



Ohio Administrative Code Rule 3745-4-03 Qualified data collectors.

Effective: July 10, 2025

(A) Requirements to become a qualified data collector (QDC).

(1) Level 1 requirements.

An individual may obtain level 1 QDC status by:

(a) Successful completion of a level 1 training from a QDC trainer approved by the director results in automatic approval as a level 1 QDC if the trainee provides name and contact information at the training. Individuals approved as level 1 QDCs will be included on the list of approved QDCs on the credible data website at: <https://epa.ohio.gov/divisions-and-offices/surface-water/reports-data/current-qualified-data-collectors-qdc->.

(b) Documenting completion of a basic water quality monitoring program designed for public awareness and education. The director will determine the acceptability of the basic water quality monitoring training based on factors including, but not limited to, the following:

(i) Whether the training is affiliated with a national, state, or local organization that actively encourages and supports surface water monitoring.

(ii) Whether the training is affiliated with a program that has maintained, or intends to maintain, data collection efforts spanning more than one year.

(iii) Confirmation that the training received by participants includes basic water quality monitoring procedures, such as: the use of field instrumentation, sample collection and preservation, and data recording techniques.

(2) Level 2 requirements. Four categories of level 2 QDC status are available. Applicants may apply for one or more of the following in any combination and shall meet the following requirements:



(a) Stream habitat assessment.

(i) Demonstrate through education or experience a general knowledge of stream and riverine physical forms and habitat features.

(ii) Within the past one year, attended training and achieved a passing mark in stream habitat assessment "Qualitative Habitat Evaluation Index" (QHEI) testing offered by Ohio EPA or a person authorized pursuant to this chapter to provide such training.

(b) Primary headwater stream habitat assessment.

(i) Demonstrate through education or experience a general knowledge of stream and riverine physical forms and habitat features.

(ii) Within the past one year, attended training and achieved a passing mark in "Headwater Habitat Evaluation Index" (HHEI) testing offered by Ohio EPA or a person authorized pursuant to this chapter to provide such training.

(c) Benthic macroinvertebrate biology.

[Comment: Stream habitat training, QHEI and HHEI, is strongly encouraged for QDCs in the level 2 macroinvertebrate specialty.]

(i) Demonstrate through education or experience a general knowledge of stream and riverine or lake physical forms and habitat features.

(ii) Demonstrate through education or experience knowledge of and the ability to accurately use macroinvertebrate taxonomic references and dichotomous keys to identify midwestern aquatic macroinvertebrates to the level of family.

(iii) Within one hundred eighty days prior to submission of a level 2 QDC application, achieved a passing mark in a macroinvertebrate taxonomic identification examination administered by Ohio



EPA or a person authorized under this chapter to administer such an examination.

(iv) College-level course credit in aquatic invertebrate zoology or practical experience in the identification of aquatic macroinvertebrates.

(d) Chemical water quality assessment.

(i) Demonstrate through education or experience a general knowledge of stream and riverine or lake physical forms and habitat features.

(ii) Completed and achieved passing marks in undergraduate course work in a biological, chemical, microbiological, natural or physical science, or has pertinent laboratory experience performing water quality testing and analysis, or has pertinent experience in chemical or microbiological water quality data analysis, interpretation and report writing. The director may develop training and testing for this knowledge.

(iii) Demonstrate practical experience involving surface water quality sampling techniques and water quality sampling equipment, or have attended a training to conduct chemical water quality assessments offered by Ohio EPA or a person authorized under this chapter to administer such training. The director may develop testing for this knowledge.

(3) Level 3 requirements. Five categories of level 3 QDC status are available. Applicants may apply for one or more of the following in any combination and shall meet the following requirements:

(a) Primary headwater stream habitat assessment.

(i) Demonstrate through education or experience a general knowledge of stream and riverine physical forms and habitat features.

(ii) Within the past one year, attended training and achieved a passing mark in "Headwater Habitat Evaluation Index" (HHEI) testing offered by Ohio EPA or a person authorized pursuant to this chapter to provide such training.



(iii) Completed and achieved passing marks in undergraduate course work in environmental sciences or a related discipline, or has practical experience in environmental assessment work.

(iv) Practical experience involving work in developing water quality sampling and analysis plans, quality assurance plans, and data quality objectives. The director may develop training and testing for this knowledge.

(b) Fish community biology.

[Comment: Approval as a level 3 QDC in fish community biology requires training and testing in QHEI.]

(i) Within the past two years, attended training to conduct fish assessments and habitat assessments and achieved a passing mark in a program offered by Ohio EPA or a person authorized under this chapter to administer such training.

