

3745-300-01

**Definitions - voluntary action program.**

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-300-15 of the Administrative Code titled "Incorporation by reference - voluntary action program."]

The following definitions are applicable in this chapter of the Administrative Code:

(A)

(1) "Acceptance limit" is the numerical range in which an analyte shall be quantitated in a proficiency testing sample.

(2) "Accredited laboratory" means a laboratory that is accredited as follows:

(a) For analysis of asbestos, valid accreditation by one of the following:

(i) The American industrial hygiene association, asbestos analysts registry;

(ii) The national institute of standards technology, national voluntary laboratory accreditation program for asbestos fiber analysis;

(iii) An accreditation body recognized by the national environmental laboratory accreditation conference institute ("The NELAC Institute" (TNI)).

(b) For analysis of any constituent other than asbestos, valid accreditation by an accreditation body recognized by "The NELAC Institute" (TNI).

~~(2)~~(3) "Activity and use limitations" are one or more restrictions or obligations created under sections 5301.80 to 5301.92 of the Revised Code with respect to real property. Activity and use limitations eliminate or mitigate exposure to a release of hazardous substances or petroleum. Examples of activity and use limitations include but are not limited to land use limitations and ground water use restrictions.

~~(3)~~(4) "Actual costs" are the actual, substantiated direct, indirect, and other costs associated with a specific voluntary action program activity.

~~(4) "Additional certification" is supplemental certification to perform analyses of specific analytes or parameter groups, using designated methods, for which the laboratory is not already certified pursuant to the laboratory's current certification under rule 3745-300-04 of the Administrative Code.~~

- (5) "Affected media" are any environmental media present on or off property that contain concentrations of COCs.
  - (6) "Affected property" is a property, or portion thereof, for which a variance is being sought under rule 3745-300-12 of the Administrative Code.
  - (7) "Affiliated" means under common ownership or control.
  - (8) "Analyte" is a hazardous substance or petroleum, or a constituent of a hazardous substance or petroleum.
  - (9) "Applicable standards" are standards established in or pursuant to sections 3746.05, 3746.06, and 3746.07 of the Revised Code, or rule 3745-300-07, 3745-300-08, 3745-300-09, 3745-300-10, or 3745-300-11 of the Administrative Code, as applicable.
  - (10) "Audit findings" means written documentation which indicates the results of an audit conducted pursuant to rule 3745-300-14 of the Administrative Code provided to one or more of the following, as appropriate:
    - (a) A person who has performed a voluntary action.
    - (b) The current owner of a property that has been the subject of a voluntary action.
    - (c) A certified professional.
    - (d) A certified laboratory.
    - (e) An accredited laboratory.
- (B)
- (1) "Background levels" are the conditions at a property and areas surrounding a property that are unaffected by any current or past activities involving treatment, storage, or disposal of hazardous substances or petroleum. Background levels include naturally occurring substances.
  - (2) "Bioavailability" is that fraction of a COC that is available for uptake by a receptor upon exposure to a contaminated medium.
- (C)
- (1) "Capture zone" means all unsaturated and saturated subsurface areas that presently contribute or shall contribute ground water to a well.

- (2) "Central management entity" is an organization that is designated as responsible to oversee compliance with applicable standards at a property that allows for any residential use. A central management entity also may oversee compliance at a property that allows recreational or commercial use. A central management entity may consist of one or more domestic business entities that own or hold an interest in the property. A central management entity may consist of a condominium unit owner's association for the property, which is subject to Chapter 5311. of the Revised Code. A central management entity does not consist of any association formed pursuant to Chapter 5312. of the Revised Code, or other fee simple owners of the property.
- (3) "Central tendency value" is a parameter value from a probability distribution of parameter values which is an estimation of the median of that distribution.
- (4) "Certificate" is the document issued by the director to an individual laboratory, certified under rule 3745-300-04 of the Administrative Code, that does either of the following:
- (a) Authorizes ~~the laboratory~~ laboratories under the prior version of rule 3745-300-04 of the Administrative Code, with an effective date of October 17, 2019, to perform analyses in support of a request for a no further action letter for the specified analytes or parameter groups, and using the methods listed on the document.
  - (b) Acknowledges that the individual is a certified professional for the purposes of this chapter and Chapter 3746. of the Revised Code.
- (5) "Certified" or "certification" is the authorization of either of the following:
- (a) A laboratory to perform analyses in support of a request for a no further action letter for the specific analytes or parameter groups and using the methods for which the director has determined the laboratory ~~meets~~ met the requirements provided in the prior version of rule 3745-300-04 of the Administrative Code, with an effective date of October 17, 2019.
  - (b) An individual to issue no further action letters under rule 3745-300-05 of the Administrative Code.
- (6) "Certified laboratory" is a laboratory ~~certified by~~ which maintains a certification from the director pursuant to the prior version of rule 3745-300-04 of the Administrative Code, with an effective date of October 17, 2019.

- (7) "Certified professional" is an individual certified by the director pursuant to rule 3745-300-05 of the Administrative Code to issue no further action letters under section 3746.11 of the Revised Code.
- (8) "Chemicals of concern" or "COCs" are specific constituents of hazardous substances or petroleum which are on or from a property and are identified during a voluntary action.
- (9) "Chemical-specific intake" is the measure of exposure of a receptor to the COC and is equivalent to the administered dose. Chemical specific intake is equal to the mass of a substance in contact with the exchange boundary of a receptor per unit body mass per unit time, expressed in units of milligrams per kilogram per day.
- (10) "Chemical testing method" is a method used for the preparation and analysis of an environmental sample to quantify for hazardous substances or petroleum, or constituents of hazardous substances or petroleum.
- (11) "Class C release" means a release of petroleum occurring or identified from an underground storage tank system subject to sections 3737.87 to 3737.89 of the Revised Code for which the responsible person for the release is specifically determined by the fire marshal not to be a viable person capable of undertaking or completing the corrective actions required under those sections for the release. Class C release also includes any release designated as a class C release in accordance with rules adopted under section 3737.88 of the Revised Code.
- (12) "Commercial land use" is land use with the potential for exposure of adult workers and patrons during a business day, and the potential for low frequency exposures of children who are visitors to commercial facilities during the business day. Commercial land use has the potential for exposure of adults to dermal contact with soil, inhalation of vapors and particles from soil, incidental ingestion of soil, and inhalation of volatile compounds due to vapor intrusion to indoor air. Examples of commercial land use include, but are not limited to, the following:
  - (a) Shopping centers.
  - (b) Restaurants.
  - (c) Retail gasoline stations.
  - (d) Retail establishments.
  - (e) Professional offices.

- (f) Hospitals and clinics.
  - (g) Religious institutions.
  - (h) Hotels-, except for residential hotels, as defined in division (A)(4) of section 3731.01 of the Revised Code.
  - (i) Motels.
  - (j) Warehouses.
  - (k) Parking facilities.
  - (l) Agricultural lands and facilities when demonstrated through a property-specific risk assessment.
- (13) "Commercial land use with high frequency child exposure" is land use with the potential for exposure of adult workers and patrons during a business day, and the potential for high frequency exposures of children who are patrons to commercial facilities during the business day. Commercial land use has the potential for exposure of adults and children to dermal contact with soil, inhalation of vapors and particles from soil, incidental ingestion of soil, and inhalation of volatile compounds due to vapor intrusion to indoor air. Examples of commercial land use with high frequency child exposure include, but are not limited to, schools and child daycare facilities.
- (14) "Complete exposure pathway" is a current or reasonably anticipated exposure pathway determined to be complete after the identification of current and reasonably anticipated property use and receptor populations and as a result of a pathway completeness determination.
- (15) "Compliance audit" is the selection of any no further action letter submitted to the director with a request for a covenant not to sue for an audit for any purpose or combination of purposes described in paragraph (A) of rule 3745-300-14 of the Administrative Code. The audit may be conducted in accordance with paragraph (F) of rule 3745-300-14 of the Administrative Code or by any other means selected by the director.
- (16) "Conflict of interest" is any circumstances which would affect the laboratory's ability to objectively analyze samples in connection with a voluntary action, including circumstances similar to those in paragraph (E)(3) of rule 3745-300-05 of the Administrative Code for certified professionals.
- (17) "Consolidated saturated zone" is a saturated zone in bedrock.

- (18) "Construction activities" include invasive activities that result in potential exposure of adult workers during the business day for a portion of one year. Exposures during construction activities are of greater intensity and shorter duration than those for the commercial and industrial land use categories. Construction activities have potential exposures of adults to dermal contact with soil, inhalation of vapors and particles from soil, and ingestion of soil. Examples of construction activities include, but are not limited to, excavation, grading, bulldozing, tilling, trenching, utility installation or maintenance, building construction, operation of heavy equipment, and traffic on unpaved roads on a construction site.
- (19) "Continuing education unit" is a unit of credit customarily used for professional development courses. One continuing education unit equals ten hours of actual instruction in an approved continuing education course.
- (20) "Course" is any educational activity with a clear purpose and objective which shall maintain, improve, or expand the skills and knowledge relevant to the investigation, assessment, or remediation of hazardous substances or petroleum.
- (21) "Covenant not to sue" is a release from civil liability that is issued by the director under section 3746.12 of the Revised Code.
- (22) "Cumulative risk" is the estimate of excess lifetime cancer risk attributable to the exposure of a receptor or receptor population to one or more COC in one or more environmental media, or through one or more routes of exposure.
- (D)
- (1) "Data verification" is the process of evaluating the completeness, correctness, and conformance/compliance of a specific data set against the method, procedural, or contractual requirements.
- ~~(1)~~(2) "Determination of sufficient evidence letter" is a notification from the director, pursuant to section 3746.02 of the Revised Code and this chapter, that a person or property that is the subject of an enforcement letter may or may not participate in the voluntary action program.
- ~~(2)~~(3) "Diligent inquiry" means conducting a thorough search of all reasonably available information, and making reasonable efforts to interview persons with knowledge regarding current and past uses of the property, waste disposal practices, and environmental compliance history.

- ~~(3)~~(4) "Director" is the director of the Ohio environmental protection agency or the director's designee.
- ~~(4)~~(5) "Discretionary audit pool" is any no further action letter submitted to the director with a request for a covenant not to sue in the preceding calendar year under section 3746.11 of the Revised Code that was either not included in or was not selected for audit from the random audit pool.
- ~~(5)~~(6) "Document" is any record, device, or item, regardless of physical form or characteristic, including but not limited to, electronic or hard copy records of reports, studies, data, correspondence, and all other information.
- ~~(6)~~(7) "Drinking water source protection area" has the same definition as in rule 3745-9-01 of the Administrative Code.
- ~~(7)~~(8) "Drinking water source protection plan" means the strategies to be implemented by a public water system to prevent, detect, and respond to water quality contamination in a drinking water source protection area, as adopted by the owner of the public water system and endorsed by Ohio EPA as meeting the requirements of the wellhead protection program and the source water assessment and protection program.

(E)

- (1) "Enforcement letter" is a notification, in the form of an invitation to negotiate from the director, that the director intends to pursue enforcement under Chapter 3704., 3734., or 6111. of the Revised Code relating to a release or threatened release of hazardous substances or petroleum.
- (2) "Engineered fill" is soil or aggregate materials derived from on-property or off-property locations which has been placed on the property to meet specific engineering requirements for the construction of buildings, utility lines, roadway sub-grade, or other structures. Engineered fill includes structural fill.
- (3) "Engineering control" is any structure, system, or barrier, which is protective of human health, safety, and the environment, that effectively and reliably eliminates or mitigates human or important ecological resource exposure to hazardous substances or petroleum on, underlying, or emanating from a property.
- (4) "Environmental covenant" is a servitude that imposes activity and use limitations on property that is the subject of a no further action letter submitted with a request for a covenant not to sue under section 3746.11 of the Revised Code.

An environmental covenant meets the requirements in section 5301.82 of the Revised Code.

- (5) "Environmental media" are soil, sediment, surface water, and ground water. Environmental media also include naturally occurring transitional zones between soil, sediment, surface water, or ground water, such as bedrock, soil gas, and air.
- (6) "Exposure" is contact of a receptor with a COC that is quantified as the amount of the COC available for absorption at the exchange boundaries of the organism, such as the skin, lungs, or gastrointestinal tract.
- (7) "Exposure factor" is a parameter that defines one term in an equation used to quantify the exposure of a receptor to a COC by means of one exposure pathway. Exposure factors may be represented by point values or by a distribution of values.
- (8) "Exposure factor point value" is a single numeric value selected from a distribution of numeric values of the exposure factor, selected on the basis of the value's representativeness of a central tendency or upper-bound value.
- (9) "Exposure pathway" is a mechanism by which a receptor is exposed to a COC.
- (10) "Exposure point concentration" is the mass of a COC per unit quantity of medium which is available for intake by a receptor.
- (11) "Exposure route" is the manner in which a chemical or physical agent comes into contact with an organism (for example, ingestion, inhalation, or dermal contact with soil).
- (12) "Exposure unit" is a geographic area within which an exposed receptor may reasonably be assumed to move at random and where contact with environmental media is equally likely at all sub-areas.

~~(F)~~

~~(1) "Fixed-base laboratory" is a laboratory at a permanent location that provides for the analysis of environmental media.~~

~~(2)~~(F) "Free product" is a separate liquid hydrocarbon phase that has a measurable thickness of greater than one one-hundredth of a foot.

(G)



- (1) "Gallons" means U.S. gallons.
- (2) "Generic direct-contact soil standard" is a generic numerical standard based on a single chemical exposure that results from ingestion of soil, dermal contact with soil, and inhalation of volatile and particulate emissions from soil.
- (3) "Generic numerical standard" is a concentration of a hazardous substance or petroleum that ensures protection of public health and safety and the environment for the reasonably anticipated exposures associated with a residential, commercial, or industrial land use, construction activities, or potable ground water use. The generic numerical standard is determined pursuant to rule 3745-300-08 of the Administrative Code.
- (4) "Good moral character" is such character as enables an individual to comply with the ethical responsibilities of a certified professional.
- (5) "Ground water" is water underlying a property in a saturated zone that meets the following criteria:
  - (a) Capable of yielding, within eight hours after purging, a minimum of one and one-half gallons of water as determined in accordance with paragraph (F)(2)(b) of rule 3745-300-07 of the Administrative Code.
  - (b) The in situ hydraulic conductivity is greater than  $5.0 \times 10^{-6}$  centimeters per second as determined in accordance with standards of paragraph (F)(2)(b) of rule 3745-300-07 of the Administrative Code.
  - (c) This definition applies only to voluntary actions conducted under this chapter and Chapter 3746. of the Revised Code.

(H)

- (1) "Hazard index" is a numerical value that describes the potential for an adverse non-cancer threshold effect to occur in an individual as a result of exposure of a receptor or receptor population to one or more COC in one or more environmental media through one or more routes of exposure over a specific time exposure period. This numerical value is expressed as the unitless sum of the hazard quotient values for each COC, each environmental medium, and each route of exposure.
- (2) "Hazardous substance" includes any of the following:
  - (a) Any substance identified or listed in rules adopted under division (B)(1)(c) of section 3750.02 of the Revised Code.

- (b) Any product registered as a pesticide under section 921.02 of the Revised Code when the product is used in a manner inconsistent with the product's required labeling.
  - (c) Any product formerly registered as a pesticide under that section for which the registration was suspended or canceled under section 921.05 of the Revised Code.
  - (d) Any mixture of a radioactive material with a substance described in paragraphs (H)(2)(a) to (H)(2)(c) of this rule.
- (3) "Hazard quotient" is the value which quantifies non-carcinogenic risk for one chemical for one receptor population over a specified exposure period. The hazard quotient is equal to the ratio of a chemical-specific intake to the reference dose.
- (4) "Historical records" means sources of information which assist in identifying current or past uses or occupants of a property, including but not limited to, aerial photographs, fire insurance maps, property tax files, recorded land title records, U.S. geological survey 7.5 minute topographic maps, local street directories, building department records, zoning or land use records that identify past uses or occupants of the property from the property's first commercial or industrial use through the present use, and records in the files of an owner or operator of the property.

(I)

- (1) "Identified area" is a location at a property where a release of hazardous substances or petroleum has or may have occurred.
- (2) "Imminent hazard" is any condition which poses an immediate risk of harm to public health, safety, or the environment. Examples of imminent hazards include, but are not limited to, the following:
- (a) Threats of explosion.
  - (b) Discharges of hazardous substances or petroleum to surface water.
  - (c) Discharges to ground water of hazardous substances or petroleum that threatens existing drinking water supplies.
  - (d) Releases of hazardous substances or petroleum into the air which could result in an exposure at or to a concentration of chemicals that is immediately dangerous to life or health.

- (e) Migration or releases of hazardous substances or petroleum which would threaten to immediately harm public health, safety, or the environment.
- (3) "Important ecological resource" or "IER" is any specific ecological community, population, or individual organism protected by federal, state, or local laws and regulations, or ecological resources that provide important natural or economic resource functions and values. Important ecological resources include, but are not limited to, the following:
- (a) Any surface water of the state, as that term is used in Chapter 3745-1 of the Administrative Code.
  - (b) Any wetland regulated under federal law and Chapter 6111. of the Revised Code.
  - (c) Any dedicated natural area or preserve.
  - (d) Any federally-listed or state-listed threatened or endangered species and the associated habitat.
  - (e) Any state of Ohio special interest or declining species and the associated habitat.
  - (f) Any state park or national park.
  - (g) Any federally designated wilderness area.
  - (h) Any national lakeshore recreational area.
  - (i) Any national preserve.
  - (j) Any state wildlife refuge or national wildlife refuge.
  - (k) Any federal, state, local, or private land designated for the protection of natural ecosystems.
  - (l) Any federally-designated or state-designated scenic or wild river.
  - (m) Any federal or state land designated for wildlife or game management.
  - (n) Wildlife populations and the associated important nesting areas and food resources, taking into consideration land use and the quality and extent of habitat on and in the vicinity of the property.

- (4) "Incremental sampling" is a technique used to obtain a reproducible estimate of the exposure point concentration. An incremental sample is comprised of randomly collected sub-samples combined to form the sample.
- (5) "Individual" is any person (as "person" is defined in section 1.59 of the Revised Code and in this rule), but not a corporation, business trust, estate, trust, partnership, or association. Individual is also not this state, any political subdivision of this state, any other body of this state or of a political subdivision of this state, and the United States and any agency or instrumentality thereof.
- (6) "Indirect costs" are all costs other than direct costs which may be attributed to a fee source including, but not limited to, administrative overhead, training of personnel, reporting to the legislature, rule development, guidance development, program marketing, database management, and word processing. Indirect costs are determined by multiplying direct costs by the indirect rate.
- (7) "Indirect rate" is the rate or per centage by which direct costs are multiplied to determine the indirect costs for a given fee or activity.
- (8) "Industrial fill" is non-soil material that is derived from industrial or manufacturing operations and that has been placed on a property for the purpose of disposal, grading, or construction.
- (9) "Industrial land use" is land use with the potential for exposure of adult workers and patrons during a business day, and the potential for low frequency exposures of children who are visitors to commercial or industrial facilities during the business day. Industrial land use has the potential for exposure of adults to dermal contact with soil, inhalation of vapors and particles from soil, incidental ingestion of soil, and inhalation of volatile compounds due to vapor intrusion to indoor air. Industrial land use is considered appropriate for an alternate cumulative cancer risk goal through a property-specific risk assessment in accordance with paragraph (B)(3)(b) of rule 3745-300-09 of the Administrative Code. Examples of industrial land use include, but are not limited to, manufacturing facilities such as metal-working shops, plating shops, blast furnaces, coke plants, oil refineries, brick factories, chemical plants, and plastics plants; assembly plants; non-public airport areas; lumber yards; power plants; limited access highways; railroad switching yards; and marine port facilities.
- (10) "Initial certification" is any first certification issued to ~~either of the following:~~ an individual who is certified by the director to issue no further action letters under rule 3745-300-05 of the Administrative Code.

~~(a) A laboratory to perform analyses of specific analytes or parameter groups, using designated methods, under rule 3745-300-04 of the Administrative Code.~~

~~(b) An individual who is certified by the director to issue no further action letters under rule 3745-300-05 of the Administrative Code.~~

(11) "Institutional control" is a restriction that is recorded in the same manner as a deed which limits access to or use of the property such that exposure to hazardous substances or petroleum are effectively and reliably eliminated or mitigated. Activity and use limitations are considered institutional controls when required pursuant to sections 5301.08 to 5301.92 of the Revised Code. Examples of institutional controls include land and water use restrictions.

(12) "Interim measures" are remedial activities undertaken to protect public health and safety and the environment until the property complies with applicable standards through a permanent remedy.

(13) "Investigatory auditing activities" means activities conducted prior to the issuance of audit findings, including, but not limited to, document review and analysis, field screening or sampling activities, and laboratory analysis.

(J) [Reserved.]

(K) "Key property personnel" means an individual or individuals identified by the owner or operator of a property, and confirmed by the volunteer, as having reliable knowledge of the uses or physical characteristics of the property.

(L)

(1) "Laboratory" is ~~a fixed-base laboratory or mobile laboratory that provides for the analysis of environmental media.~~ an accredited laboratory or certified laboratory as defined by this rule.

(2) "Laboratory audit" is an evaluation of a laboratory ~~to determine the laboratory's qualifications for certification under rule 3745-300-04 of Administrative Code, or to determine compliance of a laboratory that is certified with such~~ with the laboratory's obligations under rule 3745-300-04 of the Administrative Code. Laboratory audits may consist of a review of documents or other information submitted to Ohio EPA, or an on-site visit to the laboratory to review the laboratory's operations and to evaluate the facility and personnel.

(M)

- (1) "Method" is the analytical procedure used to identify and calculate the concentration of an analyte or parameter group and is often designated by a method number from a compendium of standardized test methods (e.g., hazardous waste test methods included in U.S. EPA's "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. EPA publication SW-846). If the method has been revised, the method includes the method number plus the revision suffix (e.g., "A, B, C," etc.). Therefore, proper citation of the method shall include the method number plus the revision suffix, if any.
- (2) "Method detection limit study" is a procedure used by a laboratory to determine the laboratory's ability to reliably and accurately report to a specific concentration for an analyte or parameter group using the method for which the laboratory is applying for certification.
- ~~(3) "Mobile laboratory" is a laboratory that is not fixed at a permanent location. Mobile laboratory data provide real-time analysis of environmental media at a location on or near a property.~~

(N)

- (1) "Native fill" is soil material derived from the property and transferred from one area of the property and placed in another area in such a manner that the original soil structure and physical properties may be altered from the initial pre-excavation conditions, but the chemical and physical properties remain consistent with other undisturbed native soils at the property.
- (2) "Natural attenuation" is the in situ biotic and abiotic processes through which passive remediation occurs. Natural attenuation may include the following:
  - (a) Non-destructive processes, including but not limited to, the following physical processes:
    - (i) Adsorption.
    - (ii) Absorption.
    - (iii) Advection.
    - (iv) Dispersion.
    - (v) Diffusion.
    - (vi) Dilution from recharge.

(vii) Volatilization.

(b) Destructive processes, including but not limited to, the following chemical processes:

(i) Aerobic biodegradation.

(ii) Hypoxic biodegradation.

(iii) Anaerobic biodegradation.

(iv) Chemical degradation, including abiotic oxidation processes, hydrolysis, and other reactions.

(3) "Ninety-five per cent upper confidence limit" is the upper limit of an interval within a frequency distribution curve in which the observed mean of a data set occurs ninety-five per cent of the time.

(4) "No further action letter" is a document issued by a certified professional under affidavit upon determination by the person undertaking a voluntary action that either there is no information indicating there has been a release of hazardous substances or petroleum at or upon the property, or there has been a release of hazardous substances or petroleum at or upon the property and applicable standards were not exceeded or have been or shall be achieved in accordance with Chapter 3746. of the Revised Code and rules adopted thereunder.

(5) "No further action letter submitted to the director" means no further action letters submitted to the director for either of the following:

(a) A covenant not to sue has been requested from the director under division (D) of section 122.654, sections 3746.11 and 3746.12 of the Revised Code and paragraph (H)(1) of rule 3745-300-13 of the Administrative Code.

(b) A covenant not to sue has not been requested from the director, but Ohio EPA is obligated to review the no further action letter under division (C) of section 122.654 of the Revised Code.

(O)

(1) "Ohio EPA" means the Ohio environmental protection agency.

(2) "Operation and maintenance plan" is a written plan prepared in accordance with paragraph (F) of rule 3745-300-11 of the Administrative Code. An operation

and maintenance plan describes the remedy or remedial activities planned to demonstrate that the property meets and maintains compliance with applicable standards. As applicable, an operation and maintenance plan also describes the remedial activities planned so that the property achieves compliance with applicable standards within five years, or such other time frame as agreed upon by the director in an operation and maintenance agreement.

- (3) "Other person responsible for operation and maintenance plan and agreement implementation" is the person responsible for implementation of the operation and maintenance plan and agreement through transfer of the operation and maintenance agreement, by assignment or in conjunction with acquisition of title to the property.
- (4) "Owner or operator" includes both of the following:
  - (a) Any person owning or holding a legal, equitable, or possessory interest in or having responsibility for the daily activities on a property.
  - (b) In the case of property title or control of which was conveyed due to bankruptcy, foreclosure, tax delinquency, abandonment, or similar means to this state or a political subdivision of this state, any person who owned, operated, or otherwise controlled activities occurring on the property before the conveyance.

(P)

- (1) "Parameter group" is a group of analytes similar in chemical characteristics quantitated using a specific method and technology.
- (2) "Pathway deferral" is a demonstration made in accordance with rule 3745-300-11 of the Administrative Code that access to an off-property area known to contain or suspected to contain a complete exposure pathway has been refused following informed requests to access in order to complete assessment or remedy in accordance with this chapter. Compliance with applicable standards associated with the pathway are deferred until access to the off-property area is attained and the remedy is implemented and verified in accordance with this chapter.
- (3) "Pathway exclusion" is a demonstration made in accordance with rule 3745-300-11 of the Administrative Code and approved by the director that excludes the releases of hazardous substances or petroleum associated with a potentially complete or complete exposure pathway to an off-property area from the release of liability provided by the covenant not to sue, and from



any demonstration of compliance with applicable standards that is otherwise required for issuance of the no further action letter.

(4) "Peer-reviewed" is a document or study that meets the following criteria:

- (a) The document or study have been published in a recognized scientific journal or publication.
- (b) The document or study is generally accepted within the scientific community as being accurate and reliable.
- (c) The results in the document or study have been independently reproduced, or the methods described in the document or study have been proven to produce consistent results.

~~(5) "Performance-based method" is a method designed to quantitate for an analyte or parameter group that is not listed in a method published or endorsed by U.S. EPA or Ohio EPA.~~

~~(6)~~(5) "Persistent, bioaccumulative and toxic (PBT) chemicals" are those chemicals which do not readily degrade via biogeochemical processes, remain in the environment for long periods of time (as measured by a half-life or  $t_{1/2}$  of greater than sixty days), are highly toxic and bioaccumulate in animal tissue (as indicated by an octanol water coefficient or  $k_{ow}$ , of greater than 4.5 and a bioaccumulation factor or BCF of greater than one thousand).

~~(7)~~(6) "Person" is defined in section 1.59 of the Revised Code and also includes this state, any political subdivision of this state, any other body of this state or of a political subdivision of this state, and the United States and any agency or instrumentality thereof.

~~(8)~~(7) "Petroleum" is oil or petroleum of any kind and in any form, including, without limitation, crude oil or any fraction thereof, petroleum, gasoline, kerosene, fuel oil, oil sludge, oil refuse, used oil, substances or additives utilized in the refining or blending of crude petroleum or petroleum stock, natural gas, natural gas liquids, liquefied natural gas, synthetic gas usable for fuel, and mixtures of natural gas and synthetic gas.

