shall bear the cost of any subscription to a PT program required by DEQ. DEQ shall not be charged a fee for the analysis of any PT samples.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-7-7. Alternate program

DEQ may designate an alternate PT program if it determines such designation is appropriate.

[**Source:** Amended at 43 Ok Reg, Number 21, effective 9-15-26; Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-7-8. DEQ PT samples

As part of a laboratory's PT, DEQ may also submit blind audit samples to an accredited laboratory.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-7-9. 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.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-7-10. Maintenance of PT 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.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-7-11. Evaluation of PT results

PT study providers shall evaluate results from all PT studies using NELAP-mandated acceptance criteria. Each result shall be scored on an acceptable/not acceptable basis.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-7-12. PT report

The PT study provider shall provide the participant laboratories and 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 DEQ deems necessary for accreditation purposes. The report and all associated data shall also be made available in electronic format as specified by DEQ. The report shall be submitted electronically or mailed no later than twenty-one (21) calendar days from the study closing date.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-7-13. PT report deadline [REVOKED]

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Revoked at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-7-14. PT criteria for laboratory accreditation

The following criteria apply individually to each analyte in each class of accreditation as defined by the laboratory seeking accreditation in its application:

(1) Results of the PT study shall be considered successfully analyzed when the results are "acceptable" and are within the acceptable limits established and published by the PT Provider.

(2) Successfully analyzed shall also mean an aggregate passing score of ninety percent (90%) for microbiological PT testing studies. No partial credit will be given;

(3) DEQ shall consider PT results along with the other elements of these rules when determining a laboratory's accreditation status;

(4) For initial accreditation or supplemental testing, the studies must be at least seven (7) calendar days apart.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 39 Ok Reg 1063, eff 9-15-22; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-7-15. Failure to perform

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

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-7-16. Analyte absence

(a) **Generally.** If a laboratory is requesting accreditation for an analyte and matrix combination that does not have a PT available through an NELAP-approved or DEQ-approved PT provider, the laboratory may qualify for accreditation through acceptable PT performance of similar parameters. This is specifically achieved through successful analysis in two (2) out of three (3) PTs for at least seventy-five percent (75%) of all analytes that the laboratory is seeking accreditation for that are of the same matrix and in the same accreditation category. This process does not affect the accreditation status of the parameters that do have PTs available. Those parameters are evaluated in accordance with the other sections of this subchapter.

(b) **Exception.** Laboratories that have or are pursuing accreditation for a basic environmental laboratory are not subject to subsection (a) of this section.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-7-17. 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 closing date of one (1) study to the opening date of another study for the same analyte and matrix.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 39 Ok Reg 1063, eff 9-15-22; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

252:301-7-18. 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 CAP. The CAP shall be submitted to DEQ within 45 days of PT study report issuance.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 43 Ok Reg, Number 21, effective 9-15-26]

SUBCHAPTER 9. QUALITY ASSURANCE/QUALITY CONTROL

PART 1. QUALITY ASSURANCE/QUALITY CONTROL GENERAL CRITERIA

252:301-9-1. Quality Assurance/Quality Control (QA/QC) Plan Required

Every accredited laboratory shall maintain a written QA plan and implement it into a QA/QC program to ensure that all routinely generated analytical data are scientifically valid and defensible and are of known and acceptable precision and accuracy.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-2. 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.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-3. 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 system;

(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 laboratory director or laboratory manager; and

(6) the laboratory management arrangements for exceptional departures from documented policies and procedures or from standard specifications.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-4. 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 system, 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 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.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-5. 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 may include inter-laboratory comparisons, proficiency testing programs, use of reference materials and internal quality control schemes; and
(5) procedures for reporting analytical results.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-6. Additional items included in QA Plan

The QA plan shall also include the following:
(1) a list of all test methods under which the laboratory performs its accredited testing;
(2) mechanisms for ensuring that the laboratory reviews all new work to ensure that it has the appropriate facilities and resources before commencing such work.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