(ii) Satisfy the requirements of stream habitat assessment in paragraph (A)(2)(a)(ii) of this rule.

(iii) Demonstrate knowledge of Ohio EPA electrofishing sampling protocols and data assessment procedures. This knowledge shall be tested under provisions in paragraph (A)(3)(b)(i) of this rule.

(iv) Demonstrate knowledge of and the ability to accurately use fish taxonomic references and dichotomous keys to identify midwestern fish to the level of species. This knowledge shall be tested under provisions in paragraph (A)(3)(b)(i) of this rule.

(v) Demonstrate a thorough understanding of the taxonomy, distribution, and status of midwestern fishes.

(vi) Completed and achieved passing marks in undergraduate course work in limnology, aquatic biology, environmental sciences, or a related discipline, or has equivalent practical experience in environmental assessment work.

(vii) Practical experience involving work in developing biological water quality sampling and



analysis plans, quality assurance plans, and data quality objectives processes. The director may develop testing for this knowledge.

(c) Benthic macroinvertebrate biology.

(i) Demonstrate through education or experience a general knowledge of stream and riverine physical forms and habitat features.

(ii) Within the last two years, have attended training to conduct macroinvertebrate assessments and achieved a passing mark in a program offered by Ohio EPA or a person authorized under this chapter to administer such training.

(iii) Knowledge of Ohio EPA macroinvertebrate field sampling, laboratory analysis, and data assessment procedures. This knowledge shall be tested under provisions in paragraph (A)(3)(c)(ii) of this rule.

(iv) Knowledge of and the ability to accurately use macroinvertebrate taxonomic references and dichotomous keys to identify midwestern aquatic macroinvertebrates to the level of taxonomy used by Ohio EPA. This knowledge shall be tested under provisions in paragraph (A)(3)(c)(ii) of this rule.

(v) College-level course credit in aquatic invertebrate zoology or equivalent practical experience in the identification of aquatic macroinvertebrates.

(vi) Completed and achieved passing marks in undergraduate course work in limnology, aquatic biology, environmental sciences, or a related discipline, or has equivalent practical experience in environmental assessment work.

(vii) Practical experience involving work in developing biological water quality sampling and analysis plans, quality assurance plans, and data quality objectives processes. The director may develop testing for this knowledge.

(d) Stream salamander community assessment.



- (i) Within the past two years, attended training to conduct stream salamander assessments and achieved a passing mark in an equivalent training program offered by Ohio EPA or a person authorized under this chapter to administer such training.
 - (ii) Knowledge of Ohio EPA primary headwater assessment field sampling protocols and data assessment procedures. This knowledge shall be tested under provisions in paragraph (A)(3)(d)(i) of this rule.
 - (iii) Satisfy the requirements of stream habitat assessment in paragraph (A)(3)(a)(ii) of this rule.
 - (iv) Knowledge of and the ability to accurately use taxonomic references and dichotomous keys to identify larval and adult stream salamanders to the level of species. This knowledge shall be tested under provisions in paragraph (A)(3)(d)(i) of this rule.
 - (v) College-level course credit in herpetology or practical experience in the identification of midwestern stream salamanders.
 - (vi) Completed and achieved passing marks in undergraduate course work in limnology, aquatic biology, environmental sciences or a related discipline, or has practical experience in environmental assessment work.
 - (vii) Practical experience involving work in developing water quality sampling and analysis plans, quality assurance plans, and data quality objectives. The director may develop training and testing for this knowledge.
- (e) Chemical water quality assessment.
- (i) Demonstrate through education or experience a general knowledge of stream and riverine or lake physical forms and habitat features. The director may develop training and testing for this knowledge.
 - (ii) Completed and achieved passing marks in undergraduate course work in a biological,



microbiological, chemical, natural or physical science, or has two years of pertinent laboratory experience performing water quality testing and analysis, or has two years of pertinent experience in chemical or microbiological water quality data analysis, interpretation and report writing. The director may develop training and testing for this knowledge.

(iii) Practical experience involving work in developing chemical or microbiological surface water quality sampling and analysis plans, quality assurance plans, and data quality objectives processes. The director may develop testing for this knowledge.

(iv) Two years of practical experience involving surface water quality sampling techniques and water quality sampling equipment. The director may develop testing for this knowledge.

(f) In lieu of the training set forth in paragraph (A)(3) of this rule, an applicant may serve a six-month apprenticeship under the mentorship of a level 3 QDC in the same specialty. For level 3 fish and macroinvertebrate certification, field collection and taxonomic identification must be included as part of the apprenticeship. The QDC shall monitor, assess and document the apprentice and provide an interim and final written evaluation of the apprentice to the director. The director reserves the right to perform unannounced audits during the apprenticeship period. Accepting the apprenticeship as fulfillment of level 3 QDC qualifications is at the discretion of the director. If accepted, the applicant shall take and pass the level 3 test for the specialty following the completion of the apprenticeship.