~~(9)~~(8) "Phase I property assessment" is all the activities required to evaluate a property in accordance with rule 3745-300-06 of the Administrative Code, Chapter 3746. of the Revised Code, and the standards provided in division (B) of section 3746.07 of the Revised Code.

- ~~(10)~~(9) "Phase II property assessment" is all the activities required to evaluate a property in accordance with rule 3745-300-07 of the Administrative Code, Chapter 3746. of the Revised Code, and the standards provided in division (C) of section 3746.07 of the Revised Code.
- ~~(11)~~(10) "Point of compliance" is any location on or off the property to which applicable standards shall be met and maintained.
- ~~(12)~~(11) "Practically reviewable" means information provided in a manner and in a form that, upon examination, yields information relevant to the property. Records that cannot feasibly be retrieved by reference to the location of the property, the geographic area in which the property is located, or the name of the owner or operator of the property are not practically reviewable.
- ~~(13)~~(12) "Professional development hour unit" is a unit hour for tracking continuing education, as required by paragraph (C) of rule 3745-300-05 of the Administrative Code.
- ~~(14)~~(13) "Professional services" is any conduct in connection with a voluntary action or in rendering a voluntary action opinion.
- ~~(15)~~(14) "Proficiency" is a demonstration of competence in projects similar in type and scope to voluntary actions.
- ~~(16)~~ "Proficiency testing provider" is any entity that is accredited to provide proficiency testing samples and to evaluate proficiency testing results by a proficiency testing oversight body or proficiency testing provider accreditor designated by the national environmental laboratory accreditation conference institute.
- ~~(17)~~ "Proficiency testing result" is the result derived by the laboratory from the analysis of a proficiency testing sample.
- ~~(18)~~ "Proficiency testing sample" is a material or matrix spiked with a known concentration of one or more specific analytes representative of the analyte or parameter group. The proficiency testing sample is used to evaluate a laboratory's ability to identify and quantitate an analyte or parameter group using a specific method or technology.
- ~~(19)~~(15) "Property" is any parcel of real property, or portion thereof, and any improvements thereto, the limits of which have been described in writing by the owner of record or a legally appointed representative of the owner and that is or has been the subject of a voluntary action under this chapter.

~~(20)~~(16) "Property-specific risk assessment" is an analysis conducted in accordance with rule 3745-300-09 of the Administrative Code. This process includes the following steps:

- (a) Selection of COCs.
- (b) Exposure assessment.
- (c) Toxicity assessment.
- (d) Risk characterization, including uncertainty.

~~(21)~~(17) "Publicly available" means the source of the information allows access to the information by anyone upon request.

(Q) "Quality assurance program plan" or "QAPP" is a written document that details the data collection, storage, analysis, and quality assurance or quality control procedures used by a laboratory to assure that all data generated are scientifically valid, defensible, and of known precision and accuracy.

(R)

(1) "Radioactive material" is a substance that spontaneously emits ionizing radiation.

(2) "Random audit pool" is the pool of all of the no further action letters submitted to the director with a request for a covenant not to sue in the preceding calendar year under section 3746.11 of the Revised Code. Properties with a remedy or a risk assessment that have been issued and submitted after completion of the process and procedures, as defined by Ohio EPA, to comply with the "2007 Memorandum of Agreement," between Ohio EPA and U.S. EPA region 5, are excluded from the random audit pool.

(3) "Reasonably available" is any of the following situations:

- (a) Information is publicly available or known of and available to the volunteer or owner or operator of the property.
- (b) Information is provided or made available by the source within ninety days after receipt of a written request.
- (c) Information is practically reviewable.

(4) "Receptor" or "receptor population" means humans or important ecological resources that are reasonably anticipated to come in contact with COCs, based

on the distribution of the COCs on the property and the activity patterns of those humans or important ecological resources on or off the property.

- (5) "Recognized educational institution" is an institution which is accredited by an appropriate regional board or association of institutions of higher education.
- (6) "Recreational activities" are highly variable exposure scenarios that require determination of applicable standards through a property-specific risk assessment conducted pursuant to rule 3745-300-09 of the Administrative Code. Recreational activities may have the potential for exposure of adults and children to dermal contact with soil or sediment, inhalation of vapors and particles from soil, incidental ingestion of soil or sediment, dermal contact with surface water, incidental ingestion of surface water, ingestion of fish, and inhalation of volatile compounds due to vapor intrusion to indoor air.
- (7) "Reference concentration" is an estimate of a continuous inhalation exposure to the human population, including sensitive subgroups, that is likely to be without an appreciable risk of deleterious effects during a lifetime.
- (8) "Reference dose" is a value representative of a daily exposure level for the human population, including sensitive subpopulations, that is not likely to cause an adverse non-cancer health effect during a specified period of time. For example, an acute, short-term, subchronic or chronic exposure period.
- (9) "Release" is any past or current spilling, leak, pump, pour, emission, empty, discharge, injection, escape, leach, migration, dump, or disposal of any hazardous substance or petroleum into the environment, including, without limitation, the abandonment or discard of barrels, containers, or any other closed receptacle that contains any hazardous substance, petroleum, or pollutant or contaminant. "Release" does not include any of the following:
  - (a) Exposure of individuals to hazardous substances or petroleum in the workplace with respect to which those individuals may assert a claim against the individuals' employer and that is regulated under the Occupational Health and Safety Act and regulations adopted thereunder, or under Chapter 4167. of the Revised Code and rules adopted thereunder.
  - (b) Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine.
  - (c) Source material, by-product material, or special nuclear material from a nuclear incident, as "source material," "by-product material," "special nuclear material," and "nuclear incident" are defined in the Atomic

Energy Act, if the release is subject to financial protection requirements under section 170 of that act, unless any such material is mixed with a hazardous substance or petroleum.

- (d) Any federally "permitted release" as defined in section 101(10) of the Comprehensive Environmental Response, Compensation, and Liability Act.
  - (e) The normal application of a fertilizer material that is intended to improve the quality or quantity of plant growth.
- (10) "Relevant professional experience" is experience obtained through conducting or supervising voluntary actions or projects similar in type and scope to voluntary actions. Such experience shall indicate that the applicant is competent to conduct voluntary actions or to render voluntary action opinions. Relevant professional experience does not include experience that involves non-scientific or non-technical activities associated with assessment or remediation projects such as contract management, budget control, or other similar management activities.
- (11) "Remedy" or "remedial activities" are actions that are taken at a property to treat, remove, transport for treatment or disposal, dispose of, contain, or control hazardous substances or petroleum, which are protective of public health and safety and the environment, and which are consistent with a permanent remedy, including, without limitation, excavation, treatment, off-property disposal, the use of engineering or institutional controls or activity and use limitations, the issuance and implementation of a consolidated standards permit under section 3746.15 of the Revised Code, and the entering into and implementation of an operation and maintenance agreement pursuant to section 3746.12 of the Revised Code.
- (12) "Renewal certification" is ~~either of the following:~~ the renewal of a certified professional's certification under rule 3745-300-05 of the Administrative Code.
- ~~(a) The renewal of a laboratory's current certification under rule 3745-300-04 of the Administrative Code.~~
  - ~~(b) The renewal of a certified professional's certification under rule 3745-300-05 of the Administrative Code.~~
- (13) "Residential land use" is land use with the potential for a high frequency of exposure of adults and children to dermal contact with soil, inhalation of vapors and particles from soil, incidental ingestion of soil, and inhalation of

volatile compounds due to vapor intrusion to indoor air. Examples of residential land use include, but are not limited to, residences, condominiums, dormitory residences, nursing homes, elder care and other long-term health care facilities, residential hotels, as defined in division (A)(4) of section 3731.01 of the Revised Code, and correctional facilities.

- (14) "Restricted residential land use" is residential land use that requires the implementation of institutional controls, engineering controls, any other remedial activities to comply with applicable standards for residential land use. Restricted residential land use is considered protective for, and may be applied to, residential land uses appropriate for a point of compliance less than the minimum depth of ten feet that is required by rule 3745-300-07 of the Administrative Code, vapor intrusion remedies, or ground water use restrictions. Restricted residential land use requires a central management entity to implement or oversee the institutional controls, engineering controls, and any other remedial activities used to comply with applicable standards pursuant to rule 3745-300-11 of the Administrative Code.
- (15) "Risk mitigation measures" are the health and safety precautions and other such remedial activities that mitigate or eliminate human exposure to the COCs at the property as a result of excavation or construction activities. Risk mitigation measures reduce potential risks and provide protection to persons who perform excavation or construction activities or to other persons who would be exposed to COCs in environmental media as a result of the excavation or construction activities.

(S)

- (1) "Sediment" is unconsolidated inorganic and organic material that has precipitated and deposited below surface waters. Sediment includes the following:
  - (a) Materials below the water surface under bankfull conditions in streams, lakes, and ditches.
  - (b) Materials below normal pool elevation for reservoirs.
  - (c) Materials within the federal and state jurisdictional boundaries of wetlands.
  - (d) Materials below maximum capacity for ponds and lagoons.
  - (e) Materials found below the ordinary high water mark of lake Erie, as defined by "International Great Lakes Datum."

- (2) "Sole source aquifer" is an aquifer designated as a sole source aquifer under section 1424(e) of the Safe Drinking Water Act.
- (3) "Source area" is any abandoned or discarded barrels, containers, or any other closed receptacle in environmental media, or any affected media, originally impacted by a release from which contamination is acting, has acted, or has the potential to act as a point of origin for the migration of the release throughout the environment.
- (4) "Split sample" is a material or medium that consists of two or more individual samples collected at the same time and location and that are analyzed independently, with each sample analyzed at a different laboratory.
- (5) "Standard operating procedures" or "SOPs" are a laboratory's written procedures to prepare samples and perform measurements of analytes or parameter groups.
- ~~(6) "Suspension period" is the period of time listed on the final findings and orders issued by the director to a certified laboratory, in which the certified laboratory is suspended for an analyte or parameter group and corresponding method.~~

(T)

- (1) "Technology" is the laboratory instrumentation used to quantify an analyte or parameter group. Examples include, but are not limited to, gas chromatography, mass spectrometry, and inductively coupled plasma.
- (2) "Tier I audit" is a review and analysis of documents that pertain to a no further action letter held or produced by a certified professional, a volunteer, the current owner of the property, an accredited laboratory, or a certified laboratory, as appropriate, and a site walkover of the property, in order to determine compliance with applicable standards, this chapter, or Chapter 3746. of the Revised Code.
- (3) "Tier II audit" is a physical inspection and investigation of a property upon which a voluntary action was conducted in order to determine compliance with applicable standards, this chapter, or Chapter 3746. of the Revised Code, including sampling and analysis of soils, surface water, air, sediments, or ground water.

(U)

- (1) "Unconsolidated saturated zone" is any saturated zone that is not in bedrock, including, but not limited to, saturated zones in soil, gravel, sand, silt, clay, or fill materials.

- (2) "Unrestricted potable use standard" means ground water standards based on the assumption that ground water shall be used as a source of water for drinking, cooking, showering, and bathing. Unrestricted potable use standards include generic unrestricted potable use standards based on maximum contaminant levels or other established regulatory criteria in accordance with rule 3745-300-08 of the Administrative Code, generic risk-derived unrestricted potable use standards developed in accordance with rule 3745-300-08 of the Administrative Code, or property-specific risk-derived unrestricted potable use standards developed in accordance with rule 3745-300-09 of the Administrative Code.
- (3) "Unrestricted residential land use" is considered protective for, and may be applied to, any land use, without further restriction.
- (4) "Upper-bound value" is a parameter value from a distribution of such values which is within the highest decile (ten per cent) of that distribution.
- (5) "Urban setting designation" is an area where the potable use pathway is determined to be incomplete under paragraph (C) of rule 3745-300-10 of the Administrative Code. An urban setting designation does not eliminate the volunteer's responsibility to address non-potable pathways or to protect ground water that meets unrestricted potable use standards.
- (6) "U.S. EPA" means the United States environmental protection agency.

(V)

- (1) "Voluntary action" is a series of measures that may be undertaken to identify and address contamination and potential sources of contamination of properties by hazardous substances or petroleum and to establish that the property complies with applicable standards.
  - (a) "Voluntary action" may include, without limitation, any of the following:
    - (i) A phase I property assessment.
    - (ii) A phase II property assessment.
    - (iii) A sampling plan.
    - (iv) A remedial plan.
    - (v) Remedial activities.



- (vi) Such other actions the volunteer considers to be necessary or appropriate to address the contamination, followed by the issuance of a no further action letter that indicates the property complies with applicable standards.
  - (b) To demonstrate that applicable standards have been met, the person undertaking such measures shall establish either of the following:
    - (i) That there is no information indicating that there has been a release of hazardous substances or petroleum at or upon the property.
    - (ii) That there has been a release of hazardous substances or petroleum at or upon the property and that applicable standards were not exceeded or have been or shall be achieved in accordance with this chapter and Chapter 3746. of the Revised Code.
- (2) "Voluntary action opinion" is any of the following:
- (a) A no further action letter issued in accordance with this chapter and Chapter 3746. of the Revised Code.
  - (b) A written notice pursuant to division (B) of section 3746.11 of the Revised Code that the certified professional is not able to issue a no further action letter for a property because the property does not comply with applicable standards.
  - (c) An application for a variance pursuant to rule 3745-300-12 of the Administrative Code and section 3746.09 of the Revised Code.
  - (d) A request for an urban setting designation pursuant to paragraph (C) of rule 3745-300-10 of the Administrative Code.
  - (e) A summary report prepared pursuant to division (C) of section 3746.11 of the Revised Code.
  - (f) A request for a case-by-case determination pursuant to paragraph (B) of rule 3745-300-12 of the Administrative Code.
  - (g) A request for a pathway exclusion pursuant to paragraph (D) of rule 3745-300-11 of the Administrative Code.
  - (h) Verification of completion of remedial activities and determination of compliance with applicable standards pursuant to paragraph (E) of rule 3745-300-11 of the Administrative Code.

- (i) A statement in support of a remedy revision notice that demonstrates the property complies with applicable standards through implementation of the remedial activities pursuant to paragraph (H)(2) of rule 3745-300-11 of the Administrative Code.
  - (j) Any other circumstance in which a certified professional determines compliance with applicable standards in a document submitted to Ohio EPA on behalf of a volunteer pursuant to this chapter.
- (3) "Voluntary action program" means the program created under this chapter and Chapter 3746. of the Revised Code to provide a way to voluntarily investigate and clean up possible environmental contamination.
- (4) "Volunteer" is a person who conducts a voluntary action and any authorized representative of the person who conducts the voluntary action. Volunteer does not include a "responsible person," as defined in section 3737.87 of the Revised Code, for a class C release on the property that is the subject of a voluntary action.

Effective:

Five Year Review (FYR) Dates: 10/17/2024

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Certification

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Date

Promulgated Under: 119.03  
Statutory Authority: 3746.04  
Rule Amplifies: 3746.04  
Prior Effective Dates: 12/29/1995, 12/16/1996, 03/04/2002, 04/19/2006,  
03/01/2009, 04/23/2012, 08/01/2014, 05/26/2016,  
10/17/2019

3745-300-03

**Voluntary action program fees.**

(A) Applicability. Fees shall be derived from the estimated actual costs associated with performing all of the tasks, duties, and services related to the relevant application or voluntary action program activity. Fees shall be primarily based upon the following:

- (1) The estimated typical time to complete each task, duty, or service.
- (2) The person or persons performing each task, duty, or service.
- (3) The applicable hourly rate plus fringe benefits for the person or persons performing the task, duty, or service.
- (4) The estimated frequency of each task, duty, or service.

(B) The voluntary action program fees for the activities listed below are as follows:

- (1) Initial certification of professionals: two thousand five hundred dollars.
- (2) Annual fee for certified professionals: two thousand dollars.
- ~~(3) Initial certification of a fixed-base laboratory: five thousand dollars.~~
- ~~(4) Annual fee for certified laboratories: five hundred dollars.~~
- ~~(5)~~(3) No further action letter submitted for a covenant not to sue with no environmental covenant: fifteen thousand seven hundred dollars.
- ~~(6)~~(4) No further action letter submitted for a covenant not to sue that includes an environmental covenant: eighteen thousand two hundred dollars.
- ~~(7)~~(5) No further action letter submitted for a covenant not to sue after having completed the voluntary action program memorandum of agreement track: ten thousand dollars.
- ~~(8)~~(6) No further action letter submitted for a covenant not to sue after having completed the voluntary action program memorandum of agreement track that includes an environmental covenant: twelve thousand five hundred dollars.

~~(C) For initial certification, a mobile laboratory shall pay the actual costs incurred by Ohio EPA relating to reviewing the application package and performing an audit pursuant to rule 3745-300-04 of the Administrative Code.~~

~~(D)~~ In addition to payment of all applicable initial certification and renewal certification fees pursuant to paragraph (B) of this rule, a certified laboratory shall pay the following:

- ~~(1) The actual costs incurred by Ohio EPA that are associated with laboratory requests for reinstatement or modification of the laboratory's certification pursuant to rule 3745-300-04 of the Administrative Code.~~
- ~~(2) The actual costs incurred by Ohio EPA for all travel time and costs in performing audits of fixed-base laboratories pursuant to rule 3745-300-04 of the Administrative Code.~~
- ~~(3) The actual costs incurred by Ohio EPA for all time and travel costs in performing compliance audits of certified laboratories pursuant to rule 3745-300-04 of the Administrative Code.~~
- ~~(4) The actual costs incurred by Ohio EPA for all time and travel costs for reviewing application packages for additional certification and performing audits pursuant to rule 3745-300-04 of the Administrative Code.~~

~~(E)~~(C) For all activities not addressed by paragraph (B), ~~(C)~~, or ~~(D)~~ of this rule, the actual costs incurred by Ohio EPA shall be charged to and paid by the beneficiary or subject, as applicable, of the activity. These activities may include, but are not limited to, the following:

- (1) Providing site-specific technical assistance.
- (2) Reviewing demonstrations of sufficient evidence of entry into the voluntary action program.
- (3) Reviewing urban setting designation requests.
- (4) Reviewing a variance request or a case-by-case ground water demonstration.
- (5) Enforcing or administering compliance schedule agreements.
- (6) Monitoring compliance with operation and maintenance agreements, risk mitigation plans, or institutional controls.
- (7) Reviewing remedy changes.
- (8) Any other activities necessary for the enforcement or administration of this chapter and Chapter 3746. of the Revised Code.

~~(F)~~(D) In addition to any applicable existing permit fees, any person requesting a consolidated standards permit shall pay the actual direct and indirect costs related to obtaining and administering the consolidated standards permit.

~~(G)~~(E) Full payment of fees shall accompany any application or form, and shall be made using a form prescribed by Ohio EPA. Payment by check or money order shall be made payable to "Treasurer, State of Ohio" and shall indicate in the memo field the applicable fees being paid. Payment by use of an Ohio EPA-prescribed electronic system shall be completed in compliance with terms for system use. Fees are not refundable, unless specifically provided for in this chapter.

~~(H)~~(F) Any certification, permit, covenant, renewal, or other action by the director under this chapter or Chapter 3746. of the Revised Code which requires payment of a fee or cost shall not be made effective until full payment of all applicable fees or costs is received by Ohio EPA.

Effective:

Five Year Review (FYR) Dates: 10/17/2024

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Certification

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Date

Promulgated Under: 119.03  
Statutory Authority: 3746.04  
Rule Amplifies: 3746.04  
Prior Effective Dates: 12/29/1995, 07/01/2006, 03/01/2009, 04/23/2012,  
08/01/2014, 05/26/2016, 10/17/2019

3745-300-04

**Certified laboratories.**

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-300-15 of the Administrative Code titled "Incorporation by reference - voluntary action program."]

(A) ~~Certified data; authority~~ Authority of a certified laboratory to perform analyses.

(1) A certified laboratory produces certified data under affidavit in accordance with rule 3745-300-13 of the Administrative Code only when the analyses are performed within the laboratory's current certification. Certification may limit the analysis of certain environmental media, as indicated on the laboratory's certificate issued by Ohio EPA under this chapter.

(2) In order to produce certified data to support a voluntary action under this chapter and Chapter 3746. of the Revised Code, the following shall occur:

(a) The certified laboratory shall be certified for each analyte, parameter group, and method at the time the laboratory performs the analyses.

(b) The certified laboratory's analyses shall remain consistent with the laboratory's standard operating procedures (SOPs) and quality assurance program plan (QAPP).

(c) The certified laboratory's SOPs and QAPP used to produce certified data shall be consistent with all of the following:

(i) Requirements in the published method published or endorsed by U.S. EPA.

(ii) The applicable minimum requirements in paragraph ~~(G)~~(D) of this rule.

(iii) Any additional requirements specified during approval for analysis using performance-based methods under paragraph (B)(1)(c) of this rule.

(iv) Where there is a conflict between paragraph (A)(2)(c)(i) of this rule and paragraph (A)(2)(c)(ii) of this rule or paragraph (A)(2)(c)(iii) of this rule, requirements consistent with paragraph (A)(2)(c)(ii) of this rule or paragraph (A)(2)(c)(iii) of this rule take precedence.

(3) Certification pursuant to this rule is applicable to analyses performed in support of a voluntary action, including but not limited to the issuance of a no further



action letter under this chapter and Chapter 3746. of the Revised Code. Certification pursuant to this rule does not constitute certification under any other state or federal laboratory certification or accreditation program.

- (4) For certification obtained that relies on third-party accreditation, the certified laboratory shall maintain in good standing the accreditation provided in paragraphs (B)(1)(d) and (B)(1)(e) of this rule.
- (5) A volunteer may request that a certified laboratory analyze the constituents of a hazardous substance when a chemical testing method or technology does not exist to measure the concentration of the hazardous substance. When a hazardous substance is comprised of more than one constituent, the certified laboratory shall obtain certification for each constituent, even if the constituent is not listed as a hazardous substance.
- (6) If a certified laboratory no longer intends to retain certification, the certified laboratory may return the certificate with a notice to Ohio EPA that indicates the certified laboratory's intent to withdraw from certification. Upon withdrawal, the laboratory shall not report data as certified data under this chapter.

(B) Methods for the analysis of analytes or parameter groups are the following:

- (1) A laboratory ~~may apply for certification pursuant to this rule~~ certified pursuant to this rule for any method used for the analysis of any analyte or parameter group that meets the following criteria, except as provided in paragraph (B)(2) of this rule:
  - (a) Certification is restricted to hazardous substances or petroleum. If a chemical testing method or technology does not exist to measure the concentration of the hazardous substance, then certification to test for constituents of the hazardous substance may be granted pursuant to paragraph (A)(5) of this rule.
  - (b) Chemical testing methods. A certified laboratory may apply for certification for any chemical testing method published or endorsed by U.S. EPA. A certified laboratory shall use a published or endorsed method only in the manner for which that method is designed.
  - (c) Performance-based methods. At the request of a laboratory, Ohio EPA may evaluate whether to certify a laboratory to perform analyses using a performance-based method. A laboratory shall demonstrate the laboratory's ability to perform the method using a proficiency testing sample as provided in paragraph (C)(1) of this rule, if available, and in

accordance with the application requirements in paragraph (D)(4) of this rule.

- (d) Asbestos accreditations. A laboratory ~~that applies for~~holding certification for the analysis of asbestos shall have current accreditation in at least one of the following programs:

- (i) American industrial hygiene association, asbestos analysts registry.
- (ii) National institute of standards technology, national voluntary laboratory accreditation program for asbestos fiber analysis.
- (iii) "The NELAC Institute" (TNI) recognized accreditation body.

- (e) ~~"National Environmental Laboratory Accreditation Program" (NELAP)~~"The NELAC Institute" (TNI) accreditation. A laboratory that ~~applies for~~holds certification ~~of the~~for analysis of any constituent other than asbestos may rely on current ~~NELAP~~NELAC accreditation from an accreditation body that is recognized by TNI.

- (2) Testing for characteristic hazardous waste or for radioactive materials is not included for certification under this rule.

[Comment: Ohio EPA coordinates with the Ohio department of health for the Ohio department of health's review of any release of radioactive materials or substances.]

- (3) Testing for sediment toxicity is not included for certification under this rule. Testing for sediment toxicity shall be performed in accordance with paragraph (F)(4)(b) of rule 3745-300-09 of the Administrative Code.

(C) Proficiency testing program.

- (1) Use of proficiency testing samples; requirement to purchase proficiency testing samples through proficiency testing providers:

- (a) Unless otherwise exempt from this requirement, a laboratory that ~~applies~~forholds certification under this rule shall do the following:

- (i) Analyze proficiency testing samples representative of the analytes or parameter groups for certification.
- (ii) Receive from the proficiency testing provider acceptable proficiency testing results pursuant to the criteria of this rule.

- (b) The certified laboratory shall order proficiency testing samples from a proficiency testing provider that is approved to produce the proficiency testing samples and evaluate the proficiency testing results.
  - (c) For the purposes of this rule, a certified laboratory shall analyze a proficiency testing sample that was formulated and evaluated using the criteria established by TNI.
    - (i) If the laboratory ~~applies for~~holds certification for testing aqueous samples, the laboratory shall analyze a non-potable water sample or, if a non-potable water sample is not available, a drinking water sample.
    - (ii) If the laboratory ~~applies for~~holds certification for testing solid matrix samples, the certified laboratory shall analyze a solid matrix sample or, if a solid matrix sample is not available, an aqueous sample.
  - (d) Paragraph (C)(1) of this rule does not apply to certifications for asbestos or to the circumstances provided in paragraph (C)(2) of this rule.
- (2) Criteria for analysis of proficiency testing samples, exceptions, and waivers. To demonstrate compliance with this rule for any analyte or parameter group a certified laboratory shall analyze proficiency testing samples, which a proficiency testing provider prepared and evaluated using TNI criteria, except as follows:
- (a) When a non-potable water proficiency testing sample is not available for an analyte or parameter group for which the laboratory ~~applies for~~holds certification, proficiency testing samples prepared and evaluated based on drinking water criteria may be used instead.
  - ~~(b) For mobile laboratories, each proficiency testing sample shall be analyzed while the laboratory is mobilized on location for a project and not at the laboratory's base of operations.~~
  - ~~(c)~~(b) For any analyte or parameter group for which TNI has not published any proficiency testing criteria or for which proficiency testing samples are not available, Ohio EPA may waive the proficiency testing sample analysis requirement in paragraph (C)(2) of this rule. In the case of a waiver, certification for the analyte or parameter group shall be limited to the use of a performance-based method as described in paragraph (B)(1)(c) of this rule.

- (d)(c) For any analyte or parameter group for which the certified laboratory holds ~~NELAP~~NELAC accreditation in good standing pursuant to paragraph (B)(1)(e) of this rule, analysis of proficiency testing samples is not required unless Ohio EPA determines that proficiency testing is required.
- (3) Use of existing proficiency testing results. A certified laboratory may use the proficiency testing results obtained for another state or federal certification or accreditation program to demonstrate compliance with this rule, provided that the proficiency testing samples comply with this rule.
- (4) Analysis of proficiency testing samples.
- (a) The certified laboratory shall analyze proficiency testing samples that include the analyte or parameter group which corresponds to the scope of the laboratory's certification ~~or application for certification~~.
- (b) The certified laboratory may analyze a proficiency testing sample on more than one technology to demonstrate proficiency for an analyte or parameter group and method. For example, a laboratory that ~~applies for~~holds certification for volatile organic compounds by gas chromatography and mass spectrometry may analyze the same proficiency testing sample on both technologies.
- (c) Analysis of proficiency testing samples shall be conducted in accordance with the certified laboratory's SOPs and QAPP identified in paragraph (D) of this rule.
- (d) The ordering and analysis of proficiency testing samples is based on a technology. To comply with this rule, a certified laboratory shall order a proficiency testing sample based on the technology that is representative of the certification. For example, to encompass the scope of a certification for volatile organic compounds, the certified laboratory shall ensure that the proficiency testing sample contains both aromatics and halocarbons.
- (5) Reporting and time lines for proficiency testing studies are as follows:
- (a) Reporting proficiency testing results. A laboratory that is certified ~~or that applies for certification~~ for multiple technologies for an analyte or parameter group shall analyze and report proficiency testing results for each technology, and may use the same proficiency testing sample. For example, the same volatile organic compound proficiency testing sample

may be analyzed on gas chromatography and mass spectrometry with a separate result reported for each technology.