PART 3. STANDARD OPERATING PROCEDURES AND METHODS MANUAL

252:301-9-31. General

(a) The laboratory shall use appropriate methods and procedures for all environmental tests and/or calibrations within its scope. These include sampling, handling, transport, storage and preparation of samples, and, where appropriate, an estimation of the measurement uncertainty as well as statistical techniques for analysis of environmental test and/or calibration data.
(b) The laboratory shall have instructions on the use and operation of all relevant equipment, and on the handling and preparation of samples where the absence of such instructions could jeopardize the results of environmental tests and/or calibrations. All instructions, standards, manuals and reference data relevant to the work of the laboratory shall be kept up to date and shall be made readily available to personnel. Deviation from environmental test and calibration methods shall occur only if the deviation has been documented, technically justified, authorized, and accepted by the client.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-32. Standard Operating Procedures (SOPs)

(a) Laboratories shall maintain Standard Operating Procedures (SOPs) that accurately reflect all phases of current laboratory activities such as assessing data integrity, corrective actions, handling customer complaints, and all test methods.
(b) SOPs may be equipment manuals provided by the manufacturer or internally written documents. Test methods may be copies of published methods as long as any changes or selected options in the methods are documented and included in the methods manual.
(c) Copies of all SOPs shall be accessible to all personnel.
(d) SOPs shall be well organized and shall clearly indicate the effective date of the document, the revision number and the signature(s) of the approving authority.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-33. Laboratory method manual(s)

(a) The laboratory shall have and maintain an in-house methods manual(s) for each accredited analyte or test method.

(b) This manual may consist of copies of published or referenced test methods or SOPs that have been written by the laboratory. In cases where modifications to the published method have been made by the laboratory or where the referenced test method is ambiguous or provides insufficient detail, these changes or clarifications shall be clearly described.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-34. 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) Pollution prevention;
(18) Data assessment and acceptance criteria for quality control measures;
(19) Corrective actions for out-of-control data;
(20) Contingencies for handling out-of-control or unacceptable data;
(21) Waste management;
(22) References; and
(23) Any tables, diagrams, flowcharts and validation data.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-35. Selection of methods

The laboratory shall use methods for environmental testing and/or calibration, including methods for sampling, which meet the needs of the client and which are appropriate for the environmental tests and/or calibrations it undertakes.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-36. Sources of methods

(a) Methods published in international, regional or national standards shall preferably be used. The laboratory shall ensure that it uses the latest valid edition of a standard unless it is not appropriate or possible to do so. When necessary, the standard shall be supplemented with additional details to ensure consistent application.
(b) When the use of specified methods for a sample analysis are mandated or requested, only those methods shall be used.
(c) When the client does not specify the method to be used or where methods are employed that are not required, as in the Performance Based Measurement System approach, the methods shall be fully documented and validated and be available to the client and other recipients of the relevant reports. The laboratory shall select appropriate methods that have been published either in international, regional or national standards, or by reputable technical organizations, or in relevant scientific texts or journals, or as

specified by the manufacturer of the equipment. Laboratory-developed methods or methods adopted by the laboratory may also be used if they are appropriate for the intended use and if they are validated. The client shall be informed as to the method chosen.
(d) The laboratory shall inform the client when the method proposed by the client is considered to be inappropriate or out of date.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-37. Methodology incorporated by reference

The following EPA-approved methods are hereby incorporated by reference:

(1) "National Primary Drinking Water Regulations," 40 C.F.R. Part 141, published July 1, 2021.
(2) "Test Methods for Evaluating Solid Waste, Laboratory Manual Physical/Chemical Methods," SW-846 Manual, Third Edition as amended by Final Update I, II, IIA, IIB, III, IIIA, IIIB, IVA, IVB, V, VI, and VII.
(3) "Guidelines Establishing Test Procedures for the Analysis of Pollutants," 40 C.F.R. Part 136, effective July 19, 2021.
(4) "Manual for the Certification of Laboratories Analyzing Drinking Water," Fifth Edition and Supplement 1 (EPA 815-5-05-004, January 2005 and EPA 815-F-08-006, June 2008).
(5) Any other approved method incorporated by DEQ's laboratory accreditation program in writing.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 31 Ok Reg 1279, eff 9-12-14; Amended at 43 Ok Reg, Number 21, effective 9-15-26; Amended at 36 Ok Reg 1595, eff 9-15-19; Amended at 39 Ok Reg 1063, eff 9-15-22]

252:301-9-38. DEQ approved methodologies

The following methods are specifically approved by DEQ:

(1) TNRCC Method 1005 Total Petroleum Hydrocarbons (>nC6 to nC35);
(2) Oklahoma GRO 8020/8015(Modified);
(3) Oklahoma DRO 8000/8100(Modified);
(4) ASTM mussels; and
(5) On a caseby-case basis as approved by DEQ.