(g) The director retains the discretion to certify an applicant as level 3 QDC based upon a demonstration by the applicant of a combination of equivalent education and experience to that set forth in paragraphs (A)(3)(a) to (A)(3)(f) of this rule, along with the applicant successfully passing a test to be administered by Ohio EPA concerning the specific specialties for which the applicant is requesting QDC status.

(B) Application and initial approvals.

(1) An applicant seeking to become a QDC shall submit to the director a complete and current application on forms provided by the director. The application shall include documentation demonstrating that the applicant completed water quality monitoring training described in paragraph (A) of this rule. Applications must be submitted within the time limits provided in paragraph (A) of



this rule. The director may grant a waiver extending the period during which the applicant must apply for QDC status if the applicant can document that extenuating circumstances prevented a timely submission. The director may require the applicant to furnish additional documentation pertaining to the application.

(2) An applicant shall submit copies of official transcripts from the appropriate educational institution and official training certifications or alternate necessary documentation to verify that the applicant meets the educational and training requirements set forth in paragraph (A) of this rule.

(3) The level 2 and level 3 applicants shall certify that all information submitted in support of the application is true, accurate, and complete and that the applicant has not been convicted of or pleaded guilty to a violation of section 2911.21 of the Revised Code (criminal trespass) or a substantially similar municipal ordinance within the previous five years. Failure to include the certification renders the application incomplete.

(4) Ohio EPA will conduct a completeness review of the application and will notify the applicant in the event the application is incomplete. Ohio EPA will not consider an incomplete application and will notify the applicant of the reasons the application is incomplete and of any additional information necessary for further consideration.

(5) The director will either approve or deny a complete application by sending a letter to the applicant. If the director denies the application, the director will identify the deficiencies upon which the denial of the application is based.

(6) The director will maintain a list of approved, active QDCs. The active QDC list will provide the organization with which the QDC is affiliated, the approval level and specialty, the QDC number, and expiration date of the status. The current QDC list will be displayed on the credible data web page at: <https://epa.ohio.gov/divisions-and-offices/surface-water/reports-data/current-qualified-data-collectors-qdc->

(C) Expiration and renewals.

(1) Status as level 1 QDC does not expire and a renewal application is not necessary.



(2) Status as a level 2 QDC automatically expires five years after the date of approval of the application unless the approval has been renewed.

(3) Status as a level 3 QDC automatically expires three years after the initial date of approval of the application unless the approval has been renewed or a timely renewal application has been submitted in accordance with this rule. Status as a level 3 QDC will be renewed for a period of five years provided the QDC has submitted data while in the status of a level 3 QDC as detailed in paragraph (C)(4)(iv) of this rule.

(4) Renewal applications. An applicant seeking renewal of the applicant's status as a level 2 or level 3 QDC shall submit to the director a renewal application prior to the date of expiration of the applicant's status as a level 2 or level 3 QDC.

(a) Renewal application and requirements.

(i) Renewal applications shall be on forms for that purpose available from Ohio EPA.

(ii) Ohio EPA shall approve or deny the renewal application in accordance with the procedures set forth in paragraphs (B)(4) and (B)(5) of this rule.

(iii) Renewal of level 2 QDC status is contingent upon the applicant's demonstration of active participation. Active participation means that the QDC has participated in activities in the level and specialty of the applicant's QDC certification during the period the applicant's certification was valid. These activities include:

(a) Submission of data at the appropriate level, collected under an approved project study plan under this program.

(b) Volunteer monitoring related work in accordance with approved level 2 methodologies.

(c) The director retains the discretion to approve other active participation at the appropriate level and specialty without the submission of data.



(iv) Renewal of level 3 QDC status is contingent upon the applicant's demonstration of active participation.. Active participation means that the QDC has participated in activities at the level and specialty of the applicant's QDC certification during the period the applicant's certification was valid. These activities include:

(a) Submission of data at the appropriate level, collected under an approved project study plan under this program.

(b) Ohio EPA contract or permit related work in accordance with approved level 3 methodologies.

(c) Successful completion of refresher training may substitute for active participation at the discretion of the director.

(d) The director retains the discretion to approve other active participation performed at the appropriate level and specialty without the submission of data.

(b) Renewal grace period.

(i) A QDC with expired level 2 status may submit a renewal application for a period of one year after the expiration date.