~~(b) Time lines for the analysis of proficiency testing samples. A laboratory that applies for any initial or additional certification under this rule shall analyze the proficiency testing sample within the six months prior to the date the laboratory submits the laboratory's application, except as provided in paragraph (C)(2)(c) of this rule.~~

~~(e)(b) After a laboratory received certification, Ohio EPA may use periodic performance testing to assess a certified laboratory's ability to perform testing under this rule. Upon request, certified laboratories shall analyze proficiency testing samples and shall report the results to Ohio EPA.~~

(6) ~~Provide proficiency~~Proficiency testing reports submitted to Ohio EPA: ~~A laboratory shall submit proficiency testing reports to Ohio EPA as follows~~include the following:

~~(a) Applications for initial or additional certification. A laboratory that applies for initial or additional certification shall submit to Ohio EPA a copy of each required proficiency testing report with the documentation listed in paragraph (D)(1) of this rule.~~

~~(b) Proficiency testing report content. Each proficiency testing report submitted to Ohio EPA shall include of the following:~~

~~(i)(a)~~ (a) Name of proficiency testing provider.

~~(ii)(b)~~ (b) ~~Laboratory~~Certified laboratory name and address.

~~(iii)(c)~~ (c) Opening and closing dates of the proficiency testing study.

~~(iv)(d)~~ (d) Date proficiency testing report was issued.

~~(v)(e)~~ (e) Analyte or parameter group with units, reported value, assigned value, and acceptance limits.

~~(vi)(f)~~ (f) Performance evaluation by proficiency testing provider.

~~(vii)(g)~~ (g) Technology code or method description.

~~(viii)(h)~~ (h) Sample matrix type.

~~(7) Ohio EPA evaluation of proficiency testing results. A laboratory that applies for initial or additional certification or renewal certification shall meet the proficiency testing requirements as follows:~~

~~(a) The proficiency testing samples are acceptable for use based on the criteria provided in this rule for the analyte or parameter group for which the laboratory applies for certification.~~

~~(b) The laboratory obtained acceptable proficiency testing results for each analyte and parameter group using the methods and technologies, including matrix type, for which the laboratory applies for certification.~~

~~(c) The laboratory submitted to Ohio EPA the proficiency testing report for proficiency testing samples analyzed within the time frame provided in paragraph (C) of this rule.~~

~~(d) Ohio EPA may require a laboratory that applies for certification for a performance-based method to analyze proficiency testing samples. These proficiency testing results shall be used to evaluate a laboratory's qualifications to apply for the performance-based method. For example, a laboratory that applies for initial or additional certification for n-Hexane by gas chromatography and mass spectrometry shall provide acceptable proficiency testing results for a non-potable water volatile proficiency testing sample analyzed using the same technology and method.~~

~~(D) Procedures to apply for initial, additional, or renewal certification:~~

~~(1) Applications for initial or additional certification. To apply for initial or additional certification, a laboratory shall submit the following, in the format prescribed by Ohio EPA:~~

~~(a) The completed original application for initial certification or additional certification, including the affidavit, signed by a person authorized to submit the affidavit on behalf of the laboratory, affirming, based upon knowledge, information, and belief, that all information provided in the application and associated documentation is true, accurate, and complete. The applications shall be on the form provided by Ohio EPA.~~

~~(b) The laboratory's QAPP that complies with paragraph (G) of this rule.~~

~~(c) The laboratory's proficiency testing report, in accordance with paragraph (C) of this rule, for the analytes and parameter groups for which the laboratory applies for certification. This requirement does not apply to asbestos;~~

~~or when proficiency testing samples are not required as described in paragraph (C)(2) of this rule.~~

~~(d) The SOPs that comply with paragraph (G) of this rule for each analyte, parameter group, and corresponding method for which the laboratory applies for certification, including, but not limited to, as appropriate, the following:~~

~~(i) SOPs for preparation and analysis of samples.~~

~~(ii) The interpretation of data, such as manual integration of instrument chromatographs.~~

~~(iii) SOPs for cleaning of canisters designed to collect air samples.~~

~~(e) The laboratory's method detection limit study for each analyte and parameter group, and corresponding method, except for the analytes or parameter groups provided under paragraph (B)(1) of this rule. The method detection limit study shall include use of spiked solutions and method blanks. The spiked solutions final spiking concentrations shall not exceed the laboratory's reporting limit. The following information shall be provided for each analyte and parameter group in spreadsheet format:~~

~~(i) Spiking concentration for each analyte or parameter group including units.~~

~~(ii) Method numbers for which the laboratory applies for certification.~~

~~(iii) Extraction, digestion, distillation, preparatory, and analysis dates or date range. The laboratory shall digest, extract, or distill all method detection limit study samples using the procedures included in the SOPs submitted under paragraph (D)(1)(d) of this rule.~~

~~(iv) Individual results of the method detection limit study samples.~~

~~(v) The calculated standard deviation, calculated method detection limit, and reporting limit for each analyte or parameter group.~~

~~(vi) For method detection limits calculated from quarterly method detection limit verification samples, information for the ongoing method detection limit verifications and documentation for the recalculations associated with the ongoing verifications, as appropriate.~~

- ~~(f) For a fixed-base laboratory that applies for initial certification, payment of the non-refundable certification fee required by rule 3745-300-03 of the Administrative Code.~~
  - ~~(g) For a mobile laboratory that applies for initial certification or a certified laboratory that applies for additional certification, the actual costs incurred by Ohio EPA as required by rule 3745-300-03 of the Administrative Code.~~
  - ~~(h) The information listed in paragraph (D)(3) of this rule, if the laboratory applies for certification for asbestos, or paragraph (D)(4) of this rule, if the laboratory applies for certification for a performance-based method, as provided in paragraph (B) of this rule.~~
  - ~~(i) The information listed in paragraph (D)(5) of this rule, if the laboratory applies for certification for the analysis of any constituent other than asbestos that relies on maintaining accreditation in good standing from a NELAP accreditation body recognized by TNI.~~
  - ~~(j) For additional certification requests, Ohio EPA may waive some requirements in paragraph (D)(1) of this rule, depending on the analyte, parameter group, or method the laboratory intends to add, and the current certification held by the laboratory.~~
- ~~(2) Applications for renewal certification. A certified laboratory shall submit to Ohio EPA a complete application, in the format prescribed by Ohio EPA, prior to the expiration date listed on the laboratory's current certificate. If Ohio EPA receives a renewal application less than ninety days prior to the expiration date on the laboratory's current certificate, the result may be a lapse in certification. A certified laboratory that requests certification changes shall comply with paragraph (Q) of this rule. To apply for renewal certification, a laboratory shall submit to Ohio EPA the following:~~
- ~~(a) The original completed application for renewal certification, including the affidavit, signed by a person authorized to submit the affidavit on behalf of the laboratory, affirming, based upon knowledge, information, and belief, that all information provided in the application and associated documentation is true, accurate, and complete. The application shall be on the form provided by Ohio EPA.~~
  - ~~(b) The payment of the non-refundable annual fee required by rule 3745-300-03 of the Administrative Code.~~



~~(c) Notification of any analyte, parameter group, or method the laboratory intends to drop from the laboratory's certification.~~

~~(d) Notification of any analyte, parameter group, or method the laboratory intends to add to the laboratory's certification. The addition of an analyte, parameter group, or method also requires completion of the application for initial or additional certification as required by paragraph (D)(1) of this rule.~~

~~(e) If the laboratory intends for the laboratory's renewal certification to be based on maintaining third-party accreditation in good standing in accordance with paragraph (A)(4) of this rule, the laboratory shall provide the documentation required by paragraphs (D)(3) and (D)(5) of this rule.~~

~~(3) Asbestos certification:~~

~~(a) A laboratory that applies for initial or additional certification for the analysis of asbestos under paragraph (B)(1)(d) of this rule shall submit a copy of a current certificate or other form of documentation issued by an accreditation program listed in paragraph (B)(1)(d) of this rule. The submittal shall include the documentation required by paragraph (D)(1) of this rule, excluding paragraphs (D)(1)(e) and (D)(1)(f) of this rule.~~

~~(b) A certified laboratory that applies for renewal of the laboratory's asbestos certification shall submit a copy of a current certificate or other form of documentation issued by an asbestos accreditation program that documents that the accreditation remains in good standing.~~

~~(4) Performance-based method certifications. A laboratory that applies for initial or additional certification for any performance-based method as provided in paragraph (B)(1)(e) of this rule shall submit the documents listed in paragraph (D)(1) of this rule, and shall submit the following:~~

~~(a) Laboratory check sample data. At a minimum, seven data points for each analyte or parameter group and matrix.~~

~~(b) Quality control limits derived from the data points collected pursuant to paragraph (D)(4)(a) of this rule.~~

~~(c) In addition to compliance with the minimum requirements of paragraph (G) of this rule, any additional minimum requirements that are included in the SOPs used to analyze analytes or parameter groups in order to ensure the laboratory's ability to provide reliable, defensible, and representative data.~~

~~(d) Any other information Ohio EPA deems appropriate.~~

~~(5) Applications that rely on NELAP accreditation:~~

~~(a) A laboratory that applies for initial or additional certification for analysis of any constituent other than asbestos that relies on maintaining accreditation in good standing from a NELAP accreditation body recognized by TNI shall submit the following:~~

~~(i) A copy of the current certificate, or other form of documentation issued by the NELAP accreditation body, that documents that the accreditation remains in good standing.~~

~~(ii) Documentation from the NELAP accreditation body that supports the analytes, parameter groups, and methods for which the laboratory seeks certification.~~

~~(iii) Documentation required by paragraph (D)(1) of this rule, except that information required by paragraphs (D)(1)(c) and (D)(1)(e) of this rule, may be excluded, unless otherwise requested by Ohio EPA.~~

~~(b) A laboratory that applies for renewal certification for analysis of any constituent other than asbestos that relies on maintaining accreditation in good standing from a NELAP accreditation body recognized by TNI shall submit the following:~~

~~(i) A copy of the current certificate, or other form of documentation issued by the NELAP accreditation body, that documents that the accreditation remains in good standing.~~

~~(ii) Documentation from the NELAP accreditation body that supports the analytes, parameter groups, and methods for which the laboratory seeks renewal certification.~~

~~(iii) Documentation required by paragraph (D)(2) of this rule.~~

~~(E) Procedures used to evaluate laboratory applications for initial or additional certification are the following:~~

~~(1) Ohio EPA's review of a laboratory's application for certification begins within thirty days after receipt of a complete application. An application that contains all of the information required by paragraph (D) of this rule is considered complete. Ohio EPA's review includes, but is not limited to, the following:~~

- ~~(a) Review of the laboratory's application to ensure that all necessary components are included.~~
  - ~~(b) For applications that rely on third-party accreditation bodies, review of the documentation required by paragraphs (D)(3) and (D)(5) of this rule that demonstrate that the accreditation is in good standing.~~
  - ~~(c) A detailed review of the information required by paragraph (D) of this rule, such as a laboratory's SOPs, QAPP, method detection limit studies, proficiency testing results, or any other required information, as applicable.~~
  - ~~(d) If applicable, a laboratory audit of the laboratory that applies for initial certification. Ohio EPA may conduct a laboratory audit of a certified laboratory that applies for additional certification. Laboratory audits are conducted in accordance with paragraph (J) of this rule.~~
  - ~~(e) If applicable, review the laboratory's response to correct deficiencies that were identified during a laboratory audit conducted in accordance with paragraph (J) of this rule.~~
  - ~~(f) A determination that the laboratory paid the fee and actual costs incurred by Ohio EPA as established in rule 3745-300-03 of the Administrative Code.~~
- ~~(2) Ohio EPA may request additional information that Ohio EPA deems relevant for consideration of the request for certification, even after Ohio EPA determines the application for certification is complete. The applicant shall provide the requested information in a timely manner. Failure to respond to Ohio EPA's request for additional information may be grounds for denial of the application.~~
- ~~(3) To receive certification, a laboratory shall demonstrate to the director's satisfaction that the laboratory complies with this rule. The laboratory shall possess the ability to provide reliable, defensible, and representative data that complies with the requirements for certified data under this rule.~~
- ~~(4) Unless the request for certification is withdrawn by the applicant, the director shall either approve or deny certification:~~
- ~~(a) If approved, the certification is valid for three years after the date of approval, unless the certification is suspended or revoked.~~
  - ~~(b) If the director denies certification, the director shall provide to the applicant a letter that describes the deficiencies upon which the certification denial is based.~~

~~(F) Procedures used to evaluate certified laboratory applications for renewal certification are the following:~~

- ~~(1) A certified laboratory may renew the laboratory's certification under this rule for only the analytes, parameter groups, and methods for which the laboratory is currently certified, except as provided in paragraph (F)(2)(f) of this rule.~~
- ~~(2) As provided in paragraph (D)(2) of this rule, a certified laboratory shall submit a complete renewal application prior to the expiration date listed on the laboratory's current certificate. If Ohio EPA receives a renewal application less than ninety days prior to the expiration date on the laboratory's current certificate, the result may be a lapse in certification. Ohio EPA's review of the application for renewal certification begins thirty days after receipt of a complete application. An application that contains all of the information required by paragraph (D) of this rule is considered complete. Ohio EPA's review includes, but is not limited to, the following:~~
  - ~~(a) Review of the laboratory's application to ensure that the laboratory is certified for the analytes, parameter groups, and methods listed on the application.~~
  - ~~(b) For certifications that rely on third-party accreditation bodies, review of the documentation required by paragraphs (D)(3) and (D)(5) of this rule that demonstrate that the accreditation remains in good standing.~~
  - ~~(c) In accordance with paragraph (J)(5) of this rule, the information required by paragraph (F)(2)(b) of this rule shall be provided in the laboratory's renewal application.~~
  - ~~(d) Review of the laboratory's response to correct deficiencies that were identified during a laboratory audit conducted in accordance with paragraph (J) of this rule.~~
  - ~~(e) A determination that the laboratory paid the annual fee and actual costs incurred by Ohio EPA for laboratory audits, as established in rule 3745-300-03 of the Administrative Code.~~
  - ~~(f) Review any request for additional analytes, parameter groups, or methods the laboratory intends to add to the laboratory's certification, in accordance with paragraphs (D) and (E) of this rule.~~
  - ~~(g) Ohio EPA may approve renewal of a laboratory's certification without the inclusion of the requested additional analytes, parameter groups, or methods. Ohio EPA's review of the requested additional analytes,~~

~~parameter groups, or methods shall continue and can be added to the certification at a later date if approved by the director.~~

~~(3) Ohio EPA may request additional information that Ohio EPA deems relevant for consideration of the request for renewal certification, even after Ohio EPA determines the application is complete.~~

~~(4) The director may deny a laboratory's application for renewal certification if the director determines that the laboratory failed to comply with any of the requirements of this rule.~~

~~(5) Renewal of a laboratory's certification past the expiration date on the certificate shall be addressed as follows:~~

~~(a) The director may choose to delay renewal of a laboratory's certification past the expiration date on the certificate if deficiencies that were identified during a laboratory audit remain unresolved. Renewal of a laboratory's certification may be approved after the expiration date and after resolution of any outstanding deficiencies.~~

~~(b) The director may choose to delay renewal of a laboratory's certification past the expiration date on the certificate if the renewal application is submitted less than ninety days prior to the expiration date on the certificate and Ohio EPA did not have adequate time to process the renewal application.~~

~~(c) If renewal of a laboratory's certification is delayed past the expiration date on the certificate for reasons identified in paragraph (F)(5)(a) or (F)(5)(b) of this rule, the laboratory is not required to submit an initial application to obtain certification renewal unless the director ultimately denies the request for renewal.~~

~~(G)~~(D) Minimum requirements for the QAPP and SOPs. Each certified laboratory shall have a written QAPP and written SOPs for every method and procedure used by the certified laboratory to produce certified data, and shall keep these documents at the certified laboratory for use by laboratory personnel. The QAPP and SOPs shall comply with paragraph (A)(2)(c)(iii) of this rule and the methods published or endorsed by U.S. EPA, except as specified in this rule.

(1) At a minimum, the QAPP shall include provisions that require the certified laboratory reports issued in compliance with this chapter to contain the following:

- (a) An accompanying affidavit that complies with paragraph (P) of rule 3745-300-13 of the Administrative Code.
- (b) At a minimum, a case narrative that includes the following:
  - (i) Discussion of any issues that impact the quality of the data with sample receipt, sample process, or sample analysis.
  - (ii) Discussion of any potential bias in sample results, as appropriate.
- (c) A report of the analytical results determined by the methods indicated on the certified laboratory's certificate.
- (d) A report of the quality control sample results and indication of whether applicable criteria were met.
- (e) A copy of the chain of custody that accompanied the samples to the certified laboratory.
- (f) At a minimum, a copy of the sample receipt form that records the following:
  - (i) Temperature of samples upon receipt by the certified laboratory, if the method requires monitoring.
  - (ii) Date and time the samples were received by the certified laboratory.
  - (iii) Notation of whether holding times specified in the SOPs for sampling preparation and analysis were exceeded.
  - (iv) Any exceptions or special instructions for sample handling, analysis, or reporting.
  - (v) Notation of whether samples include appropriate labeling, such as the date and time of sample collection and a sample identification notation.
  - (vi) Notation of whether sample containers contain appropriate sample preservatives, if applicable.
  - (vii) Description of the general condition of sample containers, including whether any containers were damaged or improperly filled.
- (2) Data interpretation and reporting requirements. To ensure quality data interpretation and quality reporting of certified laboratory results, the QAPP or SOPs shall include, at a minimum, the following:

- (a) SOPs shall include information regarding how the qualitative and quantitative analyses are performed and interpreted by the analysts.
- (b) ~~Laboratories~~ Certified laboratories shall report solid samples on a dry weight basis, unless otherwise dictated by the method or when inadequate sample volume limits the laboratory's ability to determine dry weight. The moisture content also shall be reported, when applicable. SOPs shall include processes and calculations for this purpose.
- (c) Prior to issuance of the certified laboratory reports as certified data, certified laboratories shall complete peer review of applicable calibration, calibration verification, quality assurance, and quality control results, as well as sample laboratory results.
- (d) SOPs for methods that include manual integration of chromatographic data to ensure that manual integrations are performed in a consistent and technically justifiable manner for standards, samples, and quality control solutions. The SOPs shall contain the following minimum requirements:
  - (i) Examples of proper and improper manual integrations.
  - (ii) Procedures to manually adjust data to ensure that obvious inaccuracies in automated integrations are corrected and that reported results accurately reflect the information contained in the analytical data.
  - (iii) Both original and modified chromatograms, including the chromatographic peaks and baselines, shall be peer reviewed.
  - (iv) The certified laboratory shall retain copies of the original and modified chromatograms. These shall be made available to Ohio EPA, or other interested parties, upon request.
- (e) As appropriate, the QAPP or SOPs shall contain a provision that the certified laboratory shall narrate potential bias in sample results if the requirements in the SOP cannot be met, including, but not limited to, the following:
  - (i) Failure to meet required holding times.
  - (ii) Improper sample preservation.
  - (iii) Inability to perform corrective actions for calibration, calibration verification, or quality control outliers.
  - (iv) Insufficient sample amount.

(f) For dual column analysis, the following apply:

- (i) Results shall only be reported if the analyte is detected in both columns.
- (ii) If the certified laboratory does not designate a primary column, then the higher result shall be reported unless a matrix interference is causing the elevated concentration.
- (iii) If the certified laboratory designates a primary column, then the results from the primary column shall be reported unless matrix interference is present.
- (iv) In cases where matrix interference is present, the lower result, or both results, shall be included in the analytical report.

(g) Analytes reported as certified data shall meet all calibration, calibration verification, and quality control criteria. If analytes do not meet criteria, then the analytes shall not be reported as certified data except as provided in paragraph ~~(G)(2)(e)(iii)~~(D)(2)(e)(iii) or ~~(G)(4)(e)(D)(4)(c)~~ of this rule. This applies to all analytes including, but not limited to, the following:

- (i) Analytes traditionally known as poor performers or common laboratory contaminants.
- (ii) Analytes that may meet method criteria through provisions of marginal exceedance.

(h) ~~Laboratories~~Certified laboratories shall not provide certified data for tentatively identified compounds.

(i) As appropriate, the QAPP or SOPs shall require the certified laboratory to report as certified data only for analytes specified in the method, unless the laboratory's certification specifically allows reporting of additional analytes for the method. If a certified laboratory report includes analytes that are not specified in the method and are not specifically allowed by the laboratory's certification, the laboratory shall identify the analytes as exceptions to the certified data attested to in the affidavit that is issued with the certified laboratory report.

(j) If a certified laboratory's certification relies on maintaining third-party accreditation in good standing, the laboratory shall not report certified data under this rule when the relied-upon third-party accreditation is not in good standing with the issuing accreditation body.



(k) Samples for metals analysis that are filtered prior to digestion shall be reported as dissolved metals. Unfiltered samples or samples that are filtered after digestion may be reported as total metals.

(3) Instrument calibration requirements. To ensure the quality of the data to be analyzed, the QAPP or SOPs shall comply with the approved method and shall include the following minimum instrument calibration requirements:

(a) At a minimum, SOPs shall include all of the following calibration requirements:

(i) Information about the frequency of initial calibration and calibration verification.

(ii) Criteria to evaluate results of initial calibration and calibration verification, including calibration blanks.

(iii) Without exception, corrective actions the analyst shall follow for initial calibration, calibration verification, and calibration blanks when these standards do not meet the criteria required by paragraph (G)(3)(a)(ii) of this rule, as applicable.

(iv) A prohibition against forcing the initial calibration curve through the origin.

(v) A prohibition against use of the zero point in an initial calibration curve, unless specified by the method or there are instrument limitations.

(vi) Nonlinear initial calibrations (e.g., quadratic calibration model) may be used but are restricted to compounds that have historically exhibited a nonlinear response.

(vii) Nonlinear initial calibration models shall not be used to extend the calibration range for compounds that normally exhibit a linear response.

(viii) The lowest standard concentration used for initial calibration shall be at or below the certified laboratory's practical quantitation limit.

(b) Standard operation procedures shall specify initial calibration models as follows:

- (i) For quadratic calibration models, a minimum number of standard concentrations is six.
    - (ii) Unless otherwise specified by the method, for all other calibration models, the minimum number of standard concentrations is five.
    - (iii) If more than the minimum number of standard concentrations is used, only the lowest or highest standard concentrations may be omitted from the calibration model as long as the minimum number of standard concentrations from paragraph (G)(3)(b)(i) or (G)(3)(b)(ii) of this rule are retained for use.
  - (c) Calibration solutions shall meet the following minimum requirements:
    - (i) Unless the method allows for use of a different solution, the same solution used to prepare the initial calibration standards shall be used to prepare the continuing calibration verification standard.
    - (ii) Unless use of the same solution is specifically allowed by the method, when an initial calibration verification standard is included in a method, a different solution other than the one used to prepare the calibration curve shall be used.
    - (iii) A prohibition on the use of expired standards or spiking solutions, except for the analysis of air samples.
    - (iv) For analysis of air samples, expired standards or spiking solutions may be used if revalidated against an unexpired reference material or if recertified by the vendor. The certified laboratory shall keep on file the documentation of such revalidation or recertification.
    - (v) Retention time marker solutions shall be used for petroleum analysis. These solutions shall be analyzed before the instrument is calibrated.
  - (d) For all dual column analysis, the calibration criteria required by paragraphs (G)(3)(a) to (G)(3)(c) of this rule shall be met on the column used to report data as certified.
- (4) Quality control. To ensure reliable data, the QAPP or SOPs shall comply with the approved method and shall include the following:
- (a) Identify all reagents, standards, and spiking solutions to be used in sample preparation and analysis.

- (b) Define criteria for the quality control solutions or provide reference as to where the information is available. When criteria are not met for all associated quality control solutions, including but not limited to the method blank and spiked laboratory control solutions, or when surrogate recoveries or internal standard recoveries fail to meet the defined criteria in samples or quality control solutions, corrective actions shall occur, except as provided in paragraph (G)(2)(e)(iii) or (G)(4)(c) of this rule. Upon re-analysis of the failed quality control solution once, appropriate corrective actions may include re-preparation of the entire batch, including re-digestion, re-distillation, or re-extraction.
- (c) When surrogates, internal standards, method blanks, calibration verification solutions, or spiked laboratory control solutions are biased high and the associated samples are non-detect for the outlying analytes, corrective actions need not be taken, and reporting of certified data is acceptable.
- (d) Include procedures to prepare initial, continuing, and calibration verification standard solutions and calibration blank solutions.
- (e) Include procedures to prepare samples, including the weight or volume of the media.
- (f) Calibration verification solutions shall contain all target analytes, except for the analysis of polychlorinated biphenyls. For polychlorinated biphenyl analysis, a spike mix that contains aroclors 1016 and 1260 is sufficient to represent the range of aroclors specified in the method.
- (g) SOPs shall include information regarding quality control solutions, including all of the following:
  - (i) Frequency of analysis.
  - (ii) Weight or volume of the media used.
  - (iii) Criteria used to evaluate results.
- (h) Quality control solutions shall be treated in the same manner as samples, including handling, preservation, preparation, and equipment use.
- (i) All detections in the method blank equal to or greater than the reporting limit require corrective actions as specified in paragraph (G)(4)(b) of this rule.

- (j) All calibration verification standards required by the method and evaluated for per cent recovery, as defined by the methods, shall be reported based on the true value of the standard.
  - (k) To report dual column analysis data as certified, criteria required by paragraph (G)(4)(b) of this rule for quality control solutions shall be met on the column used.
- (5) Preparation of samples. To ensure the quality of the samples to be analyzed, the QAPP or SOPs shall comply with the approved method and shall include the following minimum requirements for preparation of samples:
- (a) Identify requirements for sample preservation, storage, holding times (including beginning and ending times), and the proper sample collection container, including the following:
    - (i) If requirements from the approved method do not specify requirements for sample preservation, storage, holding times, and the proper sample collection container, the certified laboratory shall include such requirements in the QAPP or SOPs, as applicable.
    - (ii) Holding times described in the approved method shall not be increased by alternate preservation techniques or by alternate demonstrations.
    - (iii) Air samples from "Tedlar" bags shall not be reported as certified data. The transfer of air samples from "Tedlar" bags to a canister for air analysis shall be prohibited.
  - (b) Identify equipment used for sample preparation, and identify diluents used for all dilutions.
  - (c) Identify requirements to be followed for holding times for extracted, digested, or distilled samples, and the storage requirements and the proper storage containers for each.
  - (d) Include details to ensure that sample preparation specifications for digestion, distillation, clean-up, and extraction shall meet the final volume for analysis, either volumetrically measured or otherwise verified to meet volumetric specifications.
  - (e) If the preparatory batch standards (i.e., initial calibration or calibration verification standards) for digestion, distillation, or extraction are processed with the sample and the batch standards fail either quality

control criteria or calibration criteria, upon re-analysis of the failed quality control solutions or calibration solutions once, the entire batch shall be prepared again. The corrective action shall occur except as provided in paragraph (G)(2)(e)(iii) or (G)(4)(c) of this rule.