[**Source:** Amended at 43 Ok Reg, Number 21, effective 9-15-26; Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-39. New rules apply

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.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

PART 5. QA/QC PROGRAM REQUIREMENTS

252:301-9-51. QA/QC program required

Each accredited 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.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08; Amended at 36 Ok Reg 1595, eff 9-15-19]

252:301-9-52. Drinking water accredited laboratories

A laboratory accredited in drinking water classifications shall conform to the requirements established by the EPA for laboratories which analyze drinking water.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-53. General water quality accredited laboratories

QC requirements specified by approved methodologies shall be practiced in the general water quality laboratory. The laboratory shall establish control limits for all types of QC samples.

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-54. Inorganic chemistry

If approved methodologies do not specify minimum laboratory QA/QC requirements for inorganic chemistry, the following frequencies shall apply:

(1) A minimum of three concentrations of standards for daily calibration plus one continuing calibration check standard after each ten samples tested. The lab should repeat all samples tested after the last acceptable continuing calibration check if the continuing calibration check standard is outside plus/minus 10%.

(2) One blank per twenty samples tested (or batch).

(3) If applicable, one spike per twenty samples tested or one per batch.

(4) One duplicate or spiked duplicate per twenty samples tested or one per batch.

[**Source:** Amended at 36 Ok Reg 1595, eff 9-15-19; Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-55. Organics

If approved methodologies do not specify minimum laboratory QA/QC requirements for organic chemistry, the following frequencies shall apply, provided that where possible, surrogates shall be used for all samples:

(1) A minimum of three concentrations of standards for daily calibration plus one continuing calibration check standard after each ten samples tested inside established control limits; if any analytes are outside the limits, repeat all samples tested after the last acceptable continuing calibration check.

(2) One reagent blank (carried through preparation) per twenty samples tested (or per batch).

(3) One matrix spike per twenty samples tested (or per batch).

(4) One matrix spike duplicate per twenty samples tested (or per batch).

[**Source:** Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-56. QA/QC documentation

(a) Documentation shall be kept to insure 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 QC 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.** Calibration curve or coefficient of the linear equation which describes the calibration curve; concentration/response data (or relative response data) for standards; percent recovery of an initial calibration check standard and the date it was analytically determined; percent recovery of the continuing calibration check standard; and laboratory sample identification of the samples run with this curve.

(3) **Extraction/digestion records.** Date, analyst, type of extraction or digestion for each sample, and laboratory sample identification.

(4) **Surrogate records.** Amount of surrogate spiked, percent recovery of each surrogate, date, analyst, and laboratory sample identification.

(5) **Maintenance logs.** By instrument, dates and description of repairs, preventive maintenance, malfunctions, and other actions or events affecting instrument performance.

(6) **QC charts.** Quality control procedures for monitoring the validity of the environmental testing. The resulting data shall be recorded in such a way that trends are detectable, and statistical techniques shall be applied to the reviewing of the results. All laboratories shall have detailed written protocols in place for positive and negative controls, variability, repeatability, and accuracy of the methods.
(7) **Sample login.** Procedures plan for sample login, unique sample identification, date, time, source of sample (including name, location and sample matrix), preservative used, analysis required, name of collectors and any pertinent field data.
(8) **Spike/duplicate/spike-duplicate data.** Date, analyst, laboratory sample number, amount spiked, percent recovery, percent of difference, and makeup and concentration in the spiking solution.
(9) **Temperature logs.** By oven, incubator, freezer, and or refrigerator, daily (during periods of use) temperature readings and any temperature excursions with corrective action recorded.
(10) **Weight logs.** By balance, checked with the appropriate range of class S weights weekly (during periods of use) before use and results recorded. Each balance serviced and calibrated at least once per year by an accredited technician.

[**Source:** Amended at 39 Ok Reg 1063, eff 9-15-22; Added at 25 Ok Reg 2247, eff 7-11-08]

252:301-9-57. Support equipment

All support equipment shall be calibrated or verified at least annually, using a recognized National Metrology Institute, such as NIST, traceable references when available, bracketing the range of use. The results of such calibration or verification shall be within the specifications required of the application for which this equipment is used or the equipment shall be removed from service and tagged as such until repaired.

[**Source:** Added at 36 Ok Reg 1595, eff 9-15-19]