(ii) A QDC with expired level 3 status may submit a renewal application for a period of six months after the expiration date.

(iii) A QDC with expired status may submit data if the project was initiated prior to the expiration date, providing the QDC submits an approvable renewal application within the time periods indicated by paragraph (C)(4) of this rule.

(iv) A QDC with a lapsed status extending beyond these time periods shall submit a full application as specified in paragraph (B) of this rule. The director retains the discretion to offer a modified testing process in lieu of the full application requirements based upon the QDCs experience and previous participation in the credible data water quality monitoring program.



(D) Revocation.

(1) The director may revoke an individual's status as a QDC upon finding that the QDC has taken any of the following actions:

(a) Fraudulently obtained or attempted to obtain QDC status or renewal thereof.

(b) Knowingly or negligently submitted misleading, inaccurate, or false data to Ohio EPA.

(c) Consistently failed to attain the necessary standards for study design, field collection methods, laboratory techniques, or quality assurance and quality control procedures for the collection of credible data under this chapter.

(2) Upon making a finding under paragraph (D)(1) of this rule, the director shall first issue a proposed action revoking QDC status in accordance with Chapter 3745-49 of the Administrative Code.

(3) The director shall notify the QDC of a proposed action under paragraph (D)(2) of this rule. The notice shall be by mail and shall set forth the period of ineligibility proposed by the director, the proposed effective date thereof, the reason therefor, and the procedure for appealing the action.

(4) Revocation of QDC status shall state a period during which the individual shall not apply for such status. After the period of ineligibility has expired, the former QDC may apply for status as a QDC under this chapter.

(E) Trainers and testing.

(1) An individual seeking to become a QDC trainer for level 1 credible data shall include with the application to become a level 1 QDC trainer, documentation demonstrating all of the following:

(a) The applicant has successfully completed training offered through an educational monitoring program or a citizen monitoring program designed specifically for teaching the technical and



leadership skills to group leader candidates.

(b) The applicant has credentials establishing that the individual is a qualified instructor or documented experience in presenting technical training offered through classes, field trips, seminars, workshops, or conferences.

(c) The applicant agrees to submit to Ohio EPA information provided by trainees seeking level 1 QDC status at the time of the level 1 training activity.

(2) Training required for level 2 or level 3 QDC status shall be performed by Ohio EPA, Ohio EPA's contractors or a third-party trainer having qualifications as a subject matter expert.

(a) Qualification as a subject matter expert. A person interested in offering the training required for level 2 or level 3 QDC shall have the following qualifications:

(i) Technical competence in the pertinent subject matter.

(ii) Five or more years of practical experience performing the full set of skills required for the QDC level and specialty.

(iii) A post-secondary educational degree in a scientific field related to the specialty.

(iv) Documented experience in presenting technical training offered through classes, field trips, seminars, workshops or conferences.

(b) Third party trainer requirements. A person interested in offering training shall submit a written application to the director with the following information:

(i) A resume that documents technical competence, education and employment history.

(ii) A basic description of the expected training and testing services to be provided.

(iii) A detailed training content manual for the specialty offered.



(c) The director shall either approve or deny the application by sending a letter to the applicant. If the director denies the application, the director shall identify the deficiencies upon which the denial of the application is based.

(d) Status as a level 2 or level 3 QDC trainer will remain active so long as the trainer continues to renew their QDC certification at that level and specialty.

(e) Trainers who plan to retire from field work may apply for emeritus trainer status, which will allow them to continue training without maintaining their QDC certification. Applications for emeritus trainer status must be submitted while their QDC status is still active or within the grace period and will be evaluated and approved by the director based on the following:

(i) Practical experience performing the full set of skills required for that QDC level and specialty.

(ii) Documented experience serving as a QDC trainer at that level and specialty.

(iii) The applicant's ability and commitment to stay current with changes to the science and methodology for that specialty.

(f) Annual third-party trainer review. All third-party trainers, including those with emeritus status, will submit a list of all QDC trainings provided on an annual basis on a form provided by the director. The trainer may be asked to provide updated training materials for approval if changes have been made since such materials were previously reviewed.

(3) Testing.

(a) Third party trainers may test level 2 QDCs provided the trainers coordinate with Ohio EPA on test content, scoring and test result notification.

(b) All level 3 QDC trainees shall be tested by Ohio EPA or Ohio EPA's contractors.

(F) Notwithstanding paragraph (E) of this rule, an individual, or an individual who works for an



organization, contracted by Ohio EPA to conduct QDC training shall be an approved QDC trainer for the life of that contract. Trainers' qualifications will be evaluated by Ohio EPA staff as part of the contract process.