- (f) Analysis of non-aqueous samples for volatile organic compounds shall utilize a closed-system purge-and-trap process consistent with "SW-846" method 5035 or method 5035A, unless the analytical method pre-dates December 1996.
  - (g) For organic extraction methods that include instruction for drying solid matrix samples, surrogates or any other spiking compounds shall be added with the drying agent and into the homogenous mixture of sample or quality control sample. Surrogates or any other spiking compounds may not be added via the extraction solvent to samples and the associated quality control solutions.
- (6) Analysis of samples. To ensure the quality of the samples to be analyzed, the QAPP or SOPs shall comply with the approved method and shall include the following minimum requirements:
- (a) Identify equipment and instrumentation used for analysis of samples.
  - (b) For organic analysis methods, samples with failing internal standard or surrogate criteria require re-analysis of the samples. Dilutions shall be made only if matrix interference is present. Dilutions shall not be made for the sole purpose to meet, or attempt to meet, internal standard or surrogate criteria.
  - (c) When mass spectrometry methods are used, designate the primary and secondary ions used for identification of compounds.
  - (d) ~~Laboratories~~ Certified laboratories that report selective ion monitoring data shall include operating procedures for selective ion monitoring analysis within the associated SOP.
- (7) At a minimum, the written QAPP shall meet any necessary requirements in paragraphs (G)(1) to (G)(6) of this rule and shall include provisions that describe the following:
- (a) Procedures that require proper citation and use of method numbers, including the appropriate revision suffix, if applicable, shall be consistently identified and included on instrument printouts, ~~log books~~ logbooks, analytical reports, and any other laboratory documents.

All method numbers plus the revision suffix, if applicable, shall correlate with the method number and revision suffix on the certificate issued under this rule.

- (b) SOPs requirements shall be reviewed for potential updates at least once every two years.
- (c) Describe storage requirements of samples during all phases of analysis.
- (d) Provide details for the expiration of stock standards, solutions, and all working standards and solutions, or cross-reference to the location of that information.
- (e) Identify how the certified laboratory shall establish quality control acceptance limits for the analysis of samples.
- (f) Identify how the certified laboratory shall manage waste in accordance with all applicable federal, state, and local requirements.
- (g) Include a provision to address initial and periodic training for personnel in sample receipt, preparation, analysis, and data interpretation and review:
  - (i) ~~Laboratory~~ Certified laboratory personnel shall review the QAPP and applicable SOPs which relate to the tasks associated with laboratory personnel's duties at the laboratory. Laboratory personnel shall sign documentation that acknowledges review of the documents.
  - (ii) The certified laboratory shall maintain training records and documentation that the laboratory personnel reviewed the appropriate documents.

~~(H)~~(E) Standards of performance and conduct to maintain certification. To maintain certification under this rule, a certified laboratory shall do the following:

- (1) Produce results as certified data pursuant to paragraph (A) of this rule when the certified laboratory is requested to provide data in support of a voluntary action under this chapter or Chapter 3746. of the Revised Code.
- (2) Disclose when the certified laboratory does not hold certification for a requested analyte, parameter group, or method included in a request for analysis. After this disclosure, if the requester still requests the analysis to be performed, the certified laboratory shall specify in the affidavit that accompanies the analytical report the analytes, parameter groups, or methods for which the laboratory is not providing certified data.

- (3) Comply with the methods for which the laboratory is certified.
- (4) Notify Ohio EPA in writing within thirty days after any of the following:
  - (a) A change in management personnel or quality assurance personnel.
  - (b) A change in certified laboratory operations that affects the laboratory's ability to perform analyses pursuant to this rule.
  - (c) A change in name or ownership of the certified laboratory.
  - (d) A relocation of the certified laboratory, in whole or in part, or a change of address of the laboratory.
  - (e) Anything that results in the loss of accreditation, temporarily or permanently, that is relied upon for certification under paragraph (A)(4) of this rule for any analytes, parameter groups, or methods for which the certified laboratory holds certification.
- (5) Perform acceptably on each certified laboratory audit conducted pursuant to this rule, and address in a timely manner the deficiencies that are identified by Ohio EPA.
- (6) Perform analyses in accordance with the certified laboratory's QAPP and SOPs that are consistent with paragraph ~~(G)~~(D) of this rule when the laboratory produces certified data.
- (7) Disclose when the certified laboratory cannot quantify at or below an applicable standard specified in a request for analysis as follows:
  - (a) The certified laboratory shall provide certified data that detects chemicals of concern in environmental media at or below the applicable standards, unless the certified laboratory discloses that the laboratory is incapable of achieving an applicable standard under the laboratory's certification.
  - (b) Unless the certified laboratory is otherwise informed of the need for a lower applicable standard, the certified laboratory shall quantify at or below the single chemical generic numerical standards in appendices A and B to rule 3745-300-08 of the Administrative Code.
  - (c) If a certified laboratory that performs analyses in support of a no further action letter but is not capable of detecting the chemicals of concern in environmental media at or below the applicable standards, the ~~certified~~ laboratory shall notify, in writing, the person who requests the analysis

that the laboratory cannot quantify at or below an applicable standard using a method for which the laboratory is currently certified. The certified laboratory may disclose this information in the analytical report or by other means.

- (8) Not falsify any information on any application, SOP, QAPP, or any proficiency testing result, or any certified data used in support of a no further action letter, or any other submittal to Ohio EPA.
- (9) Not perform analyses in support of a request for a no further action letter for which the certified laboratory has a conflict of interest.
- (10) Provide Ohio EPA access to the certified laboratory's facility and documents, data, or information related to any voluntary action, or laboratory certification, in order to determine compliance with this chapter and Chapter 3746. of the Revised Code.
- (11) Promptly and completely respond to all document and data requests made by the director under this chapter and Chapter 3746. of the Revised Code.
- ~~(12) Pay all costs and fees required by rule 3745-300-03 of the Administrative Code.~~
- ~~(13)~~(12) As required by this rule and rule 3745-300-13 of the Administrative Code, submit by affidavit all information, data, documents, and reports for use in support of a request for a no further action letter.
- ~~(14)~~(13) Conduct laboratory operations in compliance with all applicable federal and state laws, regulations and rules, including but not limited to, requirements for management and disposal of samples that meet the definition of "hazardous waste" in rule 3745-51-03 of the Administrative Code and other hazardous wastes stored on property in compliance with Chapters 3745-52 and 3745-65 of the Administrative Code.
- ~~(15)~~(14) Maintain in good standing any third-party accreditations relied upon for certification.
- ~~(F) Procedures for submittals under this rule are the following:~~
- ~~(1)~~(F) All applications and documentation provided to Ohio EPA in accordance with this rule shall be submitted to Ohio EPA in a format prescribed by Ohio EPA.
- ~~(2) Payment of fees or costs incurred by Ohio EPA under this rule shall be paid in accordance with paragraph (G) of rule 3745-300-03 of the Administrative Code.~~



~~(F)~~(G) Laboratory audits.

(1) At Ohio EPA's discretion, Ohio EPA shall audit certified laboratories to determine compliance with this rule ~~or to evaluate a laboratory's qualifications to become certified under this rule~~. Laboratory audits may consist of a review of either documents or other information submitted to Ohio EPA. Laboratory audits may include an on-site visit to the laboratory to review the laboratory's operations and to evaluate the laboratory's facility and personnel.

~~(a) During a laboratory audit, Ohio EPA shall evaluate a laboratory's qualifications to become certified to perform analyses in accordance with this rule, at either of the following occurrences:~~

~~(i) When a laboratory applies for initial certification.~~

~~(ii) During review of a certified laboratory's application for additional certification, renewal certification, or if the laboratory relocates the laboratory facility.~~

~~(b)~~(a) At any time and for any purpose, Ohio EPA shall evaluate a certified laboratory to determine a laboratory's compliance with the laboratory's obligations as a certified laboratory under this rule and the laboratory's ability to produce certified data in accordance with this rule. Ohio EPA may conduct this evaluation for any reason, including but not limited to, the following:

(i) When there is a change in laboratory personnel, management personnel, operational procedures, or other functional issue.

~~(ii) To evaluate a laboratory prior to the renewal of the laboratory's certification.~~

~~(iii)~~(ii) If Ohio EPA receives a complaint regarding the certified laboratory's performance.

~~(c) Ohio EPA may conduct audits of mobile laboratories while the laboratory is either mobilized on a project or at the laboratory's headquarters. Ohio EPA may conduct an audit of the location where the data undergoes quality assurance review, if the quality assurance review is not performed in the mobile laboratory.~~

(2) In order to determine compliance with this rule, an audit of a certified laboratory may include, but is not limited to, the following:

- (a) Review of the certified laboratory's SOPs, QAPP, analytical reports and associated data, affidavits, and other documents.
  - (b) On-site visit and review of the certified laboratory's sample receiving area, waste storage area, analytical testing areas, and other pertinent areas of the certified laboratory. During the visit, Ohio EPA may review the following:
    - (i) ~~Log books~~ Logbooks.
    - (ii) Sample storage procedures.
    - (iii) Instrumentation set-up and software programs.
    - (iv) Equipment calibration and maintenance procedures.
    - (v) Data review procedures.
    - (vi) Record filing and storage.
    - (vii) Project management and communication procedures.
    - (viii) Data reporting procedures.
    - (ix) Record files.
    - (x) Any other information or area of the laboratory deemed appropriate by Ohio EPA.
  - (c) Interviews of laboratory personnel to determine knowledge of personnel who perform the analyses.
  - (d) Review of any other documentation that Ohio EPA considers appropriate, including, if applicable, review of any documents related to third-party accreditation relied upon for certification.
  - (e) Review of performance testing results, as required by paragraph (C) of this rule.
  - (f) Evaluation of whether any violations of this rule are material in a laboratory's ability to report reliable, defensible, and representative data that satisfies the requirements for certified data under this rule.
- (3) Ohio EPA shall prepare an audit report that indicates any deficiencies that are identified during the audit that require corrective actions by the laboratory.

Failure to address the deficiencies in a timely manner may result in suspension or revocation of a laboratory's certification, ~~denial of a request for initial or additional certification, or denial of a laboratory's request to renew the laboratory's certification.~~

- (4) If Ohio EPA identifies any deficiencies during a certified laboratory audit, the laboratory shall correct those deficiencies to Ohio EPA's satisfaction ~~before receipt of an initial, additional, or renewal certification.~~
- ~~(5) If the current certification was not previously based on third-party accreditation and the laboratory elects to provide documentation of third-party accreditation during a laboratory audit, the laboratory shall include in the laboratory's renewal application documentation that demonstrates that the accreditation remains in good standing for the purpose of the laboratory's renewal certification.~~
- ~~(6) Pursuant to rule 3745-300-03 of the Administrative Code, Ohio EPA shall recover Ohio EPA's actual costs to conduct audits.~~

~~(K)~~(H) Laboratory certifications:

- ~~(1) After completion of the requirements in this rule, the director shall provide to the laboratory a certificate that identifies the analytes, parameter groups, or methods for which the laboratory may perform analyses. The certification, issued by the director, may limit the analysis of certain environmental media.~~
- (2) The certification automatically expires three years after the date of issuance, unless the laboratory's certification is suspended, or revoked, ~~or renewed~~ prior to the certification's expiration.
- ~~(3) The certification expiration date for additional certification is the same as that of the laboratory's initial certification or renewal certification, as applicable.~~
- ~~(4)~~(3) The certification applies only to the individual certified laboratory facility identified in the certificate. ~~Entities that own or operate multiple laboratories shall apply for a separate certification for each laboratory facility.~~
- ~~(5) If a laboratory changes location, the laboratory shall reapply for certification as an initial application to continue the laboratory's certification.~~
- ~~(6)~~(4) The effective certificate shall be displayed in a prominent location in the certified laboratory.
- ~~(7)~~(5) If a laboratory's certification is revised, the revised certification supersedes any prior certification.

~~(L)~~(I) Retention of documents and data.

- (1) A certified laboratory shall maintain all documents and data prepared or acquired in connection with a voluntary action for a period of at least ten years after the date that the laboratory's analyses were submitted to a certified professional or volunteer.
- (2) The certified laboratory may retain the documents and data using any available technology, provided that the laboratory can readily retrieve the documents and data in legible condition when retrieval is requested by Ohio EPA during the ten-year retention period.
- (3) If a certified laboratory does not intend to retain such documents and data after ten years, the laboratory shall notify Ohio EPA of such intent, and shall provide Ohio EPA the opportunity to obtain the documents and data.
- (4) The documents and data shall be retained until the notice described in paragraph ~~(L)~~(3)(I)(3) of this rule is provided to Ohio EPA, and Ohio EPA notifies the certified laboratory in writing whether Ohio EPA shall obtain the documents and data.
- (5) Notification of Ohio EPA pursuant to this paragraph is not required as long as a certified laboratory continues to retain all documents and data.
- (6) Failure to provide documents or data requested by Ohio EPA may result in permanent revocation of the laboratory's certification in accordance with paragraph ~~(L)~~(3)(L)(3) of this rule.

~~(M)~~(J) Out-of-state laboratories.

- (1) As a condition of certification under this rule, certified laboratories, ~~or companies that own mobile laboratories,~~ located outside the state of Ohio consent to service of process and to personal jurisdiction of any Ohio court or the Ohio environmental review appeals commission in proceedings that adjudicate any rights or obligations under this chapter and Chapter 3746. of the Revised Code, or in which the cause of action involves, in whole or in part, the laboratory's performance under this chapter or Chapter 3746. of the Revised Code.
- (2) Out-of-state certified laboratories consent to Ohio EPA's right of entry for inspection or investigation, and to the service of administrative warrants, inspection warrants, or other appropriate search warrants as a condition of certification under this rule.

~~(N)(K)~~ Appeal of certification determinations. The ~~issuance,~~ denial, suspension, or revocation of any laboratory certification is a final action of the director, which is subject to the procedure for appeal provided in Chapter 3745. of the Revised Code.

~~(O)(L)~~ Revocation or suspension of certification.

- (1) The director may revoke or suspend a laboratory's certification issued pursuant to this rule, for a period to be determined by the director, upon finding that a laboratory failed to comply with paragraph ~~(H)(E)~~ of this rule, except as provided in paragraphs ~~(O)(2)(L)(2)~~ and ~~(O)(3)(L)(3)~~ of this rule.
- (2) The director may permanently revoke a laboratory's certification if the laboratory falsifies any information in connection with the laboratory's certification or any voluntary action, in violation of paragraph ~~(H)(8)(E)(8)~~ of this rule.
- (3) The director shall permanently revoke a laboratory's certification if the laboratory does not comply with a request for documents and data, in violation of paragraph ~~(H)(H)(E)(11)~~ of this rule.
- (4) If a laboratory's certification relies upon maintaining third-party accreditation in good standing, the director may revoke or suspend a laboratory's certification upon finding that the laboratory's third-party accreditation is no longer maintained in good standing.
- (5) Upon revocation or suspension of certification, the laboratory shall promptly return to Ohio EPA the certificate to which the revocation or suspension applies.

~~(P)(M)~~ Procedure to request reinstatement of certification.

- (1) Procedures to request reinstatement of certification after a suspension period are as follows:
  - (a) A suspended laboratory may request to reinstate the laboratory's certification for a suspension issued because of the laboratory's failure to comply with paragraphs ~~(H)(4)(E)(1)~~ to ~~(H)(7)(E)(7)~~, ~~(H)(9)(E)(9)~~ to ~~(H)(10)(E)(10)~~, and ~~(H)(12)(E)(12)~~ to ~~(H)(14)(E)(14)~~ of this rule.
  - (b) After the suspension period, the laboratory may request reinstatement of the laboratory's certification by providing ~~the following:~~ a
    - ~~(i)~~ A written request for reinstatement and any documentation to demonstrate that the laboratory resolved all findings which resulted in the suspension.

~~(ii) Information consistent with requirements for a renewal certification as required by paragraph (D) of this rule. Ohio EPA's evaluation of the information submitted shall be consistent with paragraph (F) of this rule.~~

(2) Pursuant to rule 3745-300-03 of the Administrative Code, the certified laboratory is required to pay any costs incurred by Ohio EPA to review requests for reinstatement.

~~(3) During a laboratory's suspension period, a laboratory may request adjustments to the laboratory's suspended certification so that the laboratory's reinstated certification reflects new analytes, parameter groups, or methods after completion of the laboratory's suspension period. Adjustments are subject to paragraphs (D), (E), (F), and (Q) of this rule.~~

~~(4)~~(3) If Ohio EPA conducts a certified laboratory audit of the laboratory as a result of paragraph (P)(3) of this rule, the laboratory shall do one of the following:

(a) Perform acceptably on the audit.

(b) Prior to reinstatement of the laboratory's certification, shall correct any deficiencies that are identified during the audit. Laboratory audits shall be conducted consistent with paragraph ~~(F)~~(G) of this rule.

~~(5) If a laboratory's certification renewal date occurs during a laboratory's suspension period, the laboratory need not submit a request for renewal in accordance with paragraph (D) of this rule. Instead, the laboratory shall comply with this paragraph for reinstatement of the laboratory's certification.~~

~~(6)~~(4) A ~~reinstated~~ certification shall expire ~~one year from the date of the conclusion of the suspension period. The laboratory may renew the laboratory's certification in compliance with paragraph (D) of this rule~~ on the date listed in the original issuance.

~~(Q)~~(N) Procedures to request modifications to certifications.

(1) A laboratory shall request a modification to the laboratory's certificate to reflect changes in company name or address; ~~or to update or remove methods from a certificate. Such a request shall be made on the laboratory's renewal application, or through use of a cover letter when making a request for a modification during a non-renewal period.~~

~~(2) In accordance with rule 3745-300-03 of the Administrative Code, the laboratory is required to pay any costs incurred by Ohio EPA to review a request for modification of the laboratory's certification.~~

~~(R) Recertification following expiration or revocation of certification.~~

~~(1) A laboratory that seeks recertification after a certification expires or was revoked shall comply with the requirements for initial certification provided in paragraphs (D) and (E) of this rule.~~

~~(2) Ohio EPA may waive any portion of these requirements, and may require an alternate recertification process.~~

Effective:

Five Year Review (FYR) Dates: 10/17/2024

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Certification

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Date

Promulgated Under: 119.03  
Statutory Authority: 3746.04  
Rule Amplifies: 3746.18, 3746.19, 3746.31  
Prior Effective Dates: 12/29/1995, 12/16/1996, 03/04/2002, 10/14/2006,  
03/01/2009, 04/23/2012, 08/01/2014, 10/17/2019,  
01/31/2022



3745-300-05

**Certified professionals.**

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-300-15 of the Administrative Code titled "Incorporation by reference - voluntary action program."]

**(A) Criteria for certification.**

- (1) Individuals applying for certification shall provide such information and evidence as Ohio EPA deems reasonably necessary to enable the director to determine that the individual meets the qualifications provided in this rule.
- (2) The director shall issue a certificate to an individual upon a demonstration, to the director's satisfaction, of the following:
  - (a) The individual has earned a minimum of a bachelor's degree from a recognized educational institution in biology, chemistry, environmental sciences, geology, hydrogeology, toxicology, scientific subdisciplines of public health or hazardous waste management, appropriate areas of engineering, or in a curriculum determined to be equivalent by the director. The charter or accreditation of the recognized educational institution shall have been effective as of the date the individual's degree was granted.
  - (b) The individual possesses eight years of relevant professional experience three of which are supervisory or project management related. Such experience shall consist of an average minimum of twenty hours per week. Relevant professional experience that consists of less than an average minimum of twenty hours per week shall be applied toward the satisfaction of this requirement on a pro rata basis.
  - (c) The individual possesses the professional competence and knowledge to perform the tasks required of a certified professional. This determination shall be made by a review of evidence including, but not limited to, references, Ohio EPA comments on past work submitted to Ohio EPA, the application form, and other sources the director deems appropriate. To make this determination, the director ~~shall~~may consider the following:
    - (i) Proficiency of the individual.
    - (ii) Duration of the individual's relevant employment.

- (iii) Previous performance of the individual with regard to various investigative methods used, including but not limited to, whether such experience includes work at sites where subsurface investigations that involved hazardous substances or petroleum occurred.
  - (iv) Previous performance of the individual with regard to past performance working with Ohio EPA.
  - (v) Previous performance of the individual with regard to the various types of remedial systems designed and monitored.
  - (vi) Performance of the individual with regard to risk and exposure assessments.
  - (vii) Performance of the individual with regard to evaluating laboratory data quality and sufficiency to conduct a voluntary action.
  - (viii) Number of individuals and disciplines of other professionals supervised or coordinated by the individual.
  - (ix) Nature of conclusions reached and recommendations and opinions presented by the individual.
  - (x) Any other factors the director deems relevant.
- (d) The individual completed initial certification training in accordance with this rule. Each individual who applies for initial certification shall complete initial certification training by attending all sessions of the initial certification training. Initial certification training shall consist of at least eight hours of instruction pertaining to the technical implementation of Chapter 3746. of the Revised Code, this chapter, and the standards of conduct a certified professional shall exercise when professional services are provided under Chapter 3746. of the Revised Code and this chapter.
- (i) The training may be conducted by Ohio EPA or a third-party in a manner and using materials approved by Ohio EPA. Ohio EPA shall review, and, with or without modification, shall approve the training syllabi, and the scope and content of training and training materials used by a third party prior to use at an initial certification training.
  - (ii) Ohio EPA or the third party who conducts the initial certification training may charge each person who registers for or who attends

the initial certification training a non-refundable fee, established at a level sufficient to defray the actual costs of the training. The fee amount is subject to Ohio EPA approval.

- (iii) Upon the conclusion of each initial certification training, Ohio EPA or the third-party shall provide each person who completed the initial certification training a certificate of completion. The third party shall submit to Ohio EPA the name and contact information of each person who completed the initial certification training.
  - (iv) Initial certification training is valid for one year after the date the individual completes the initial certification training as provided in the certificate of completion. If the individual who applies for initial certification does not submit the application within one year after completion of the initial certification training, the individual shall re-take the training.
  - (e) Possesses good moral character. Evidence of an inability to comply with the ethical responsibilities required of a certified professional with good moral character includes, but is not limited to, acts that involve dishonesty, fraud, or deceit.
- (3) An individual who has earned advanced degrees from recognized educational institutions in addition to those required to meet the minimum educational requirements may request that the director credit that additional education toward the requirements for relevant professional experience if the individual can demonstrate to the director's satisfaction that the advanced degree constitutes relevant experience. Credit may be granted in accordance with the following:
- (a) One year credit for each relevant master's degree.
  - (b) Two years credit for a relevant doctorate degree.
  - (c) A maximum of two years credit may be granted for such additional education.
- (4) Certification shall be denied if the director finds the following:
- (a) The individual does not meet the requirements provided in paragraph (A) (2) of this rule.
  - (b) The individual committed an act that involves dishonesty, fraud, or deceit, or otherwise lacks sufficient honesty or integrity.

(c) The individual fails to pay the fees and costs as provided in this chapter.

(5) An individual may be denied certification if the director finds that the individual is or was subject to certification or license denial, revocation, or suspension in this state, another state, or under a federal program.

(6) Except as provided in paragraphs (A)(4) and (A)(5) of this rule, an individual who meets the qualifications of paragraph (A)(2) of this rule and pays the application fee shall be issued a certificate.

(B) Procedure for initial certification.

(1) An individual who applies for certification shall submit to Ohio EPA a complete and current version of an initial application in a manner prescribed by Ohio EPA.

(2) The individual shall submit full payment of the non-refundable fee, as described in paragraph (B)(1) of rule 3745-300-03 of the Administrative Code.

(3) The individual shall submit official transcripts from the appropriate educational institutions to verify that the educational qualifications specified in paragraphs (A)(2)(a) and (A)(3) of this rule are met.

(4) The individual shall submit a certificate of completion that demonstrates the individual's completion of the initial certification training in accordance with paragraph (A)(2)(d) of this rule.

(5) All documents and information submitted to Ohio EPA pursuant to this paragraph shall be accompanied by an affidavit from the individual affirming that upon knowledge, information, and belief, all information submitted in support of the individual's certification application is true, accurate, and complete.

(6) Within fourteen days after receipt, Ohio EPA shall conduct a completeness review of an individual's initial certification application, as follows:

(a) Ohio EPA shall not consider an incomplete application, and shall notify the individual of any reasons the application is incomplete, and of any additional information required for further consideration of the application.

(b) The director shall not initiate final review of an application until Ohio EPA determines that the application is complete.

- (c) Nothing in this rule prevents Ohio EPA from requiring an individual to promptly provide any information necessary to determine whether to approve or deny certification.
- (7) Within forty-five days after Ohio EPA determines that an application is complete, the director shall either approve or deny certification. The initial certification is valid for one year after the date of approval. If the director denies certification, the director shall provide a letter that describes the deficiencies upon which the certification denial is based.
- (8) Each individual shall demonstrate to the director's satisfaction that the individual meets the requirements for certification. Ohio EPA may require an individual to appear for a personal interview to answer questions pertaining to an application. If a personal interview is scheduled, the time to approve or deny an application as provided in paragraph (B)(7) of this rule shall be extended to twenty days after the date a personal interview is conducted. If an individual twice fails to appear for a personal interview scheduled with Ohio EPA, the application ~~shall~~may be denied unless the director finds such failure to appear was due to circumstances beyond the individual's reasonable control.

(C) Procedure for renewal of certification.

- (1) An individual who applies for certification renewal shall submit to Ohio EPA a complete and current version of a renewal application in a manner prescribed by Ohio EPA. The complete renewal application shall be submitted before certification expires to maintain continuous certification. Submittal of a renewal application after the expiration date shall result in a lapse in the individual's certification.
- (2) A complete renewal application shall include the following:
  - (a) Full payment of the annual fee described in paragraph (B)(2) of rule 3745-300-03 of the Administrative Code.
  - (b) Compliance with the standards of conduct described in paragraph (E) of this rule.
  - (c) Fulfillment of the continuing education requirements described in paragraph (C)(3) of this rule.
  - (d) Completion of initial certification training, if applicable, in accordance with paragraph (A)(2)(d) of this rule.

- (e) All documents and information submitted to Ohio EPA pursuant to this paragraph shall be accompanied by an affidavit from the individual, affirming that upon knowledge, information, and belief, all information submitted in support of the renewal application is true, accurate, and complete.
- (3) To maintain certification, a certified professional either shall demonstrate to the director's satisfaction that the certified professional has completed a minimum of twelve professional development hour units in the certification period, as described in this rule, of relevant continuing education, or shall obtain an excuse or modification of those requirements in accordance with paragraph (C)(10) of this rule. Professional development hour units may be earned as follows:
- (a) Attendance at and successful completion of any of the following:
    - (i) Relevant college courses.
    - (ii) Relevant continuing education courses.
    - (iii) Seminars.
    - (iv) In-house courses.
    - (v) Workshops.
    - (vi) Meetings.
    - (vii) Conventions.
    - (viii) Conferences pertaining to investigation, assessment, or remediation of hazardous substances or petroleum.
  - (b) Presentation and instruction at any of the following:
    - (i) Courses, seminars, workshops, or other meetings identified in paragraph (C)(3)(a) of this rule.
    - (ii) Instruction of courses in biology, chemistry, environmental sciences, geology, hydrogeology, toxicology, scientific subdisciplines, hazardous waste management, appropriate areas of engineering.
    - (iii) Other core courses that do not qualify under paragraph (C)(3)(a) of this rule, but demonstrate the certified professional's knowledge

of the subject matter relevant to the investigation, assessment, or remediation of hazardous substances or petroleum.

- (c) The director has final authority with respect to approval of courses, credit, professional development hour unit value for courses, and other methods of earning credit.
- (4) The conversion of other units of credit to professional development hour units is as follows:
  - (a) Once college or unit semester hour equals twenty professional development hour units.
  - (b) One college or unit quarter hour equals fifteen professional development hour units.
  - (c) One continuing education unit equals ten professional development hour units.
  - (d) One hour of attendance at seminars, in-house courses, workshops, or professional or technical presentations made at meetings, conventions, or conferences equals one professional development hour unit.
- (5) A certified professional's initial presentation or instruction of a course, seminar, workshop, or other meeting described in paragraph (C)(3) of this rule ~~shall~~may be eligible to receive credit for twice the professional development hour units that would be credited for attendance of the part of the course, seminar, workshop, or other meeting presented or instructed by the certified professional. This additional credit is not available to full-time faculty.
- (6) Professional development hour units shall not be earned for the following:
  - (a) Any worker health and safety training.
  - (b) Any course, seminar, or workshop designed primarily for hazardous waste facility personnel as training on the requirements of Chapter 3734. of the Revised Code or the rules adopted thereunder. Partial credit may be claimed and earned for the portions of such course, seminar, or workshop that relate to the performance of a voluntary action, such as waste characterization and hazardous waste management.
  - (c) Attendance at a course, seminar, or workshop more than once in a certification period.

- (7) A certified professional shall earn a minimum of six of the twelve professional development hour units in the certification period by attendance of courses and seminars conducted by Ohio EPA that are approved for professional development hour units.
- (8) A certified professional who has not submitted a no further action letter to the director in request of a covenant not to sue within the past four calendar years shall demonstrate having done either of the following:
  - (a) Attended and completed initial certification training in accordance with paragraphs (A)(2)(d)(i) to (A)(2)(d)(iii) of this rule within the past four calendar years.
  - (b) Attended and completed an alternative Ohio EPA-sponsored course or third-party course approved by Ohio EPA pertaining to the technical implementation of this chapter, and the standards of conduct applicable to a certified professional under this chapter. The course shall be completed within one year prior to any application for certification.
- (9) Documents used to support professional development hour units claimed shall be submitted with the renewal application and shall include the following:
  - (a) A personal log or attendance verification document that shows the date of the activity, type of activity claimed, sponsoring organization, and the actual hours of instruction.
  - (b) Course summaries or conference agendas with details of the sessions attended.
- (10) The director may excuse or modify the continuing education requirements of this rule for any certification period if a certified professional is able to demonstrate to the director's satisfaction that the certified professional is unable to complete the minimum requirements due to the following:
  - (a) Health reasons, as certified by a medical doctor.
  - (b) Active service in the armed forces of the United States.
- (11) Within fourteen days after receipt, Ohio EPA shall conduct a completeness review of an individual's renewal certification application, as follows:
  - (a) Ohio EPA shall not consider an incomplete application, and shall notify the individual of any reasons the application is incomplete, and of



any additional information required for further consideration of the application.

- (b) The director shall not approve or deny an application until Ohio EPA determines that the application is complete.
  - (c) Nothing in this rule prevents Ohio EPA from requiring the individual to promptly provide any information necessary to determine whether to approve or deny certification.
  - (d) If the individual provides the additional information required to complete the application after the expiration date of certification, there shall be a lapse between certification periods. Individuals shall verify that there was no lapse in certification at the time the individual issues any voluntary action opinions.
- (12) The certified professional has thirty days after notification of an incomplete application to provide additional documentation, such as completion of professional development hour units within the certification period, and to submit such documentation as an addendum in accordance with paragraphs (C)(1) to (C)(2) of this rule.
- (13) If the director determines that the certified professional has not submitted documentation of a completed application, or the certified professional has not complied with a standard of conduct in performance of professional services as described in this rule, the director may deny the renewal certification application. If the director denies renewal of a certification, the director shall provide a letter that describes the reasons for the denial of certification renewal.
- (14) The individual may provide professional services and may render voluntary action opinions under this chapter only when in possession of certification that is issued and is unexpired. Certification expires one year after the date of issuance, unless the certification is suspended or revoked prior to expiration. An individual whose certification expired and was not renewed within sixty days after the expiration date of the certificate shall not apply for renewal certification pursuant to paragraph (C)(1) of this rule, but may apply for certification pursuant to paragraphs (A) and (B) of this rule.

(D) Biocriteria certification.

- (1) If the qualitative habitat evaluation index, index of biotic integrity, modified index of well-being, and the invertebrate community index are used in support of a

no further action letter, the certified professional or the certified professional's designated representative shall do the following:

- (a) Conduct these indices in accordance with the procedures in "Biological Criteria for the Protection of Aquatic Life" (referred to as the "biocriterial manual") only for those indices for which the certified professional or the certified professional's designated representative received approval for under paragraph (D)(1)(b) of this rule.
- (b) Receive approval by the director for status under paragraph (B) of rule 3745-4-03 of the Administrative Code to be a qualified data collector for level 3 credible data for any one or a combination of the following:
  - (i) Stream habitat assessment.
  - (ii) Fish community biology.
  - (iii) Benthic macroinvertebrate biology.
- (c) Submit with the no further action letter written documentation from Ohio EPA which states that the certified professional or the certified professional's designated representative received approval by the director for status under paragraph (B) of rule 3745-4-03 of the Administrative Code to be a qualified data collector for level 3 credible data.
- (2) ~~Qualified~~ In accordance with rule 3745-4-03 of the Administrative Code, qualified data collector level 3 status shall be renewed every two years before qualified data collector level 3 status automatically expires. To renew to qualified data collector level 3 status, the certified professional or the certified professional's designated representative shall meet the renewal requirements for status as a level 3 qualified data collector under paragraph (C) of rule 3745-4-03 of the Administrative Code.

(E) Standards of conduct. The following standards apply to a certified professional only when the certified professional provides professional services under Chapter 3746. of the Revised Code and this chapter:

- (1) Professional competency.
  - (a) A certified professional shall act with care and diligence, and shall fully apply the certified professional's knowledge and skill at the time professional services are performed.

(b) A certified professional may render a voluntary action opinion only when the certified professional, individually or together with other persons who are qualified by education, training, and experience in other areas outside the certified professional's area of professional practice, has done either of the following:

- (i) Managed, supervised, or actually performed the work which is required to render the voluntary action opinion.
- (ii) Reviewed the work performed by other qualified persons which is required to render the voluntary action opinion.

(2) Professional responsibility.

(a) A certified professional shall hold paramount public health, safety, welfare, and the environment in the performance of professional services.

(b) If a certified professional identifies an imminent hazard at a property at which the certified professional is providing professional services, the certified professional shall do the following:

- (i) Immediately notify the volunteer, or the owner or operator of the property if different from the volunteer, of the imminent hazard.
- (ii) Immediately notify the volunteer, or the owner or operator of the property if different from the volunteer, of the need for the volunteer or the owner or operator of the property to notify Ohio EPA of the imminent hazard.
- (iii) Notify Ohio EPA of the imminent hazard if the volunteer, or the owner or operator of the property if different from the volunteer, does not submit written confirmation to the certified professional within forty-eight hours after the imminent hazard was identified that the hazard was addressed, or the director was notified.

(c) If a certified professional discovers the occurrence of a release at or from a property that is subject to section 3750.06 of the Revised Code, the certified professional shall do the following:

- (i) Immediately advise the volunteer, or the owner or operator of the property if different from the volunteer, of the condition and the need for the volunteer, owner, or operator of the property if different from the volunteer, to notify Ohio EPA within the applicable time frame established in section 3750.06 of the Revised Code.

- (ii) Notify Ohio EPA of the condition if the certified professional is not able to notify the volunteer, or the owner or operator of the property if different from the volunteer, within the applicable time frames established in section 3750.06 of the Revised Code.
- (d) In the event that a certified professional knows or has reason to know of an action taken by a volunteer, or any person who conducts work in connection with a voluntary action, that significantly deviates from any scope of work, plan, or report developed to comply with this chapter or an order of the director issued under division (B)(3) of section 3746.12 of the Revised Code, the certified professional shall promptly notify the volunteer in writing of such deviation. For purposes of this rule, scope of work or plan includes any operation and maintenance plan and risk mitigation plan that is applicable to the property.
- (e) A certified professional shall do the following:
  - (i) Exercise independent professional judgment, and be objective in any professional report, statement, or testimony.
  - (ii) Comply with the applicable provisions of this chapter and Chapter 3746. of the Revised Code.
  - (iii) Make a good faith and diligent effort to obtain all relevant data, reports, and other available information regarding conditions at a property, and identify and obtain such additional data and other information as the certified professional deems necessary to provide professional services.
  - (iv) Ensure that the data relied upon to render a voluntary action opinion is verified valid, in accordance with "data verification," as defined in rule 3745-300-01 of the Administrative Code, for that use and was provided by a laboratory, as defined in paragraph (L)(1) of rule 3745-300-01 of the Administrative Code.
  - ~~(iv)~~(v) When a voluntary action opinion is rendered, disclose and explain in the voluntary action opinion the relevant facts, data, and other information that support the voluntary action opinion, and all qualifications and limitations of the voluntary action opinion.
- (f) If, subsequent to the date a certified professional issued a no further action letter, the certified professional learns that relevant facts, data, or other information existed at the time the no further action letter was issued

which indicates that applicable standards were not met, the certified professional shall do the following:

- (i) Promptly notify the volunteer or the owner or operator of the property if different from the volunteer, that the applicable standards were not met, and of the need for the certified professional to notify Ohio EPA.
  - (ii) Notify Ohio EPA that applicable standards were not met if required. For purposes of this rule, the certified professional is required to notify Ohio EPA if the volunteer, or the owner or operator of the property if different from the volunteer, does not submit written confirmation to the certified professional within thirty days after the certified professional learns of the relevant facts, data, or other information, that the volunteer, owner, or operator notified Ohio EPA.
  - (g) In the event that a volunteer prevents or attempts to prevent a certified professional from acting in accordance with paragraphs (E)(2)(e)(i) to ~~(E)(2)(e)(iv)~~ (E)(2)(e)(v) of this rule, the certified professional shall sever the certified professional's relationship with the volunteer.
  - (h) A certified professional shall not engage in fraudulent or dishonest business practices or allow the use of the certified professional's name by, or associate in a business venture with, any person or firm which the certified professional knows or should know is engaging in fraudulent or dishonest business practices.
  - (i) A certified professional shall cooperate fully in the conduct of audits by the director and shall promptly furnish such information as the director deems necessary to perform all audits under this chapter and section 3746.17 of the Revised Code.
  - (j) A certified professional shall promptly and completely respond to all document requests made by the director under this chapter and Chapter 3746. of the Revised Code.
- (3) Conflicts of interest and contingent fees.
- (a) A certified professional shall not accept compensation, financial or otherwise, from more than one person for professional services regarding a property, unless the circumstances are fully disclosed in writing to, and

agreed to, by all persons who contract with the certified professional for professional services with regard to that property.

(b) A certified professional shall not render a voluntary action opinion with respect to any property owned, leased, or operated by or in which any of the following persons have an interest:

(i) The certified professional.

(ii) An employer or a person affiliated with an employer of the certified professional.

(iii) A relative or past relative of the certified professional.

(iv) A person, or any affiliated person, with whom the certified professional was employed during the year preceding, or in the year subsequent to, the date at which the certified professional entered into a contract with that person.

(v) Any person whose relationship with the certified professional may impact the certified professional's ability to discharge professional obligations under this chapter.

(c) In the event that a certified professional has, develops, or acquires any business association, direct or indirect financial interest, or other circumstance which could create an impression of influencing the certified professional's judgment in connection with performance of professional services, the certified professional shall fully disclose in writing, to the person who has contracted with the certified professional for professional services, the nature of the business association, financial interest, or other circumstance.

(i) If the person who contracted with the certified professional for professional services objects to such business association, financial interest or circumstance, the certified professional, at the certified professional's discretion, ~~either shall~~ do either of the following: terminate

(a) Terminate the business association, financial interest, or circumstances, ~~or shall terminate the professional services pertaining to the voluntary action.~~

(b) Terminate the professional services pertaining to the voluntary action.

- (ii) If a certified professional believes that a business association, financial interest, or other circumstance renders the certified professional incapable of discharging professional obligations under this chapter regarding a voluntary action, the certified professional shall terminate the certified professional's involvement regarding that voluntary action and shall avoid any further involvement regarding such action.
  - (d) A certified professional shall not solicit or accept financial or other consideration from any person in return for specification of or endorsement of the products or services of such person in connection with a voluntary action.
  - (e) A certified professional shall not provide professional services under a contingency arrangement whereby the amount of payment of any consideration to the certified professional is dependent upon or related to the attainment or non-attainment of a specified finding or result, or where the payment of any consideration to the certified professional in whole or in part is otherwise dependent upon or related to a specified finding or result of such services.
  - (f) A certified professional shall not advertise or otherwise promise to any person that the certified professional will issue a no further action letter regarding a property until the certified professional determines that all requirements of Chapter 3746. of the Revised Code and this chapter are satisfied.
- (4) Affidavit requirement- voluntary action opinions. Certified professionals shall submit each voluntary action opinion by affidavit pursuant to this paragraph except for no further action letters that are subject to the affidavit provisions of paragraph (Q) of rule 3745-300-13 of the Administrative Code. The certified professional shall submit an affidavit based upon the certified professional's knowledge, information, and belief, which includes the following:
- (a) Name of the certified professional.
  - (b) Name and address of the property that is the subject of the voluntary action.
  - (c) The purpose for which the voluntary action opinion is submitted.
  - (d) Identification of the information, data, documents, or reports included with the voluntary action opinion submitted with the affidavit.

- (e) Statement attesting that the certified professional has read all of the standards of conduct in paragraph (E) of this rule and is in compliance with the standards of conduct regarding the voluntary action opinion.
- (f) Statement attesting that the voluntary action opinion and the associated information, data, documents, or reports submitted by the certified professional are true, accurate, and complete.

(F) Suspension or revocation of certification.

- (1) The director ~~shall~~may revoke the certification of a certified professional for a period of time to be determined by the director if the director finds that any information on the certified professional's application for initial certification or application for renewal certification or any information in connection with a voluntary action was falsified.
- (2) The director may suspend or revoke the certification of a certified professional for a period of time to be determined by the director if the director finds any of the following:
  - (a) The certified professional's performance resulted in the issuance of a no further action letter that is not consistent with applicable standards in this chapter or Chapter 3746. of the Revised Code.
  - (b) The certified professional did not substantially comply with section 3746.31 of the Revised Code or paragraph (I)(2) of this rule.
- (3) The director may suspend for a period of not more than five years, or may permanently revoke, a certification if the director finds any of the following:
  - (a) The certified professional violated or failed to comply with the standards of conduct established in paragraph (E) of this rule.
  - (b) The certified professional was denied certification for performing environmental work in this state, another state, or under federal programs.
  - (c) The certified professional's certification to perform environmental work in this state, another state, or under federal programs was revoked or suspended.
  - (d) The certified professional used the certified professional seal described in paragraph (L) of this rule in an unauthorized manner.



- (e) The certified professional committed an act involving dishonesty, fraud, or deceit.
  - (f) The certified professional's certification was suspended or revoked under this chapter on at least two occasions.
  - (g) The certified professional failed to make annual fee payments in accordance with paragraph (C)(1) of this rule and paragraph (B)(2) of rule 3745-300-03 of the Administrative Code.
- (4) The director may request the certified professional to provide documents, data, or other information to verify the qualifications of the certified professional or to audit the performance of the certified professional. If the certified professional fails to comply with the director's request, the director ~~shall~~may permanently revoke the certification of the certified professional.
- (5) A certified professional whose certification was suspended or revoked shall immediately provide notification of the suspension or revocation, by certified mail or other type of mail accompanied by receipt, to all persons who contracted with the certified professional for professional services, or who had a no further action letter prepared by the certified professional. The certified professional shall provide to the director a copy of all notifications required by this paragraph within ten days after the date of the certified mailing.
- (6) Unless the director first consults with the director of the department of commerce, the director shall not revoke the certification of a certified professional who conducts voluntary actions only at properties contaminated solely with petroleum.
- (7) The director shall provide at least thirty days prior notice to a certified professional of an ensuing suspension or revocation action by the director. The notice shall include a general explanation of the suspension or revocation action.
- (G) Recertification after suspension or revocation. An individual whose certification was suspended or revoked may apply for recertification after suspension or revocation. Such application shall comply with paragraphs (A) and (B) of this rule.
- (H) If a certified professional no longer intends to retain certification, the certified professional shall return the certificate with a written notice to Ohio EPA indicating intent to withdraw from certification.
- (I) Document retention and production.
- (1) The certified professional's document retention requirements are as follows:

- (a) A certified professional shall maintain all documents and data prepared or acquired in connection with a voluntary action for a period of at least ten years.
  - (b) After ten years, if a certified professional does not intend to retain such documents, the certified professional shall notify Ohio EPA by certified mail of such intent and shall provide Ohio EPA the opportunity to obtain all documents.
  - (c) Documents shall be retained by the certified professional until the notice described in paragraph (I)(1)(d) of this rule is provided and Ohio EPA notifies the certified professional in writing that Ohio EPA does intend to obtain the documents.
  - (d) If Ohio EPA notifies the certified professional in writing that Ohio EPA does not intend to obtain the documents, the certified professional may discard the documents.
  - (e) Notification to Ohio EPA is not required pursuant to this rule as long as a certified professional continues to retain all documents.
  - (f) Upon withdrawal, the certified professional promptly shall provide Ohio EPA the opportunity to obtain all documents maintained under this chapter in the same manner as identified in paragraph (I)(1)(a) of this rule.
- (2) Procedures to address requests for documents that are not in Ohio EPA's possession are as follows:
- (a) Upon the written request of any person for documents not in the possession of Ohio EPA and described on a list included in a no further action letter submitted to the director, Ohio EPA shall send a written request to the certified professional to submit such documents to Ohio EPA within a reasonable period of time.
  - (b) Upon receipt of the written request from Ohio EPA, the certified professional shall submit the original documents to Ohio EPA, within the time period specified in the director's request.
  - (c) Within a reasonable period of time after Ohio EPA receives the requested documents, the Ohio EPA shall provide copies of the documents to the requestor in the same manner as a public record.
  - (d) Any request for reproduction of documents shall be made through Ohio EPA.

(J) Summary reports. A certified professional shall prepare a voluntary action summary report. This report shall do the following:

- (1) Be consistent with the executive summary requirements of rule 3745-300-13 of the Administrative Code.
- (2) Detail the certified professional's findings and conclusions regarding the environmental conditions at each property for which the certified professional was requested to prepare a no further action letter.
- (3) Be retained by the certified professional.

(K) Appeal of certification determinations. The issuance, denial, suspension, or revocation of certifications are final actions of the director, and are subject to the procedure for appeal provided in Chapter 3745. of the Revised Code.

(L) Certified professional's seal.

- (1) To render a voluntary action opinion, each certified professional shall procure and use a device to mark a seal. The separate stamp may be used in addition to the seal device to record the individual's certification dates. The design, arrangement, size, and wording of the seal shall conform with the specifications prescribed by Ohio EPA.
- (2) The certified professional's seal shall apply to the certified professional's official use only in connection with voluntary action opinions for which the certified professional is responsible, and shall not transfer.
- (3) A certified professional shall use the seal to attest that, in the certified professional's professional judgment, the voluntary action opinion upon which the seal appears complies with this chapter and Chapter 3746. of the Revised Code.
- (4) A certified professional shall not allow the official seal to be affixed to any document associated with any project which is not a voluntary action or to any voluntary action opinion not prepared by the certified professional or under the certified professional's personal supervision.
- (5) An individual whose certification expired and was not renewed, or was revoked or suspended shall not allow the official seal to be affixed to any document associated with a voluntary action opinion unless and until such individual is recertified as a certified professional in accordance with this rule.

(M) Out-of-state certified professionals.

- (1) As a condition of certification under this rule, certified professionals located outside the state of Ohio consent to service of process and to personal jurisdiction of any Ohio court or the Ohio environmental review appeals commission in proceedings that adjudicate any rights or obligations under this chapter and Chapter 3746. of the Revised Code, or in which the cause of action involves, in whole or in part, the certified professional's performance under this chapter or Chapter 3746. of the Revised Code.
- (2) Out-of-state certified professionals also consent to Ohio EPA's right of entry for inspection or investigation, and to the service of administrative warrants, inspection warrants, or other appropriate search warrants as a condition of certification under this rule.

Effective:

Five Year Review (FYR) Dates: 10/17/2024

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Certification

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Date

Promulgated Under: 119.03  
Statutory Authority: 3746.04  
Rule Amplifies: 3746.07, 3746.18, 3746.19, 3746.31  
Prior Effective Dates: 12/29/1995, 12/16/1996, 03/04/2002, 04/19/2006,  
03/01/2009, 04/23/2012, 04/18/2013, 08/01/2014,  
05/26/2016, 10/17/2019

3745-300-07

**Phase II property assessments for the voluntary action program.**

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-300-15 of the Administrative Code titled "Incorporation by reference - voluntary action program."]

**(A) Applicability.**

- (1) A phase II property assessment shall be conducted in accordance with this rule if a phase I property assessment conducted in accordance with rule 3745-300-06 of the Administrative Code reveals any information that establishes any reason to believe that a release of hazardous substances or petroleum has or may have occurred on or from the property, or there is reason to believe that a release from an off-property source area is impacting the property. This rule does not apply when a release is in an area that is demonstrated to be de minimis in accordance with paragraph (E)(2)(a) of rule 3745-300-06 of the Administrative Code.
- (2) Factors affecting eligibility of a property. The volunteer shall utilize information from phase I or phase II property assessments to determine that a property is eligible for the voluntary action program in accordance with rule 3745-300-02 of the Administrative Code at the time of the no further action letter issuance.

**(B) Purpose of a phase II property assessment.**

- (1) The purpose of a phase II property assessment is to conduct an investigation sufficient to determine whether all applicable standards are met or to determine that remedial activities conducted in accordance with rule 3745-300-11 of the Administrative Code demonstrate or result in compliance with applicable standards.
- (2) A volunteer may elect to conduct remedial activities at any point during a phase II property assessment without first deriving standards, provided that the remedial activities comply with rule 3745-300-11 of the Administrative Code, and provided that the volunteer completes the activities in paragraph (E) of this rule.

**(C) Data quality objectives for phase II property assessments.** The volunteer shall develop and implement data quality objectives consistent with U.S. EPA's "Guidance on Systematic Planning Using the Data Quality Objectives Process" according to the limitations and intended uses of those objectives. To achieve the purpose in paragraph (B) of this rule, the volunteer, at a minimum, shall complete one iteration of the following steps:

- (1) Identify the goals of the phase II property assessment, including the applicable standards that need to be achieved to demonstrate compliance with this chapter.
  - (2) Identify the data and information necessary to support the objectives of the phase II property assessment. Evaluate historical information from the phase I property assessment and determine if data gaps are present that should be addressed.
  - (3) Define the boundaries of the phase II property assessment, including spatial and temporal limits.
  - (4) Determine the identified areas that need to be investigated or addressed, factoring in current and reasonably anticipated future use of the property.
  - (5) Develop an approach to identify chemicals of concern (COCs), complete exposure pathways, and current and reasonably anticipated future receptors.
  - (6) Specify how the data and information collected in the phase II property assessment shall be used in the decision-making process to assess identified areas. Clarify performance and acceptance or rejection criteria for the data.
  - (7) Identify whether additional data or information are necessary to evaluate exposure pathways if using exposure units in a property-specific risk assessment conducted in accordance with rule 3745-300-09 of the Administrative Code.
  - (8) Develop a sampling and analysis plan to obtain the data.
  - (9) Develop a conceptual site model that illustrates the relationships between contaminants, transport media, and receptors during various phases of the voluntary action as needed. The conceptual site ~~model shall~~ model shall describe the exposure scenarios that identify the environmental media, COCs, current and reasonably anticipated future land use and receptor populations, and a determination of exposure pathway completeness.
  - (10) The final conceptual site model, which represents conditions at the time of the no further action letter issuance, shall be included in the phase II property assessment report that is completed in accordance with paragraph (J) of this rule.
- (D) Sampling and sample analysis. The volunteer shall identify the samples and analytes that the ~~certified~~ laboratory shall analyze, and the volunteer shall ensure the following:

- (1) The sampling procedures employed at the property are consistent with the sample quality requirements of the certified laboratory.
- (2) Data from the ~~certified~~ laboratory are adequate for use in the voluntary action. At a minimum, the volunteer shall do the following:
  - (a) Notify the ~~certified~~ laboratory when samples are to be used for a voluntary action and when ~~certified~~ laboratory data are required.
  - (b) Ensure that the ~~certified~~ laboratory is certified or accredited for and capable of performing the analyses that are required for the property, including those necessary to form the basis of the no further action letter.
  - (c) Communicate to the ~~certified~~ laboratory the applicable standards required for the property and ensure that the certified laboratory is capable of detecting the COCs in environmental media at or below the applicable standards for the property. Cumulative adjustments for multiple chemicals and pathways shall be evaluated to determine the applicable standards that shall be achieved to evaluate compliance with applicable standards.
  - (d) Use appropriate detection limit to represent any applicable standard where the ~~certified~~ laboratory is not capable of detecting the COCs at or below the applicable standard until such time that a lower detection is achieved.
  - (e) Perform data verification.
- (3) Acceptable quality assurance and quality control procedures are established and employed when field data are collected during the phase II property assessment. The field quality assurance and quality control procedures shall serve to minimize sources of error, minimize the potential for cross contamination, and maximize the representativeness of the data collected. At a minimum, the field quality assurance and quality control procedures shall include the following:
  - (a) Review of the laboratory's quality assurance program plan and standard operating procedures for consistency with field quality assurance and quality control procedures.
  - (b) Develop field quality assurance and quality control procedures including but not limited to the following items:
    - (i) Equipment decontamination.
    - (ii) Trip blanks, equipment blanks, field blanks, and duplicates.



- (iii) Calibration of field instruments, which includes procedures for instrument correction and re-calibration when necessary.
  - (iv) Documentation and record maintenance.
  - (v) Sample handling, preservation, and holding times.
  - (vi) Chain-of-custody.
- (E) Phase II property assessment data collection activities. The sampling activities conducted under this paragraph shall be performed in accordance with the sampling procedures in paragraph (D) of this rule. Data collection and data evaluation may be conducted iteratively in accordance with the conceptual site model as required by paragraph (C)(9) of this rule. The volunteer shall collect sufficient data to make the determinations in paragraph (F) of this rule, in accordance with the following:
- (1) Use of existing information from phase I assessments and data from laboratories not accredited or certified under this chapter.
    - (a) Phase I property assessment and other existing information. The person who conducts a phase II property assessment shall utilize all information from a phase I property assessment conducted in accordance with rule 3745-300-06 of the Administrative Code and any other information known to the owner, or the volunteer if different from the owner, which is relevant to the proper characterization of environmental conditions on, underlying, or emanating from the property.
    - (b) Use of data from prior phase I environmental site assessments. Prior phase I environmental site assessments and studies not conducted in accordance with rule 3745-300-06 of the Administrative Code may be relied upon, provided that all of the following are met:
      - (i) The information gathered and the method used to collect and evaluate the data are consistent with paragraph (A) of rule 3745-300-06 of the Administrative Code.
      - (ii) The prior phase I environmental site assessment is amended in such a way as to comply with rule 3745-300-06 of the Administrative Code.
      - (iii) The prior phase I environmental site assessment is amended to comply with paragraph (E)(1)(c) of this rule, if more than one hundred eighty days has elapsed after completion of the phase I environmental site assessment.

- (c) Amending phase I property assessments. The volunteer shall ensure that all requirements in paragraphs (C) and (E) of rule 3745-300-06 of the Administrative Code are performed within one hundred eighty days before the phase II property assessment begins, or that no change in environmental conditions at the property occurred after the actions required by paragraphs (C) and (E) of rule 3745-300-06 of the Administrative Code were conducted. A change in environmental conditions means new information about known or suspected releases to environmental media that result in additional identified areas at the property that are subject to phase II property assessment, or previous identified areas that need further phase II property assessment due to new information.
  - (i) During a determination of whether to re-evaluate requirements in paragraphs (C) and (E) of rule 3745-300-06 of the Administrative Code, best professional judgment shall be used to decide which requirements in paragraphs (C) and (E) of rule 3745-300-06 of the Administrative Code shall be re-evaluated to determine whether additional phase II property assessment is required.
  - (ii) If any provisions in paragraphs (C) and (E) of rule 3745-300-06 of the Administrative Code require re-evaluation, documentation of the additional information gathered to comply with this paragraph shall be included in an updated phase I property assessment report.
- ~~(d) Use of non-certified laboratory data. Data generated by laboratories not certified under this chapter, non-certified data, and studies not conducted in accordance with this rule may be used to partially comply with this rule, provided that all of the following are met:~~
  - ~~(i) The information gathered is consistent with the purposes of this rule, and the methods used to collect and evaluate the data are consistent with the purposes of this rule.~~
  - ~~(ii) The data are evaluated to ensure quality and consistency with the requirements for data collected in a phase II property assessment conducted in accordance with this rule.~~
  - ~~(iii) The data are confirmed by samples analyzed by a laboratory with a current certification under this chapter for the analysis. The confirmatory samples shall be collected as follows:~~

- ~~(a) For ground water, surface water, and air, provided that the samples are collected from the same sampling points that were used in the previous study, a minimum of ten per cent of the sample population of each data set in the previous study shall be confirmed.~~
- ~~(b) For all environmental media not addressed in paragraph (E)(1)(d)(iii)(a) of this rule, or if the sampling points used in the previous study cannot be used, or are not used, the volunteer shall do the following:~~
  - ~~(i) Collect a minimum of ten per cent of the sample population, or at least eight samples, whichever is greater as confirmation samples, for each data set in the previous study.~~
  - ~~(ii) Qualitatively compare the non-certified laboratory data set and the certified laboratory data set and demonstrate that the two are not significantly different. To make this demonstration, the volunteer shall utilize any method that is accepted as an academic or industry standard.~~
  - ~~(iv) The data or information used in support of a no further action letter are consistent with existing property conditions.~~
  - ~~(v) If the requirements of paragraphs (E)(1)(d)(i) to (E)(1)(d)(iv) of this rule cannot be met, the volunteer shall determine the concentrations of COCs in identified areas or exposure units in accordance with paragraph (F)(6) of this rule.~~
- (2) A review and evaluation of existing regional and property-specific geologic, hydrogeologic, and physical characteristics of the property and the surrounding area by an evaluation of characteristics in paragraphs (E)(2)(a) to (E)(2)(o) of this rule. The volunteer shall review reasonably available information from previous on-property investigations or other sources of information. Property-specific data shall be collected as needed. The collection of additional data or information shall be by methods consistent with this rule. The evaluation of information and collection of additional data shall be consistent with the data quality objectives developed in accordance with paragraph (C) of this rule. The review and evaluation shall address and include the following, as necessary:
  - (a) The characteristics of major stratigraphic units and the associated depositional environments. A description of the continuous profile of

the stratigraphic units beneath the property, including the thickness and lateral extent of each unit and the depth to bedrock.

(b) Property-specific physical characteristics of saturated or unsaturated soils or bedrock including but not limited to the following:

(i) Porosity.

(ii) Effective porosity.

(iii) Bulk density.

(iv) Moisture content.

(v) Grain size analysis.

(vi) Soil pH.

(vii) The vertical and horizontal hydraulic conductivity of saturated and unsaturated zones.

(viii) The contaminant attenuation capacity and mechanisms of attenuation of soil or bedrock including but not limited to the following:

(a) Ion exchange capacity.

(b) Organic carbon content.

(c) Mineral content.

(d) Soil sorptive capacity.

(c) Identification of regional aquifers and ground water zones beneath the property, and a determination of the productivity of such aquifers.

(d) Identification of confining units that may separate ground water zones and the ability of the confining units to transmit or retard the movement of ground water, including an evaluation of the hydraulic interconnectedness of such zones in the subsurface.

(e) Identification and characterization of ground water recharge and discharge areas, and the amount of recharge and discharge.

(f) Estimates of infiltration rates or evapotranspiration rates.

- (g) A description, and the potential orientation, of geomorphology and structural geologic features that may influence the ground water flow system or unsaturated flow conditions, including but not limited to topographical features, geologic stratification, faults, joints, or fractures.
  - (h) The occurrence, flow direction, and gradient of surface water or ground water.
  - (i) The absence or presence of commingled COCs from multiple source areas.
  - (j) The natural quality of ground water and surface water.
  - (k) Any anthropogenic influences that may affect or alter the natural geology and hydrogeology underlying the property or may provide preferential migration pathways, including but not limited to, utilities, fill material, pavement, buildings and building foundations, or grading activities.
  - (l) Identification of ground water use, availability or special designations such as drinking water source protection areas for a public water system using ground water or sole source aquifer designations.
  - (m) Identification of the presence of legally-enforceable restrictions on the use of ground water including, without limitation, local rules and ordinances.
  - (n) Identification of regional availability of surface water or ground water and reasonable alternative sources of drinking water.
  - (o) Any other characteristics or information that may be useful to meet the data quality objectives of the phase II property assessment or to determine compliance with applicable standards or the need for remedial activities.
- (3) The volunteer shall identify the COCs in the identified areas by an evaluation of the following:
- (a) Hazardous substances or petroleum identified in a phase I property assessment conducted in accordance with this rule or rule 3745-300-06 of the Administrative Code.
  - (b) Hazardous substances or petroleum that are or were commonly used in industrial or commercial activities similar to the activities conducted at the property.
  - (c) Hazardous substances or petroleum that, based on reasonably available information, may be typical constituents, components, additives,

impurities, and degradation products of hazardous substances or petroleum identified in paragraphs (E)(3)(a) and (E)(3)(b) of this rule.

- (d) Constituents of hazardous substances for which a method or technology of analysis is not available to measure the concentration of the hazardous substance. The volunteer shall obtain analytical data from an accredited or certified data laboratory for each constituent or set of constituents which are representative of a hazardous substance even if the constituents are not listed as a hazardous substance.
  - (e) Naturally occurring hazardous substances or petroleum that occur in one environmental medium are considered potential COCs if current or past activities involving the treatment, storage, or disposal of hazardous substances or petroleum are suspected to have caused the transfer of these naturally occurring hazardous substances or petroleum to other environmental media. Examples include the following:
    - (i) An acid spill that results in the leaching of metals naturally found in soil to the underlying ground water.
    - (ii) The mobilization to ground water of metals naturally found in soil when the mobilization is the result of anaerobic ground water associated with the biodegradation of an organic solvent ground water plume.
- (4) Evaluate identified areas.
- (a) The volunteer shall evaluate all identified areas and determine within each identified area the following:
    - (i) All source areas that are present.
    - (ii) All affected media that are present.
  - (b) The volunteer shall consider information from a phase II property assessment to determine if the existence, location, and dimensions of each identified area designated pursuant to a phase I property assessment require adjustment. If the existence, location, or dimensions of the identified areas require adjustment or redesignation to reflect the phase II property assessment information, the volunteer shall make the appropriate adjustments to the identified areas and shall redesignate the identified areas in the phase II property assessment.
- (5) Sampling environmental media.

- (a) The volunteer shall collect samples from environmental media affected by a release in accordance with the data quality objectives and sampling procedures developed under paragraphs (C) and (D) of this rule. Sampling objectives shall be reliable and representative for the environmental media sampled, as necessary to make the determinations in paragraphs (F)(1) to (F)(10) of this rule.
  - (b) During the determination of how to conduct sampling under paragraph (E)(5)(a) of this rule, the volunteer shall ensure that the data collected are sufficient to make the determinations in paragraphs (F)(1) to (F)(10) of this rule for all points of compliance receptors, and meet the stated data quality objectives. The volunteer shall ensure that the data are representative and shall consider the following:
    - (i) The vertical and horizontal spatial distribution of sampling locations.
    - (ii) Temporal variations in the media or in the concentrations of COCs contained in the media.
- (6) Identification of current and reasonably anticipated property use and receptor ~~populations. The populations. The~~ volunteer shall identify the current and reasonably anticipated uses of the property using the data quality objectives as provided in paragraph (C) of this rule. The volunteer shall also identify all receptor populations reasonably anticipated to be exposed to COCs on the property, and all off-property receptor populations reasonably anticipated to be exposed to COCs from the property. Receptor populations that shall be identified for the purpose of making the determinations contained in paragraph (F)(1) of this rule include, at a minimum, the following:
- (a) The volunteer shall identify the current and reasonably anticipated uses of the property using the data quality objectives provided in paragraph (C) of this rule.
  - (b) The volunteer shall identify all receptor populations reasonably anticipated to be exposed to COCs on the property, and all off-property receptor populations reasonably anticipated to be exposed to COCs from the property. Receptor populations that shall be identified in order to make the determinations in paragraph (F)(1) of this rule include, at a minimum, the following:
    - (i) Populations that live on the property.
    - (ii) Populations that work on the property.

- (iii) Populations on the property as visitors, commercial consumers or recreational participants.
    - (iv) Populations on or off the property that may be exposed to COCs in environmental media as a result of construction activities.
    - (v) Populations on or off the property that are reasonably anticipated to be exposed to COCs from the property through ground water migration, surface water migration, dust emissions, volatilization, and other mechanisms which transport COCs off the property.
    - (vi) Important ecological resources that, considering the land use and the quality and extent of habitat on the property and adjoining properties, reasonably would have been associated with the property or adjacent properties were it not for the presence of COCs from the property.
  - (7) The volunteer may need to conduct data collection activities necessary to determine background levels in accordance with paragraph (H) of this rule.
- (F) Determinations under the voluntary action program.
- (1) Pathway completeness determination.
    - (a) The volunteer shall evaluate the current and reasonably anticipated exposure pathways and shall identify the following.
      - (i) All source areas or affected media contributing to the pathway.
      - (ii) The receptors identified under paragraph (E)(6) of this rule and any applicable points of compliance.
      - (iii) The transport mechanisms for the pathway.
    - (b) The volunteer shall determine which current and reasonably anticipated pathways are complete. Exposure pathways shall be based on property-specific data collected in accordance with the procedures described in this chapter and shall be evaluated in accordance with the procedures described in this chapter. A pathway is considered to be complete if all three of the pathway components described in paragraphs (F)(1)(a)(i) to (F)(1)(a)(iii) of this rule are present. All exposure pathways determined to be complete under this paragraph shall be identified in the phase II property assessment report.



- (c) If the volunteer determines that any of the exposure pathways on or adjoining the property are not reasonably anticipated to be complete for the COCs, the phase II property assessment report shall include a written justification for the elimination of those exposure pathways from further consideration.

(2) Determination of ground water zones and confining units.

- (a) The volunteer shall determine ground water zones and confining units beneath the property, as necessary, for the purposes of ground water protection or classification. The information listed in paragraph (E)(2) of this rule shall be used, as necessary, to determine the extent to which saturated zones in the subsurface should be divided or grouped into ground water zones. The volunteer shall determine whether any confining units are present, and, if present, how such confining units separate the ground water zones.
- (b) During the evaluation of whether the uppermost saturated zone is a ground water zone, the volunteer may assume that the saturated zone contains ground water, or may provide a demonstration that the saturated zone does not contain ground water. If the volunteer chooses to make a demonstration that the uppermost saturated zone does not contain ground water, the volunteer shall bias the following determinations to the area of highest expected outcome of the testing:
  - (i) Determine the ground water yield in accordance with paragraph (F)(8) of this rule, using a sufficient number of properly developed wells that are constructed to the minimum standards of a two-inch diameter, five-foot long manufactured screen placed in the saturated zone in a six-inch diameter borehole.
  - (ii) Determine the in situ hydraulic conductivity of the saturated zone using appropriate field test methods. Sampling points shall be sufficient in number to represent the hydraulic conductivity of the saturated zone underlying the property.
- (3) Determination of whether the provisions for protection of ground water that meets unrestricted potable use standards apply, or whether ground water classification is required. If a ground water zone is determined to meet unrestricted potable use standards, the provisions in paragraph (F)(4) of this rule and paragraph (D) of rule 3745-300-10 of the Administrative Code apply to the ground water zone underlying the property. If a ground water zone is determined to exceed unrestricted potable use standards, the classification of the ground water zone

shall be determined in accordance with paragraph (B) of rule 3745-300-10 of the Administrative Code. Either generic or property-specific unrestricted potable use standards may be used to make this demonstration. For each ground water zone underlying the property, the volunteer shall demonstrate whether the ground water in the zone meets or exceeds unrestricted potable use standards by use of one of the following methods:

- (a) Sample the ground water within the zone to determine whether the ground water in that zone meets or exceeds unrestricted potable use standards. The volunteer shall collect one or more ground water samples to determine the concentration of COCs in the ground water.
  - (i) Ground water samples shall be collected in accordance with paragraph (F)(6)(d) of this rule from one or more ground water monitoring wells located immediately down-gradient of the source area or down-gradient and as close as possible to the source area. The samples shall be analyzed by a ~~certified~~ laboratory for the concentrations of the COCs at the property. If more than one ground water sample is collected from a well, the second sample shall be collected within forty-eight hours to ninety days after collection of the first ground water sample.
  - (ii) To evaluate whether more than one ground water sample is warranted to determine if the ground water meets or exceeds the unrestricted potable use standards, the volunteer shall consider all temporal variations that could impact the determination of whether the provisions apply to the ground water zone. If additional ground water sampling events are warranted due to temporal variations, then a sufficient number of additional ground water samples shall be collected over an appropriate time period to adequately characterize a representative concentration of the COC in ground water. Temporal variations include, but are not limited to, the following:
    - (a) Seasonal variations that result in either increased or decreased recharge and thus fluctuations in the water table elevation.
    - (b) Other variations that result from the impact of geologic heterogeneity (permeability, fractures, etc.), contaminant source heterogeneity, or the transient nature of contaminant transport.

- (iii) A minimum of two ground water samples are needed to determine that the ground water in a zone exceeds the unrestricted potable use standards, unless one or both of the following conditions apply:
    - (a) The concentrations of the first sampling event exceed unrestricted potable use standards by at least one order of magnitude.
    - (b) The concentrations of the first sampling event exceed unrestricted potable use standards and historical ground water data at the property indicates that releases from source areas have impacted the ground water zone underlying the property in excess of unrestricted potable use standards.
  - (iv) During a demonstration of whether ground water meets or exceeds unrestricted potable use standards, a cumulative adjustment for multiple chemicals shall be conducted in accordance with paragraph (A)(2)(b) of rule 3745-300-08 of the Administrative Code. The cumulative adjustment for multiple chemicals is required for both generic and property-specific risk-derived unrestricted potable use standards. However, the generic unrestricted potable use standards based on maximum contaminant levels or other regulatory established criteria under paragraph (E) (3) of rule 3745-300-08 of the Administrative Code shall not be included in the cumulative adjustment for multiple chemicals in the ground water zone. The risk for potable use of ground water shall not be summed with the risk from exposure pathways other than potable use of ground water.
  - (v) Ground water with free product exceeds applicable standards for unrestricted potable use of ground water.
- (b) The volunteer may justify that sampling of a ground water zone underlying the property is not necessary to determine that the ground water in the zone does not contain concentrations of any COCs that exceed unrestricted potable use standards. Based on this justification, the volunteer may apply the provisions to protect ground water that meets potable use standards in paragraph (F)(4) of this rule and paragraph (D) of rule 3745-300-10 of the Administrative Code. As part of this justification, the volunteer shall document that it is reasonable to assume ground water does not exceed the unrestricted potable use standards based on a weight-of-evidence approach using relevant property-specific information, including the following, as necessary:

- (i) The nature, type, concentration, and mass of the COCs released, and the time of release.
  - (ii) The type, concentration, and mass of COCs present in the the following:
    - (a) Subsurface soil or bedrock above the ground ~~waster~~water zone that requires protection.
    - (b) Subsurface soil or bedrock between ~~grond~~ground water zones.
  - (iii) The physical and chemical characteristics of the soil or bedrock beneath the property including, but not limited to, the secondary features, soil or bedrock type, heterogeneity of the subsurface soil or bedrock, or the integrity of any confining units that separate ground water zones.
  - (iv) The separation distance between the source area and the ground water zone, or the separation distance between ground water zones.
  - (v) The results of modeling conducted in accordance with paragraph (G) of this rule, as applicable.
  - (vi) The presence or absence of off-property source areas that may have impacted ground water on, underlying, or emanating from the property. The impact of off-property source areas shall be determined in accordance with paragraph (F)(9) of this rule.
  - (vii) Any other lines of evidence the volunteer believes support the determination that the ground water in a zone underlying the property does not contain concentrations of any COCs above unrestricted potable use standards.
- (4) Demonstration of continuing compliance with the provisions to protect ground water meeting unrestricted potable use standards.
- (a) When the provisions for protecting ground water apply to a ground water zone in accordance with paragraph (D) of rule 3745-300-10, the volunteer shall demonstrate that COCs shall not migrate to the ground water zone at concentrations that exceed unrestricted potable use standards. To demonstrate this, the volunteer shall do either of the following:

- (i) Demonstrate that the COCs in the subsurface do not exceed values that would result in unrestricted potable use standards being exceeded in the ground water zone.
- (ii) Demonstrate that the provisions to protect ground water that meets potable use standards shall not be violated, using a weight-of-evidence approach. As part of this weight-of-evidence approach, the volunteer shall document that it is reasonable to assume the ground water zone will not exceed unrestricted potable use standards in the future using relevant property-specific information, including the following, as necessary:
  - (a) The nature, type, concentration, and mass of the COCs released, and the time of release.
  - (b) The type, concentration, and mass of COCs present in the subsurface soil or bedrock above the ground water zone that requires protection or between ground water zones.
  - (c) The physical and chemical characteristics of the soil or bedrock beneath the property including, but not limited to, the secondary features, soil or bedrock type, heterogeneity of the subsurface soil or bedrock, or the integrity of any confining units that separate ground water zones.
  - (d) The separation distance between the source area and ground water, or the separation distance between ground water zones.
  - (e) The results of modeling conducted in accordance with paragraph (G) of this rule, as applicable.
  - (f) The presence of man-made structures on the property that reduce or prevent infiltration and leaching of any COCs to the ground water zone. Man-made structures which inhibit infiltration are considered engineering controls and shall be maintained under an operation and maintenance plan in accordance with rule 3745-300-11 of the Administrative Code.
  - (g) Any other lines of evidence the volunteer believes support the determination that the ground water in a zone underlying the property shall not exceed concentrations of any COCs above unrestricted potable use standards.

- (b) If it cannot be demonstrated in accordance with paragraph (F)(4) of this rule that COCs shall not leach or otherwise migrate into the ground water zone underlying the property, the volunteer shall implement a remedy in accordance with rule 3745-300-11 of the Administrative Code that prevents the ground water zone underlying the property from exceeding unrestricted potable use standards.
- (5) Determination of applicable standards. Applicable standards shall be determined for all COCs with respect to all exposure pathways determined to be complete under paragraph (F)(1) of this rule for which the volunteer intends to demonstrate compliance with applicable standards in accordance with paragraph (I) of this rule. The volunteer shall determine and derive the applicable standards for each complete exposure pathway in accordance with this chapter.
  - (a) The volunteer shall determine the applicability of generic numerical standards at the property in accordance with paragraph (A)(1)(a) of rule 3745-300-08 of the Administrative Code. If generic direct-contact soil standards for restricted land uses are used to meet applicable standards, institutional controls shall be used to limit the property's land use as described in paragraphs (B)(2)(d) and (C)(2)(c) of rule 3745-300-08 of the Administrative Code. The institutional controls shall be implemented in accordance with rule 3745-300-11 of the Administrative Code.
  - (b) When a property-specific risk assessment is performed at the property, the volunteer shall determine the applicability of standards derived through a property-specific risk assessment conducted in accordance with paragraph (A) of rule 3745-300-09 of the Administrative Code.
  - (c) The volunteer shall determine the applicability of any other standards in this rule or in rule 3745-300-08, 3745-300-09, 3745-300-10, or 3745-300-11 of the Administrative Code.
  - (d) The volunteer shall consider the performance of a remedy employed at the property when the remedy's use is intended to meet or maintain applicable standards. The remedy shall be implemented in accordance with rule 3745-300-11 of the Administrative Code.
  - (e) The volunteer does not need to determine applicable standards in accordance with rule 3745-300-08 or 3745-300-09 of the Administrative Code for COCs when the concentrations of the COCs from the property are at or below background levels determined in accordance with paragraph (H) of this rule.

- (f) The volunteer does not need to determine applicable standards for COCs, if any of the following apply:
- (i) The COCs were the result of a release in a de minimus area or a previously addressed area as determined in accordance with paragraph (E)(2)(a) of rule 3745-300-06 of the Administrative Code.
  - (ii) The volunteer makes the determination that infrequent detections of COCs are a product of artifacts in the data and may not be related to the site operations or disposal practices. The determination shall be based on a demonstration of sufficient weight of evidence. Examples of evidence for consideration include the following:
    - (a) Historical information reported in the phase I property assessment report and other historical data from the property.
    - (b) The concentrations at which the detections are reported, provided that detection limits are not elevated due to matrix interferences.
    - (c) The detections do not indicate the presence of previously unknown areas of high concentration.
    - (d) The COC is not detected in any other sampled environmental media.
    - (e) The likelihood that the detected constituents are degradation or by-products of COCs on the property.
  - (iii) The COCs are demonstrated by the ~~certified~~ laboratory to be tentatively identified compounds without an indication of historical use on the property or evidence that the COCs might be degradation compounds or by-products of one or more other COCs used at the property.
  - (iv) The COCs are demonstrated through appropriate quality assurance and quality control data to be the result of contamination due to field sampling activities or laboratory processes.
  - (v) The COCs are essential human nutrients that are present due to the release or potential release of a hazardous substance or petroleum, and may be toxic only at very high concentrations. These chemicals include iron, magnesium, calcium, potassium, and sodium.

- (vi) The COCs are determined to contribute to less than one per cent of the estimated risk or hazard attributed to a pathway-receptor combination in accordance with the procedures in U.S. EPA's "Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A)" following a procedure analogous to section 5.9.5 of the document.

(6) Determination of the concentrations of chemicals of concern (COCs) in identified areas or in exposure units. The volunteer shall determine the concentrations of the COCs in accordance with paragraphs (F)(6)(a) to (F)(6)(e) of this rule as necessary to make the determinations in paragraph (F) of this rule. Exposure unit determinations shall consider current and future land use exposure scenarios in accordance with paragraph (D)(3)(b) of rule 3745-300-09 of the Administrative Code, and sampling shall be appropriate for the exposure scenario. All samples collected in accordance with this paragraph shall be analyzed by an accredited or certified laboratory, ~~and certified data provided~~, in order to support the determinations.

- (a) To determine the concentrations of the COCs in surface water, the volunteer shall follow a sampling and analysis plan developed in accordance with the following:

- (i) Ohio EPA's "Biological Criteria For the Protection of Aquatic Life: Volume II: User's Manual For Biological Field Assessment Of Ohio Surface Waters."

- (ii) Ohio EPA's "Manual of Ohio EPA Surveillance Methods and Quality Assurance Practices."

- (b) To determine the concentrations of the COCs in sediments to compare the concentrations to the applicable standards identified in paragraphs (G) and (H) of rule 3745-300-08 of the Administrative Code, the volunteer shall sample the sediments in the identified areas in accordance with the procedures in Ohio EPA's "Sediment Sampling Guide and Methodologies." The data collected shall be analyzed by an accredited or certified laboratory to determine the representative concentration or maximum concentration in the identified area. To determine representative or maximum concentrations in identified areas, the volunteer shall derive the concentrations in accordance with paragraph (F)(6)(c) of this rule.

- (c) To determine the concentrations of the COCs in soil to demonstrate compliance with applicable standards, the samples collected shall be



analyzed by ~~an accredited or~~ certified laboratory, ~~and certified data provided~~, to determine the representative concentrations or maximum concentrations of the COCs in the identified area or exposure unit. To determine representative or maximum concentrations of the COCs in identified areas or exposure units, the volunteer shall do one of the following:

- (i) Derive the representative concentration by calculating the ninety-five per cent upper confidence limit of the arithmetic mean. The ninety-five per cent upper confidence limit of the arithmetic mean shall be calculated for each data set. Data sets shall be comprised of a sufficient number and quality of samples as to derive a normal, log-normal, or other applicable frequency distribution. In addition to compliance with paragraph (D) of this rule, the volunteer shall use techniques for sampling normal or log-normal distributions based on appropriate equations in U.S. EPA's "Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites," or by other peer-reviewed statistical methodology for normal or log-normal distributions. Calculating the representative soil concentration using the ninety-five per cent upper confidence limit is inappropriate for vapor intrusion demonstrations.
- (ii) Derive the maximum concentration within the identified area. The volunteer may use the maximum concentration in the data set to represent the identified area concentration, provided that the volunteer can reliably bias sampling activities both vertically and laterally within the identified area to the point of highest concentration. A sufficient number of samples shall be collected in order to evaluate all source areas and exposures for each receptor determined in accordance with paragraph (F)(1) of this rule, provided that a minimum of three or more samples are collected from each identified area and are analyzed by ~~an accredited or~~ certified laboratory, ~~and certified data are provided~~.
- (iii) Derive the representative concentration using the incremental sampling technique based on guidance provided in Mason's "Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies," Gerlach and Nocerino's "Guidance for Obtaining Representative Laboratory Analytical Subsamples from Particulate Laboratory Samples" and the interstate technology regulatory council's "Incremental Sampling Methodology." The volunteer may use the representative concentration from incremental sampling conducted in the identified area or exposure unit,

provided that the samples are analyzed by ~~a~~an accredited or certified laboratory.

(d) To determine the concentrations of the COCs in ground water to demonstrate compliance with applicable standards, the volunteer shall perform sampling activities in compliance with the following criteria:

(i) The method of sample collection shall be capable of producing ground water quality appropriate to evaluate the pathway of concern.

(ii) The volunteer shall collect a sufficient number of samples to adequately characterize a representative concentration of the COCs in ground water. To determine the number and timing of samples collected, the volunteer shall consider temporal variations that could result in an exceedance of applicable standards. Temporal variations include, but are not limited to the following:

(a) Seasonal variations that result in either increased or decreased recharge and thus fluctuations in the water table elevation.

(b) Other variations that result from the impact of geologic heterogeneity (permeability, fractures, etc.), contaminant source heterogeneity, or the transient nature of contaminant transport.

(iii) Sample locations shall be appropriately located to evaluate all reasonably anticipated pathways to ensure applicable standards shall not be exceeded at the points of compliance or receptors based upon the following:

(a) The direction of ground water flow.

(b) The size of the plume.

(c) The date of the release.

(d) Field screening techniques and methods.

(e) Other methods or information, as appropriate.

(iv) One or more sampling locations shall be biased toward the location that is, or would be anticipated to be, the area of highest concentration of COCs. If sample locations cannot be reliably biased towards the area of highest concentration, the volunteer

shall take samples from a number of additional sample locations sufficient to determine the area of highest concentration.

- (v) All samples collected in accordance with this paragraph shall be analyzed by ~~an~~ an accredited or certified laboratory.
- (vi) To determine compliance with applicable standards, the volunteer shall evaluate the data from each location separately.
- (vii) If it is necessary to take a ground water sample directly beneath a source area, the volunteer shall use methods for monitoring well installation, construction, sampling, and maintenance that shall not cause cross-contamination between ground water zones.
- (viii) Methods and procedures shall be followed, according to the limitations and intended uses of the methods and procedures, and based on either of the following:
  - (a) Documents that provide techniques for data collection, field testing, and sampling which conform to the following:
    - (i) Are field-validated.
    - (ii) Are documented and peer-reviewed.
    - (iii) Ensure the representativeness of samples taken following the technique.
    - (iv) Are proven capable of achieving the data quality objectives identified in paragraph (C) of this rule.
  - (b) Ohio EPA's "Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring." If any portion of the "Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring" document would be inconsistent with the purpose of the phase II property assessment and this chapter, that portion should not be used.
- (e) To determine the concentrations of the COCs in either soil gas or indoor air, for a demonstration of compliance with applicable standards, the volunteer shall conduct sampling activities in compliance with the following criteria:

- (i) The method of sample collection shall be capable of producing results appropriate to evaluate the pathway of concern.
- (ii) The volunteer shall collect a sufficient number of samples to adequately characterize a representative concentration of the COCs in either soil gas or indoor air. To determine the number and timing of samples to collect, the volunteer shall consider temporal variations including, but not limited to, the following:
  - (a) Temporal variations in the water table elevation, or concentrations of hazardous substances or petroleum in ground water.
  - (b) Temporal variations that result from interior building pressure changes as a result of the use or non-use of heating, ventilation, and air conditioning (HVAC) systems during different heating and cooling seasons.
- (iii) Sample locations shall be appropriate to evaluate all current and reasonably anticipated exposure pathways. The volunteer shall reasonably bias sampling activities in the identified area to the location that is, or is reasonably anticipated to be, the area of highest concentration of COCs. The selection of sample locations shall take under consideration the following:
  - (a) Distribution of COCs.
  - (b) Building occupancy, including locations and receptors.
  - (c) Building partitions and the layout of HVAC systems.
  - (d) Preferential pathways, which may include, but are not limited to, utility conduits, sumps, wall joints, and floor openings.
  - (e) Other variations that result from the impact of geologic heterogeneity, such as permeability and fractures.
  - (f) Other information, as appropriate.
- (iv) All samples collected in accordance with this paragraph shall be analyzed by ~~an~~ an accredited or certified laboratory.

- (v) Methods and procedures shall be followed, according to the limitations and intended uses of such methods and procedures, and shall be based on either of the following:
  - (a) Documents containing data collection, field testing, and sampling techniques which conform to the following:
    - (i) The data collection, field testing, and sampling techniques are field-validated.
    - (ii) The data collection, field testing, and sampling techniques are documented and peer-reviewed.
    - (iii) The data collection, field testing, and sampling techniques ensure the representativeness of samples taken when the techniques are followed.
    - (iv) The data collection, field testing, and sampling techniques are proven capable of achieving the data quality objectives identified in paragraph (C) of this rule.
  - (b) Ohio EPA's guidance document regarding sample collection and evaluation of vapor intrusion to indoor air.
- (f) Non-intrusive or indirect field testing may be used to assist in the selection of sampling locations, but these techniques shall not be used to demonstrate that concentrations of concern meet or exceed applicable standards.
- (7) Classify the ground water. To classify ground water zones in accordance with paragraphs (A) and (B) of rule 3745-300-10 of the Administrative Code, the volunteer shall conduct the following data collection activities:
  - (a) The volunteer shall determine if the ground water zone is being used. To make the determination, the volunteer, at a minimum, shall do the following:
    - (i) Identify any visual evidence of ground water use in areas where ground water has or is reasonably anticipated to have concentrations of COCs in excess of unrestricted potable use standards.
    - (ii) Review Ohio department of natural resources water well log information for the properties on which ground water contains or is

reasonably anticipated to contain concentrations of COCs in excess of unrestricted potable use standards.

- (b) To determine that the yield of a ground water zone falls below the criterion for critical resource ground water as described in paragraph (B)(1) of rule 3745-300-10 of the Administrative Code, the yield of the ground water zone shall be based on one or more of the following sources of information or methods:
  - (i) The ground water resource maps published by the Ohio department of natural resources or other published and verified data for the ground water zone being classified.
  - (ii) Determined from a sufficient number of properly developed wells constructed to the minimum standards of an eight-inch diameter manufactured screen in a twelve-inch diameter borehole, in accordance with paragraph (F)(8) of this rule. The well screen shall extend through at least eighty per cent of the thickness of the ground water zone, or the volunteer shall otherwise demonstrate that shorter screen lengths would not produce yield that results in a different classification of the ground water.
- (c) To determine that the yield of a ground water zone falls below the criteria for class A ground water in paragraph (B)(2) of rule 3745-300-10 of the Administrative Code, the yield of the ground water zone being classified shall be determined in accordance with paragraph (F)(8) of this rule and shall conform to the following:
  - (i) For an unconsolidated ground water zone, a determination of yield based on a sufficient number of properly developed wells, that are constructed to the minimum standards of a four-inch diameter manufactured screen in an eight-inch diameter borehole or a two-inch diameter manufactured screen in a six-inch diameter borehole. When wells with dimensions of a two-inch diameter manufactured screen in a six-inch diameter borehole are used to determine yield, the yield shall be multiplied by a factor of 1.15 for purposes of this paragraph. The well screen shall extend through at least eighty per cent of the thickness of the ground water zone, or the volunteer shall otherwise demonstrate that shorter intake lengths would not produce yield that results in a different classification of the ground water.

- (ii) For a consolidated ground water zone that is monitored using wells with screens, a determination of yield based on a sufficient number of properly developed wells, that are constructed to the minimum of a four-inch diameter manufactured screen in an eight-inch diameter borehole or a two-inch diameter manufactured screen in a six-inch diameter borehole. When wells with dimensions of a two-inch diameter manufactured screen in a six-inch diameter borehole are used to determine yield, the yield shall be multiplied by a factor of 1.15 for purposes of this paragraph. The well screen shall extend through at least eighty per cent of the thickness of the saturated portion of the ground water zone, or the volunteer shall otherwise demonstrate that shorter intake lengths would not produce yield that results in a different classification of the ground water.
    - (iii) For a consolidated ground water zone that is monitored using wells with open hole intakes, a determination of yield based on a sufficient number of wells that are properly constructed and developed to appropriate minimum standards of an eight-inch diameter borehole or a six-inch diameter borehole. When wells with a six-inch diameter borehole are used to determine yield, the yield shall be multiplied by a factor of 1.15 for purposes of this paragraph. The open hole intakes shall extend through at least eighty per cent of the thickness of the ground water zone, or the volunteer shall otherwise demonstrate that shorter intake lengths would not produce yield that results in a different classification of the ground water.
  - (d) To compare the yield of the ground water zone being classified to another ground water zone present below the property in accordance with paragraph (B)(2)(c) of rule 3745-300-10 of the Administrative Code, the yield of the other ground water zone, which is the likely source of water used for potable purposes within one mile of the property, shall be determined based on the lowest yield of any wells within one mile of the property. If no wells used for potable purposes exist within one mile of the property, the ground water resources maps published by the Ohio department of natural resources may be used to determine the yield of another ground water zone present under the property, which would likely be the source of water used for potable purposes within one mile of the property should a well be developed.
- (8) Determination of ground water yield. When testing is conducted to determine the yield of a ground water zone underlying a property, the volunteer shall conduct sufficient testing to determine the representative yield available from

the ground water zone for potable purposes. The determination shall be made in accordance with the following:

- (a) Temporal considerations. The volunteer shall demonstrate either of the following:
    - (i) The statistical average yield for the ground water zone over a twelve-month period.
    - (ii) The maximum yield for the ground water zone, provided that yield tests are biased towards the period of the highest yield.
  - (b) Spatial considerations. The volunteer shall bias the yield testing locations to the area of highest yield.
- (9) Determination of ground water source areas. To determine whether ground water contamination is attributable to source areas located on the property, source areas located off the property, or a combination of the two, the volunteer shall conduct ground water sampling sufficient to determine the following:
- (a) The releases from source areas located on the property that contribute or contributed to the COCs in excess of unrestricted potable use standards in ground water.
  - (b) The extent to which releases from on-property source areas have affected the ground water.
  - (c) If releases from off-property source areas may have affected the ground water.
  - (d) The extent to which releases from off-property source areas have affected the ground water.
  - (e) Compliance with rule 3745-300-10 of the Administrative Code.
- (10) Determination of contaminant pass-through provision. When a release from an off-property source area has affected the property, the volunteer is not responsible for compliance of applicable standards at or beyond the property boundary due to the excess contribution of COCs caused by the off-property release, except when any of the following apply:
- (a) The owner of the voluntary action property was an owner or operator of any property, other than the voluntary action property, where any source area was located during the owner's ownership of or operation on any such



property, and hazardous substances or petroleum have emanated from the off-property source area onto the voluntary action property.

- (b) The volunteer, or owner if different from the volunteer, caused or contributed to the source areas or the off-property release.
- (c) The volunteer, or owner if different from the volunteer, has entered into an agreement with any person with the purpose or effect of creating a less stringent applicable standard than would otherwise be applicable in this rule.
- (d) The volunteer is a parent, subsidiary, or other commonly owned entity of any party identified in paragraphs (F)(10)(a) to (F)(10)(c) of this rule.

(G) Use of modeling.

- (1) The volunteer shall identify all models relied upon as part of the phase II property assessment activities to determine a property's compliance with applicable standards or used to evaluate remedial activities conducted in accordance with rule 3745-300-11 of the Administrative Code. The modeling shall be conducted in accordance with this rule.
- (2) The model shall conform to the following:
  - (a) The model shall be either of the following:
    - (i) Generally accepted within the scientific community and peer reviewed.
    - (ii) Scientifically valid for the processes being modeled and code-verified. To be code-verified, the model shall be shown to produce reliable and mathematically accurate results for all functions of the model.
  - (b) The model shall be used with assumptions and limitations reasonably consistent with conditions throughout the modeled area. The assumptions and limitations of the computer code, mathematical solution, technology utilized and computer code structure shall be consistent with the conditions throughout the modeled area and the application of the model.
  - (c) The model shall be used in a manner consistent with the model's documentation and intended use.

- (d) The model shall be appropriate for the environmental media and application being modeled.

(3) Uses and limitations of modeling:

- (a) A model may be used as a predictive tool to support a demonstration of ongoing compliance with applicable standards, or to evaluate whether an exposure pathway is reasonably anticipated to be complete, subject to appropriate calibration and field verification.
  - (b) A model may not be used in lieu of conducting sufficient sampling of environmental media in accordance with paragraph (E)(5) of this rule to document existing environmental conditions.
- (4) The modeling shall adequately address the intended purpose of the modeling evaluation, such as to show compliance with applicable standards or to evaluate remedial activities conducted in accordance with rule 3745-300-11 of the Administrative Code. Depending on the intended purpose of the modeling evaluation or type of model, the model may need to be calibrated to the geologic, hydrogeologic, or physical conditions throughout the modeled area. The model may need to be field-verified to determine if favorable comparisons exist between the modeled conditions and observed field conditions for the area being modeled. In some cases, field verification may require monitoring and evaluation under an operation and maintenance plan.
- (5) The modeling shall be evaluated to determine the sensitivity of the model to the input parameters or other components of the model (for example, boundary conditions). The volunteer shall consider the sensitivity of the input parameters when a model is utilized to determine whether a property meets the applicable standards, or when remedial activities conducted in accordance with rule 3745-300-11 of the Administrative Code are evaluated. Input parameters or other components of the model determined to be sensitive to the modeling results shall be either of the following:
- (a) Based on scientifically-valid conservative assumptions. The inputs shall be based on property-specific data, or information from peer-reviewed literature and best professional judgment.
  - (b) Accounted for through an uncertainty analysis to quantitatively determine compliance with applicable standards or to evaluate remedial activities conducted in accordance with rule 3745-300-11 of the Administrative Code. The inputs for the uncertainty analysis shall be based on the following:

- (i) Property-specific data collected in accordance with this rule.
    - (ii) Scientifically-valid and appropriate assumptions using either best professional judgment or information from peer-reviewed scientific literature or publications.
  - (6) The modeling evaluation and the results shall be documented within the phase II property assessment report or within a separate modeling report that addresses paragraphs (G)(1) to (G)(5) of this rule. If a separate modeling report is written, the separate modeling report shall be attached to the phase II property assessment report.
- (H) Determination of background levels. Background levels may be used as the applicable standard after a demonstration is made that the COCs are not the result of current or past activities that involve the treatment, storage, or disposal of a hazardous substance or petroleum. The volunteer shall provide a demonstration as part of paragraph (J)(8) of this rule that COCs for which a background determination is being made comply with this paragraph. Background levels that are determined in accordance with this paragraph are considered applicable standards under this rule.
- (1) Background levels in soil. If the background levels, as determined in accordance with this rule, for a COC do not meet the applicable standard derived for the property in accordance with rule 3745-300-08 or 3745-300-09 of the Administrative Code, the volunteer can select, as the applicable standard, a comparison that demonstrates that the concentration of any such COC on the property is at or below background levels.
    - (a) To determine background levels in soils, the samples shall be taken in soil media native to the property and may not be taken in areas identified in paragraph (H)(1)(b) of this rule. Native fill may be used to determine background levels when the native fill was not moved from or is not currently in an area described in paragraph (H)(1)(b) of this rule. If no areas on a property are appropriate under this rule to sample for background, to determine background levels, the volunteer may collect samples from a nearby, representative off-property location which would comply with this paragraph or refer to an appropriate Ohio EPA "Evaluation of Background Metal Soil Concentrations" summary report.
    - (b) The following areas are inappropriate to sample to determine background levels:
      - (i) The following types of fill areas:

- (a) Engineered fill.
    - (b) Structural fill.
    - (c) Industrial fill.
  - (ii) Areas in which management, treatment, handling, storage, or disposal activities of any of the following are known or suspected to have occurred:
    - (a) Hazardous substances or petroleum.
    - (b) Solid or hazardous wastes.
    - (c) Waste waters.
    - (d) Material handling areas.
  - (iii) Areas within three feet of a roadway. This restriction applies only when the a COC is one that normally would be associated with the activities conducted on the roadway.
  - (iv) Parking lots and areas surrounding parking lots or other paved areas. This restriction applies only when the COC is one that normally would be associated with the activities conducted in the parking lots.
  - (v) Railroad tracks or railway areas or other areas affected by runoff from railroad tracks or railway areas. This restriction applies only when the COCs are those that normally would be associated with the activities conducted on or around the railroad tracks.
  - (vi) Areas of concentrated air pollutant depositions or areas affected by runoff from the areas of concentrated air pollution depositions.
  - (vii) Storm drains or ditches that presently receive or historically received industrial or urban runoff.
  - (viii) Spill areas.
- (c) Background levels shall be representative of the zones or depth intervals to which the background levels may be applied.
  - (d) The following method shall be followed to determine a representative numerical value for background levels in soils at a property:

- (i) Collection of background level samples. At a minimum, eight soil sampling points shall be used to calculate a background level within each zone, or soil horizon which shall be compared to samples taken to determine the concentrations of COCs in identified areas.
- (ii) Determination of the numerical value for background concentrations for COCs at the property. The volunteer may use any statistically valid methodology to determine a background concentration whereby the statistical means of the distribution of background and the impacted area data sets are compared. The volunteer may refer to U.S. EPA's "Guidance for Comparing Background and Chemical Concentrations in Soil for CERCLA sites" and U.S. EPA's "Statistical Methods for Evaluating the Attainment of Cleanup Standards" for guidance. Alternatively, a statistical method that may be applied to establish background concentrations is as follows:

(a) The background mean, referred to as

$$\bar{X}_b$$

shall be calculated by dividing the sum of the total background readings by the total number of background readings:

$$\bar{X}_b = \frac{X_1 + X_2 + X_n}{n_b}$$

- (b) The background standard deviation, referred to as  $S_b$  shall be calculated by taking the square root of the sum of the squares of each reading minus the mean, divided by the degrees of freedom, which is the total number of background samples minus one ( $n_b - 1$ ):

$$S_b = \sqrt{\frac{(X_1 - X_b)^2 + (X_2 - X_b)^2 + \dots + (X_n - X_b)^2}{n_b - 1}}$$

- (c) The coefficient of variation, referred to as  $C_v$  shall be calculated by dividing the background standard deviation by the background mean:

$$C_v = S_b / X_b$$

The coefficient of variation is used as a means to evaluate the data distribution. Normally distributed background data should generally have  $C_v$  less than 0.5 for granular soils, and less than 0.75 for cohesive soils, or an explanation accounting for higher  $C_v$  values. If the  $C_v$  exceeds 1.0 and the volunteer determines that the data are not distributed normally, the data may be normalized by an appropriate transformation and a maximum allowable limit may be calculated for the transformed data in accordance with paragraph (H)(1)(d)(ii) (d) of this rule. If  $C_v$  exceeds 1.0, the volunteer shall conduct a thorough evaluation to account for this variability. If the  $C_v$  exceeds 1.0 and the volunteer determines that a data point does not accurately represent background conditions or if a quality assurance and quality control problem exists which has invalidated the data point, the invalidated and inaccurate data points may be dropped, or additional samples shall be collected and analyzed to ensure a sufficient representative data population is maintained.

- (d) For normally distributed data apply:

$$\bar{X}_b + 2 * S_b$$

of background data as the maximum allowable limit or upper limit, where  $2 \times S_b$  represents two times the standard deviation and

$$\bar{X}_b$$

represents the background mean.

Each sample point from the background data set shall be compared to the calculated maximum allowable limit or upper limit analyzed from background data. If a value from the background data set is found to be an outlier which is not representative of background conditions, this outlier shall be replaced by another sample that is not an outlier to maintain at least eight samples for the background determination for soils.

- (2) Determination of soil background levels from off-property investigations. Upon demonstration that it is not possible to find sampling locations in accordance with paragraph (H)(1) of this rule, the volunteer may use information from off-property investigations in accordance with this paragraph to determine the background concentrations of COCs at the property. To evaluate the applicability of the data collected as part of the off-property investigation, the criteria in paragraphs (H)(1)(b) and (H)(1)(c) of this rule shall be satisfied to consider the data as potentially applicable to determine background levels in soils for the purposes of this rule. If the information is not representative of conditions at the property, the volunteer may not use this method to demonstrate background levels in soil. Appropriate off-property investigations that may be used for the purposes of this paragraph include investigations that user data demonstrated to be reliable and representative of background levels for the property. At a minimum, to be reliable and representative, the investigations shall do the following:
  - (a) Investigations shall be conducted on soil that is representative of the soil type at the property for which the background level is being determined and are located within the state of Ohio.
  - (b) Investigations shall employ data demonstrated to be reliable and representative that, at a minimum, meet the following criteria:

- (i) Employ data quality objectives consistent with paragraph (C) of this rule.
    - (ii) Employ quality assurance and quality control procedures that serve to minimize sources of error and the potential for cross contamination of field samples, and that maximize the representativeness of the data collected.
    - (iii) Employ data collection and sampling techniques that are consistent with the criteria listed in paragraphs (D)(1) to (D)(3) of this rule.
  - (c) Employ methods to calculate background levels consistent with the methods described in paragraph (H)(1)(d) of this rule or otherwise use methods that are demonstrated to be statistically verifiable.
- (3) Ground water background levels.
- (a) Property-specific determination of ground water background levels. If the background levels, as determined in accordance with this rule, for a COC do not meet the applicable standard derived for the property in accordance with rule 3745-300-08 or 3745-300-09 of the Administrative Code, the volunteer can select, as the applicable standard, a comparison that demonstrates that the concentration of any such COC on the property is at or below background levels. To determine background levels in ground water, samples shall be taken up-gradient at appropriate locations and depths which are unaffected by contamination from activities involving treatment, storage or disposal of hazardous substances or petroleum. Background sampling points may include points not hydraulically up-gradient of the identified areas where either of the following occurs:
    - (i) Hydrogeologic conditions do not allow the volunteer to determine which direction is hydraulically up-gradient.
    - (ii) Sampling at other points provides an indication of background ground water quality that is representative or more representative than that provided by the up-gradient points.
  - (b) The number and kind of samples collected to establish background in ground water shall meet the following criteria:
    - (i) Be appropriate for the method used to determine whether concentrations of COCs exceed background, following generally accepted principles.



- (ii) As large as necessary to ensure with reasonable confidence that a contaminant release to the ground water from a property shall be detected.
- (c) The method chosen shall be applied separately for each COC and shall comply with the following performance standards:
  - (i) Capable of accounting for data below the limit of detection using the lowest practical quantitation limit that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the volunteer. The practical quantitation limit shall be below the potable ground water standard.
  - (ii) Provide procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.
  - (iii) If a statistical method is chosen, the method shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution is shown to be inappropriate for a normal theory test, then the data shall be transformed or a distribution-free theory test shall be used. If the distributions for the COCs differ, more than one statistical method may be needed.
  - (iv) Complies with the performance standards provided in U.S EPA's "Statistical Analysis of Ground Water Monitoring Data at RCRA Facilities: Unified Guidance."
- (4) Determination of ground water background levels from off-property investigations. Upon a demonstration that it is not possible to find sampling locations in accordance with paragraph (H)(3) of this rule, the volunteer may use information from off-property investigations in accordance with this paragraph to determine the background concentrations of COCs at the property. To evaluate the applicability of the data collected as part of the off-property investigation, the criteria in paragraphs (H)(3)(b) and (H)(3)(c) of this rule shall be satisfied in order to consider the data as potentially applicable to determine background levels in ground water for the purposes of this rule. If the information is not representative of conditions at the property, the volunteer shall not use this method to demonstrate background levels in ground water. Appropriate off-property investigations that may be used for the purposes of this paragraph include investigations that use data demonstrated to be reliable and representative of background levels for the property. At a minimum, to be reliable and representative, the investigations shall meet the following criteria:

- (a) Be conducted on soils and ground waters representative of the soil type, ground water conditions, and ground water zone at the property for which the background level is being determined and are located within or immediately adjacent to the state of Ohio.
    - (b) Employ data demonstrated to be reliable and representative and at a minimum meet the following criteria:
      - (i) Employ data quality objectives consistent with paragraph (C) of this rule.
      - (ii) Employ quality assurance and quality control procedures that serve to minimize sources of error and the potential for cross contamination of field samples, and maximize the representativeness of the data collected.
      - (iii) Employ data collection and sampling techniques that are consistent with the criteria listed in paragraphs (D)(1) to (D)(3) of this rule.
    - (c) Employ methods to calculate background levels that are demonstrated to be statistically verifiable.
  - (5) If background levels in soil or ground water cannot be determined using paragraphs (H)(1) to (H)(4) of this rule, background levels may not be used as the applicable standards for either the soil or ground water.
- (I) Demonstration of compliance with applicable standards.
- (1) Data collection. The data collected in accordance with this rule shall be sufficient to determine whether applicable standards are met, or to determine that remedial activities conducted in accordance with rule 3745-300-11 of the Administrative Code result in compliance with applicable standards. Data shall be sufficient to assess existing exposure pathways and reasonably anticipated exposure pathways determined to be complete in accordance with paragraph (F)(1) of this rule and all points of compliance for soil, ground water, and other environmental media, including the following:
    - (a) Points of compliance for soil.
      - (i) Applicable standards based on direct-contact with soils. A volunteer shall meet and maintain compliance with the direct-contact soil standards to the following minimum soil depths:

- (a) For properties that have unrestricted land use or unrestricted residential land use, the point of compliance for applicable standards is from the ground surface to a minimum depth of ten feet. The volunteer shall comply with applicable standards at depths below ten feet when soil may be made available for direct-contact through circumstances other than those specified in paragraph (I)(1)(a)(i)(c) of this rule. In these scenarios, the applicable point of compliance extends from the ground surface to the maximum depth of reasonably anticipated activities.
  - (b) For properties that have institutional controls that limit a property's land use, and where the institutional controls are implemented in accordance with rule 3745-300-11 of the Administrative Code, the point of compliance for applicable standards is from the ground surface to a minimum depth of two feet. The volunteer shall comply with applicable standards at depths below two feet when soil may be made available for direct-contact through circumstances other than those specified in paragraph (I)(1)(a)(i)(c) of this rule. The volunteer shall comply with applicable standards at depths greater than two feet when soil may be made available for chronic, direct-contact exposure through excavation, grading, utilities maintenance, or other similar circumstances such as when soil below two feet is brought to the surface and left on the surface or otherwise incorporated into the soil that remains within the two-foot point of compliance.
  - (c) For properties where excavation, grading, or other construction activities may occur on the property, the volunteer shall comply with applicable soil standards for such construction activities. The point of compliance for applicable standards is from the ground surface to a minimum depth equal to the maximum depth of construction activities at the property.
- (ii) Applicable soil standards based on leaching of COCs from soils to ground water. The point of compliance for applicable soil standards based on leaching of chemicals of concern from soils to ground water, when such leaching shall be prevented in accordance with paragraph (D) of rule 3745-300-10 of the Administrative Code, is the depth from the ground surface to the top of the ground water zone that requires protection in accordance with paragraphs (F)(3) and (F)(4) of this rule.

- (iii) Applicable soil standards based on other identified complete exposure pathways. The point of compliance for applicable soil standards developed pursuant to rule 3745-300-08 or 3745-300-09 of the Administrative Code for complete exposure pathways identified in paragraph (F)(1) of this rule, other than those identified in paragraphs (I)(1)(a)(i) and (I)(1)(a)(ii) of this rule, shall be determined so that the exposure to receptors is appropriately addressed.
  - (b) Points of compliance for ground water. The points of compliance for each ground water zone on, underlying, or emanating from a property shall be determined for nonpotable exposure pathways determined in accordance with paragraph (F)(1) of this rule, and in accordance with paragraphs (D) and (E) of rule 3745-300-10 of the Administrative Code.
  - (c) Points of compliance for other environmental media. The points of compliance for each complete exposure pathway identified in paragraph (F)(1) of this rule for each environmental medium other than those identified in paragraphs (I)(1)(a) and (I)(1)(b) of this rule shall be determined in accordance with rule 3745-300-08 or 3745-300-09 of the Administrative Code.
- (2) Data analysis. The volunteer shall verify the assumptions and applicability of models, statistical methods, or any other data analysis methods used to determine compliance with applicable standards, to determine the concentration of COCs, to derive applicable standards, or to demonstrate the effectiveness of a remedial activity. At a minimum, the following shall be demonstrated:
- (a) Models were used in accordance with paragraph (G) of this rule.
  - (b) Statistical methods used are appropriate and valid for the intended use of the statistical methods.
  - (c) Adjustment of applicable standards for multiple COCs was conducted in accordance with rules 3745-300-08 and 3745-300-09 of the Administrative Code, if applicable. All final cumulative human health carcinogenic risk and non-carcinogenic hazard levels are based on one significant figure.
  - ~~(d) If non-certified laboratory data or studies not conducted in accordance with this rule are used to partially comply with this rule, the data shall be confirmed in accordance with paragraphs (E)(1)(d)(iii) of this rule. The~~

~~volunteer shall demonstrate in the phase II property assessment report how the non-certified laboratory data was confirmed using certified data.~~

- ~~(e)~~(d) If applicable standards were not determined for COCs on the property because the COCs meet the criteria of paragraph (F)(5) of this rule, the volunteer shall demonstrate in the phase II property assessment report how the criteria are met.

(3) Compliance with applicable standards.

- (a) The volunteer shall verify compliance with applicable standards for all current exposure pathways and reasonably anticipated exposure pathways determined to be complete in accordance with the procedures described in paragraph (F)(1) of this rule, or the volunteer shall implement a remedy pursuant to paragraph (I)(4)(b) of this rule. The volunteer may make a determination of compliance with applicable standards at any time during the voluntary action including and through assessment and remedial activity implementation.
- (b) To verify compliance with applicable standards, the volunteer shall compare the concentration of each COC determined in accordance with paragraph (F)(6) of this rule to the applicable standard identified in paragraph (D)(2)(d) or (F)(5) of this rule. Compliance with an applicable standard is verified if the concentration of each COC does not exceed the applicable standard. All final cumulative human health carcinogenic risk and non-carcinogenic hazard levels are based on one significant figure.
- (c) Applicable standards may include but are not limited to standards derived from generic numerical standards, background levels determined in accordance with paragraph (H) of this rule, a property-specific risk assessment, or a combination of these standards. If generic direct-contact soil standards for a restricted land use are used to meet applicable standards, institutional controls shall be used to limit the property's land use as described in paragraph (I) of this rule and paragraph (C)(2)(c) of rule 3745-300-08 of the Administrative Code. The institutional controls shall be implemented in accordance with rule 3745-300-11 of the Administrative Code.

(4) Implementation of remedial activities.

- (a) If concentrations of COCs exceed applicable standards for any existing exposure pathway or reasonably anticipated exposure pathway determined to be complete in accordance with paragraph (F)(1) of this

rule, the volunteer shall implement a remedy in accordance with rule 3745-300-11 of the Administrative Code. If the applicable points of compliance for environmental media at the property cannot be met or maintained, the volunteer shall implement a remedy in accordance with rule 3745-300-11 of the Administrative Code.

- (b) If compliance with applicable standards cannot be determined or is not determined for an existing exposure pathway or reasonably anticipated exposure pathway determined to be complete in accordance with paragraph (F)(1) of this rule, the volunteer shall implement a remedy in accordance with rule 3745-300-11 of the Administrative Code. The volunteer shall demonstrate that the remedy renders the pathway incomplete as to all potential receptors and that all points of compliance specified in paragraph (I)(1) of this rule are addressed.
  - (5) In cases where applicable standards were not derived, the applicable standards consist of the standards for each complete exposure pathway identified based on paragraph (F)(1) of this rule and allowable land uses at the points of compliance identified in accordance with paragraph (I)(1) of this rule that met the requirements of rule 3745-300-08 or 3745-300-09 of the Administrative Code at the time of issuance of the no further action letter.
- (J) A volunteer shall complete a phase II property assessment written report in a format that is acceptable to Ohio EPA. At a minimum, the report shall include the following:
- (1) An introduction that identifies the property, including the legal description of the property, the dates over which the phase I property assessment and the phase II property assessment were conducted and the date that the written report for each was finalized, and the name and job title of each person who conducted the phase II property assessment.
  - (2) A summary of any amendment to the phase I property assessment required by paragraph (E)(1) of this rule.
  - (3) A statement of the limitations or qualifications, if any, which impact the phase II property assessment.
  - (4) A graphic or written representation of the conceptual site model that describes the relationships between contaminants, transport media, and receptors at the time of the no further action letter issuance, consistent with paragraph (C) of this rule.

- (5) A summary of the sampling procedures employed in accordance with paragraph (D) of this rule and the rationale for the sampling and testing activities conducted in accordance with this rule.
- (6) A summary of the data collection activities conducted under paragraph (E) of this rule, the data collected as a result of these activities, and a determination of the data usability based on the quality control information. The summary shall include a discussion that notes whether the data meet the data quality objectives required by paragraph (C) of this rule.
- (7) A summary of the determinations made under paragraphs (F)(1) to (F)(10) of this rule, and a summary of the rationale for the determinations made under paragraphs (F)(1) to (F)(10) of this rule.
- (8) A summary of the background determination activities, if any, conducted under paragraph (H) of this rule.
- (9) A summary of any models used in accordance with paragraph (G) of this rule and inclusion of the documentation required by paragraph (G)(6) of this rule.
- (10) If an urban setting designation is relied upon in part to address potable use pathways, a summary of the activities conducted in accordance with paragraph (C)(3) of rule 3745-300-10 of the Administrative Code.
- (11) If a property-specific risk assessment was conducted to derive applicable standards, a copy of the written risk assessment report shall be attached to or included in a section of the phase II property assessment report.
- (12) A summary of any remedial activities implemented prior to the issuance of the no further action letter required by paragraph (I)(4) of this rule.
- (13) A discussion of whether the property complies with applicable standards for each exposure pathway, and whether remedial activities were or are implemented to meet or maintain applicable standards in accordance with rule 3745-300-11 of the Administrative Code, and a summary of the applicable standards demonstration conducted in accordance with paragraph (I) of this rule.
- (14) The following property maps and cross-sections, as applicable:
  - (a) Maps that indicate the locations of all borings, monitoring wells, or other sampling locations.

- (b) Maps that depict the existing topography with a contour interval of no greater than five feet and delineates on or adjacent to the property any existing streams, swamps, lakes, springs, or other surface water features.
  - (c) Geologic cross-sections that represent the subsurface geologic and hydrogeologic conditions underlying the property, including all ground water zones evaluated during the phase II property assessment.
  - (d) Property maps that indicate the locations of the identified areas and exposure units at the property, and the concentration and physical distribution of the COCs identified in environmental media.
  - (e) Maps that indicate the portions of the property where remedial activities were implemented pursuant to rule 3745-300-11 of the Administrative Code, including the institutional controls, risk mitigation measures, and engineering controls. If a remedial activity does not apply to the entire property, include a plat that shows the boundary survey of the portion of the property to which the remedial activity applies. The survey plat shall be completed (signed and sealed) by a professional surveyor under Ohio law. The survey plat may be included in the operation and maintenance plan, risk mitigation plan, or environmental covenant, as applicable, written pursuant to rule 3745-300-11 of the Administrative Code, instead of in the phase II property assessment report.
- (15) A bibliography of references which identifies, to the extent available, the description, date, source, and location of the documents reviewed as part of the phase II property assessment, and the identification of all laboratories that performed analyses as part of the phase II property assessment.
- (16) Appendices for appropriate supporting documentation including attachment of data verification checklists and any data validation reports.



Effective:

Five Year Review (FYR) Dates: 10/17/2024

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Certification

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Date

Promulgated Under: 119.03  
Statutory Authority: 3746.04  
Rule Amplifies: 3746.06, 3746.10  
Prior Effective Dates: 12/16/1996, 10/21/2002, 03/01/2009, 04/23/2012,  
08/01/2014, 05/26/2016, 10/17/2019

3745-300-12

**Variances and case-by-case determinations.**

(A) Authority and scope for variances. A volunteer may apply to the director for a variance from any applicable standard that otherwise applies to a property on which a voluntary action is conducted.

(1) Criteria for variances. The director shall issue a variance from those applicable standards only if the volunteer makes the following demonstrations to the director's satisfaction:

(a) Either or both of the following:

(i) Compliance with the applicable standards otherwise established at the property named in the application is technically infeasible.

(ii) The costs of compliance with the applicable standards otherwise established at the property substantially exceed the economic benefits.

(b) The proposed alternative standard or set of standards and terms and conditions provided in the application result in an improvement of environmental conditions at the property, and ensure the protection of public health and safety.

(c) The establishment of and compliance with the alternative standard or set of standards and terms and conditions are necessary to promote, protect, preserve, or enhance employment opportunities or the reuse of the property named in the application.

(2) Application contents. An application for a variance shall be prepared and submitted by a certified professional, on behalf of the volunteer, on a form provided by Ohio EPA. The application shall include, but is not limited to, the following information:

(a) The name and address of the volunteer.

(b) The name and title of the volunteer's representative who requests the variance.

(c) The certified professional's certification identification number assigned by Ohio EPA, and the certification's expiration date.

(d) A copy of the certified laboratory's certificate or an indication of the certified laboratory's identification number assigned by Ohio EPA for any data submitted to support the variance request. If an accredited laboratory is

used, documentation of accreditation for the data supporting the variance request.

- (e) A statement that identifies the applicable standard that is the focus of the variance request.
  - (f) A statement of the proposed alternative standard or set of standards proposed to be applicable to the affected property and any terms and conditions thereof, including a detailed description or explanation, and the supporting rationale for the new alternative standard.
  - (g) A summary of the technology, methods, or controls used to achieve the alternative standard or set of standards and terms and conditions.
  - (h) A description of the affected property.
  - (i) All information obtained from a phase I or phase II property assessment that is relevant to the affected property.
  - (j) A written demonstration that the proposed variance complies with paragraph (A)(1) of this rule.
  - (k) The names and addresses of all adjacent property owners.
  - (l) The addresses and parcel numbers of all adjacent properties.
- (3) Application review process.
- (a) Within fourteen days after receipt of the application, the director shall determine whether a variance determination application is complete and contains all of the items required by paragraph (A)(2) of this rule, and shall notify the applicant in a letter sent by certified mail.
  - (b) In determining whether a variance determination application is complete, the director may request additional information. The variance applicant, through a certified professional, shall promptly respond to any requests from the director for additional information.
  - (c) Upon determining that a variance determination application is complete, the director shall implement the public notice and public meeting procedures in paragraph (C) of this rule.
  - (d) The applicant for a variance, or a representative of the applicant who is knowledgeable about the affected property and the application, shall

attend the public meeting for the variance application, shall present information about the application and the basis of the request for the variance, and shall respond to questions from the public about the affected property and the variance application.

(4) Issuance or denial of the variance determination.

- (a) When considering whether to approve or deny the application, or whether to impose terms and conditions on the variance determination that are in addition to, or alternative to, any terms and conditions proposed by the applicant, the director shall consider the following:
  - (i) Any comments made by the public at the public meeting on the application.
  - (ii) Any written comments on the application.
- (b) Within ninety days after the public meeting on a variance determination application, the director shall issue a proposed action to the applicant. The proposed action shall include the director's intent with regard to approval or denial of the application, and shall include the findings upon which that proposed action is based.
- (c) The director shall issue a variance from applicable standards established in this chapter only if the variance application makes all of the demonstrations required by paragraph (A)(1) of this rule to the director's satisfaction.
- (d) A variance issued pursuant to this rule shall do the following:
  - (i) State the specific standards whose terms are varied.
  - (ii) Provide the specific alternative standards or set of standards to be applicable to the affected property, and any terms and conditions of such standards that are imposed on the affected property.
  - (iii) Provide the specific alternative standards or set of standards to be applicable to the variance applicant, and any terms and conditions of such standards that are imposed on the variance applicant.
  - (iv) Include only standards and terms and conditions proposed by the applicant in the variance application, except that the director may impose any additional or alternative terms and conditions that the

director determines necessary to ensure the protection of public health and safety.

- (e) The director shall deny a variance application if the director finds that the application is not in compliance with paragraphs (A)(1) and (A)(2) of this rule. If the variance application fails to propose applicable standards which are protective of public health and safety as required in paragraph (A)(1)(b) of this rule, the director shall deny the variance application, unless the imposition of additional or alternative terms and conditions pursuant to paragraph (A)(4) of this rule are protective of public health and safety.
  - (f) Whether an approval or denial of the variance application, the director shall issue an order to the applicant in accordance with paragraph (A)(4) of this rule. Variances shall be approved or denied in accordance with this rule and Chapter 3745. of the Revised Code.
- (B) Authority and scope for case-by-case determinations. A volunteer may apply to the director for a case-by-case determination that renders a generic numeric ground water standard or a property-specific risk assessment-derived ground water standard inapplicable to a property on which a voluntary action is conducted. If the no further action letter relies on a case-by-case determination, then the case-by-case determination shall be approved by the director prior to issuance of the no further action letter for that property.
  - (1) Criteria for case-by-case determinations. The director shall consider public comments received by Ohio EPA during the public comment period conducted pursuant to paragraph (C) of this rule. The director shall issue a case-by-case determination from those applicable standards to remediate contaminated ground water only if the volunteer demonstrates that doing so ensures the continued protection of public health and safety.
  - (2) Application contents. An application for a case-by-case determination shall be prepared and submitted by a certified professional, on behalf of the volunteer, on a form provided by Ohio EPA. The application shall include, but is not limited to, the following information:
    - (a) The name and address of the volunteer.
    - (b) The name and title of the volunteer's representative who requests the determination.

- (c) The certified professional's certification identification number assigned by Ohio EPA, and the certification's expiration date.
  - (d) A copy of the certified laboratory's certificate or an identification number assigned by Ohio EPA for any data submitted to support the case-by-case determination request. If an accredited laboratory is used, documentation of accreditation for the data supporting the case-by-case determination request.
  - (e) A description of the affected property.
  - (f) A statement that identifies the applicable ground water standard that is the focus of the case-by-case determination request.
  - (g) A statement of the proposed alternative standard or set of standards proposed to be applicable to the affected property and any terms and conditions thereof. Include a detailed description or explanation, and the supporting rationale for the new alternative standard, if any.
  - (h) All information obtained from a phase I or phase II property assessment that is relevant to the determination and the affected property.
  - (i) The names and addresses of all adjacent property owners.
  - (j) The addresses and parcel numbers of all adjacent properties.
- (3) Application review process.
- (a) Within fourteen days after receipt of the application, the director shall determine whether the case-by-case determination application is complete and contains all of the items required by paragraph (B)(2) of this rule, and shall notify the applicant in a letter sent by certified mail.
  - (b) In determining whether a case-by-case determination application is complete, the director may request additional information. The applicant, through a certified professional, shall promptly respond to any requests from the director for additional information.
  - (c) Upon determining that a case-by-case determination application is complete, the director shall implement the public notice and public meeting procedures in paragraph (C) of this rule.
  - (d) The applicant for a case-by-case determination, or a representative of the applicant who is knowledgeable about the affected property and the

application, shall attend the public meeting, shall present information about the application and the basis of the request for the case-by-case determination, and shall respond to questions from the public about the affected property and the application.

(4) Issuance or denial of the case-by-case determination.

(a) When considering whether to approve or deny the application, or whether to impose terms and conditions on the case-by-case determination that are in addition to, or alternative to, any terms and conditions proposed by the applicant, the director shall consider the following:

(i) Any comments made by the public at the public meeting on the application.

(ii) Any written comments on the application.

(b) Within ninety days after the public meeting on a case-by-case determination application, the director shall issue a proposed action to the applicant in accordance with section 3745.07 of the Revised Code. The proposed action shall include the director's intent with regard to approval or denial of the application, and shall include the findings upon which that proposed action is based.

(c) The director shall deny a case-by-case application if the director finds that the application fails to be protective of public health and safety, as required in paragraph (B)(1) of this rule.

(d) Whether an approval or denial of the case-by-case determination application, the director shall issue an order to the applicant in accordance with paragraph (B)(4) of this rule. Case-by-case determinations shall be approved or denied in accordance with this rule and Chapter 3745. of the Revised Code.

(C) Public notice and public meeting. Upon determining that a variance or case-by-case determination application is complete, the director shall do the following:

(1) Mail notice of the application to each owner of each parcel of land that is adjacent to the affected property.

(2) Schedule a public meeting for the application and publish notice of the public meeting. The public meeting shall be held between thirty and ninety days after the date of the letter specified in paragraph (A)(3)(a) or (B)(3)(a) of this rule.

The public meeting shall be held in the county where the affected property or the greatest portion of that affected property is located.

- (3) At least thirty days before the date scheduled for the public meeting on an application, the director shall publish public notice of the public meeting. The public notice shall be published in a newspaper of general circulation in the county in which the affected property is located. If the affected property is located in close proximity, as determined by the director, to the boundary of that county with an adjacent county, the director shall publish the public notice in a newspaper of general circulation in the adjacent county. At a minimum, the public notice shall contain the following information:
    - (a) Notification that the director will receive written comments on the application for a period of forty-five days that begins on the date of publication of the public notice.
    - (b) The address of the property to which the application pertains.
    - (c) A brief summary of the alternative standards or set of standards and any terms and conditions proposed by the applicant.
    - (d) The date, time, and location of the public meeting.
  - (4) Concurrently with the publication of the public notice required in paragraph (C)(3) of this rule, the director shall mail notice by certified mail of the application, comment period, and public meeting to each owner of each parcel of land that is adjacent to the affected property, and to the legislative authority of the municipal corporation or township, and county, in which the property is located. The notices mailed to the owners of adjacent land and legislative authorities shall contain the same information as the public notice described in paragraph (C)(3) of this rule.
  - (5) A representative of Ohio EPA who is familiar with the affected property and the application shall attend the public meeting to receive comments from the public and to respond to questions from the public about the affected property and the application.
  - (6) A stenographic record of the proceedings at the public meeting shall be kept and shall be made a part of the administrative record about the application. Ohio EPA shall maintain all records produced by or for the public meeting.
- (D) Administrative fees. An applicant who seeks a variance or case-by case determination shall reimburse Ohio EPA for actual costs incurred to review the application and the application's accompanying information. The applicant shall establish a direct billing



schedule for payments, as required by paragraph ~~(E)~~(C) of rule 3745-300-03 of the Administrative Code. After the application is approved, denied, or withdrawn, Ohio EPA shall send to the applicant a statement of actual costs for payment. The applicant shall pay the actual costs, in full, within sixty days after receipt of the statement.

- (E) Application withdrawal. Upon receipt of a written request by the applicant, an application for variance or a case-by-case determination made in accordance with this rule may be withdrawn from the director's consideration. A request for withdrawal shall be submitted to Ohio EPA prior to an approval or denial of the application. Upon the application's withdrawal, the director shall cease review of the application and shall discontinue the public notice and public meeting processes. Any costs incurred by Ohio EPA prior to withdrawal are non-refundable.

Effective:

Five Year Review (FYR) Dates: 10/17/2024

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Certification

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Date

Promulgated Under: 119.03  
Statutory Authority: 3746.04  
Rule Amplifies: 3746.09  
Prior Effective Dates: 12/29/1995, 03/01/2009, 08/01/2014, 10/17/2019

3745-300-13

**No further action letter content and procedures.**

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-300-15 of the Administrative Code titled "Incorporation by reference - voluntary action program."]

(A) No further action letter timing. For the purposes of this chapter and Chapter 3746. of the Revised Code, a no further action letter may be issued pursuant to this rule by a certified professional for a property under one or a combination of the following circumstances:

- (1) After completion of a phase I property assessment conducted in accordance with rule 3745-300-06 of the Administrative Code, a certified professional determines that there is no information that establishes any reason to believe a release of hazardous substances or petroleum has or may have occurred at or upon a property.
- (2) After completion of a phase I property assessment conducted in accordance with rule 3745-300-06 of the Administrative Code, a certified professional determines a release of hazardous substances or petroleum occurred on the property, and the release is demonstrated in writing to be within a de minimis or previously addressed area in accordance with paragraph (E)(2) of rule 3745-300-06 of the Administrative Code.
- (3) After completion of a phase II property assessment conducted in accordance with rule 3745-300-07 of the Administrative Code, a certified professional determines the concentrations of chemicals of concern (COCs) pertaining to the property do not exceed the applicable standards.
- (4) After completion of a phase II property assessment conducted in accordance with rule 3745-300-07 of the Administrative Code, a certified professional determines the concentrations of COCs pertaining to the property exceed the applicable standards but one or both of the following situations occurs:
  - (a) Those applicable standards are achieved through remedial activities.
  - (b) Those applicable standards shall be achieved in accordance with one of the following mechanisms:
    - (i) An operation and maintenance plan, if required under rule 3745-300-11 of the Administrative Code.

(ii) A consolidated standards permit issued under section 3746.15 of the Revised Code and any rules adopted thereunder.

(B) Volunteer provides supporting information to certified professional. In order to support a volunteer's request to a certified professional for a no further action letter to be issued by the certified professional, a volunteer, and other persons who perform work to support the issuance of the no further action letter, shall submit to a certified professional, by affidavit, all relevant investigatory and remedial information that pertains to the property. The information shall include, but is not limited to, the following:

- (1) Information that demonstrates that there is no contamination by hazardous substances or petroleum of soil, sediments, surface water, or ground water released on or from the property that exceeds applicable standards. Each demonstration shall be based upon the findings of a phase I property assessment in accordance with rule 3745-300-06 of the Administrative Code or a phase II property assessment in accordance with rule 3745-300-07 of the Administrative Code.
- (2) Information that demonstrates compliance with rule 3745-300-02 of the Administrative Code regarding the eligibility of the property to participate in the voluntary action program.
- (3) If remedial activities were conducted in connection with a voluntary action, data that demonstrates that any or all remedies meet or shall meet applicable standards in accordance with paragraph (E) of rule 3745-300-11 of the Administrative Code.
- (4) For any no further action letter that is not to be submitted to Ohio EPA for a covenant not to sue, the institutional controls needed to restrict the use of the property to comply with applicable standards include a demonstration that all institutional controls for the property are established. The demonstration shall consist of a deed or declaration of the institutional controls that are recorded in the office of the county recorder of the county in which the property is located, or are entered as a memorial in the appropriate register for "registered land" as defined in section 5309.01 of the Revised Code, in compliance with section 3746.14 of the Revised Code. This requirement shall not apply to any no further action letter submitted to Ohio EPA with a request for a covenant not to sue, as provided by paragraphs (B)(5) and (E)(8)(e) of this rule.
- (5) For any no further action letter that is to be submitted to Ohio EPA for a covenant not to sue, the activity and use limitations needed to comply with applicable standards include a demonstration that the activity and use limitations were

developed in accordance with this chapter and are in a proposed environmental covenant that complies with section 5301.82 of the Revised Code. This requirement applies when the volunteer intends to request from the director a covenant not to sue, or when the volunteer does not intend to request a covenant not to sue but Ohio EPA is obligated to review the no further action letter pursuant to division (C) of section 122.654 of the Revised Code.

- (6) An operation and maintenance plan and a proposed operation and maintenance agreement, for the remedies that require such documents in accordance with rule 3745-300-11 of the Administrative Code.
- (7) The affidavits required by paragraphs (O) and (P) of this rule.
- (C) Prohibition on withholding information. A person, with the purpose to deceive a certified professional, certified laboratory, accredited laboratory, or a contractor thereof, or Ohio EPA or a contractor thereof, may not withhold, conceal, or destroy any data, information, records, or documents relating to a voluntary action.
- (D) Certified professional review of information. After receipt of the information that is required to be submitted by a volunteer under paragraph (B) of this rule, a certified professional shall do the following:
  - (1) Review the information to determine whether or not the property complies with the applicable standards.
  - (2) Ensure that the information is reviewed by persons with experience and competence in areas other than that of the certified professional, as necessary for the issuance of the no further action letter.
  - (3) Verify the data to ensure that the data supports the issuance of the no further action letter.
  - ~~(3)~~(4) Determine that the property meets all eligibility requirements in accordance with rule 3745-300-02 of the Administrative Code.
  - ~~(4)~~(5) Based on evaluation of the phase I property assessment, complete the following tasks:
    - (a) The certified professional shall use best professional judgment to decide which requirements in paragraphs (C) and (E) of rule 3745-300-06 of the Administrative Code shall be re-evaluated to determine whether or not phase II property assessment is required.

(b) If any requirements in paragraphs (C) and (E) of rule 3745-300-06 of the Administrative Code require re-evaluation, documentation of the additional information gathered to comply with this paragraph shall be included in an updated phase I property assessment report.

~~(5)~~(6) The following activities shall be performed or completed within one hundred eighty days prior to the issuance of the no further action letter:

(a) All requirements in paragraphs (C) and (E) of rule 3745-300-06 of the Administrative Code pursuant to a phase I property assessment, unless paragraph (D)(4)(b) of this rule applies.

(b) A walk-over of the property by the certified professional.

~~(6)~~(7) If, in the best professional judgment of the certified professional, no change in environmental conditions at the property has occurred since the requirements in paragraphs (C) and (E) of rule 3745-300-06 of the Administrative Code were performed, such requirements need not be repeated within one hundred-eighty days prior to the issuance of the no further action letter. For purposes of this rule, a change in environmental conditions means new information about known or suspected releases to environmental media that results in one or both of the following:

(a) Additional identified areas at the property that are subject to phase II property assessment.

(b) Previously identified areas at the property that need further phase II property assessment due to the new information.

(E) No further action letter preparation and issuance. After performing a review of documents and completion of other activities in accordance with paragraph (D) of this rule, if the certified professional concludes on the basis of best available knowledge, information, and belief that a property meets or shall meet applicable standards, a certified professional may prepare a no further action letter for the property. For any no further action letter prepared, the certified professional shall prepare the no further action letter in the format prescribed by Ohio EPA, and electronic copies of the document shall be indexed appropriately in a format prescribed by Ohio EPA. At a minimum, the no further action letter shall include the following information:

[Comment: In this rule, when "prescribed by Ohio EPA" is used, information about the format and submittal requirements are available on the voluntary action program's web site.]

- (1) A statement that the property is eligible to participate in the voluntary action program pursuant to rule 3745-300-02 of the Administrative Code.
- (2) A statement of whether or not a risk assessment was performed pursuant to rule 3745-300-09 of the Administrative Code.
- (3) The name, title, and employer of each person who performed work, other than the certified professional, to support the no further action letter, and the nature and scope of the work performed by that person.
- (4) A list of all documents and affidavits prepared in accordance with paragraphs (O) and (P) of this rule, and the date such documents and affidavits were prepared, which were reviewed by the certified professional as described in paragraph (B) of this rule in preparing the no further action letter.
- (5) An executive summary, to be filed with deed records, of the information required to be submitted by the volunteer to the certified professional. The executive summary shall do the following:
  - (a) Reflect the content and demonstrations by which the property complies with the applicable standards.
  - (b) Meet the recording requirement of paragraph (L) of this rule.
  - (c) Reference the legal description and surveyed acreage of the property.
- (6) A detailed executive summary, not to be filed with deed records, of the information required to be submitted by the volunteer to the certified professional. The detailed executive summary shall do the following:
  - (a) Reflect the content and demonstrations by which the property complies with the applicable standards.
  - (b) Identify the applicable standards for the property that reflect the certified professional's conclusion that the property complies with the applicable standards for each complete exposure pathway identified under paragraph (F)(1) of rule 3745-300-07 of the Administrative Code.
  - (c) Verify that the demonstration of compliance with the applicable standards is based on ~~certified~~ data that is generated by ~~an~~ an accredited or certified laboratory pursuant to rule 3745-300-04 of the Administrative Code, if such data is required by rule 3745-300-07 of the Administrative Code.

- (d) Provide a description of all COCs identified in the environmental media on or from the property, the source of the COCs, if known, and the locations and concentration levels of the COCs prior to any remediation. (The no further action letter also shall provide this information in a summary table format.)
- (7) Summary of figures and maps. The no further action letter shall include an electronic file as available which includes the map data formatted in a manner prescribed by Ohio EPA. The property maps shall include, but are not limited to, the following:
- (a) Property location map, as required by paragraph (G)(5)(a) of rule 3745-300-06 of the Administrative Code, in a format that maintains readability even if reproduced without color. Include a version scaled for printing on "8.5 x 11" inch-sized paper.
  - (b) A boundary survey plat or plats completed (signed and sealed) by a professional surveyor licensed under Ohio law that includes a version scaled for printing on "8.5 x 11" inch-sized paper. Provide a simplified plat of the boundary survey that maintains readability when printed on "8.5 x 11" inch-sized paper. Such plat shall depict the following:
    - (i) The boundary of the property that is the subject of the no further action letter.
    - (ii) The acreage of the property.
    - (iii) Each current tax parcel number that applies to the property. For any portion of the property that includes less than an entire tax parcel, the plat shall indicate the affected tax parcel numbers and shall depict the included and excluded portions.
- [Comment: No highly detailed survey plat, such as an "American Land Title Association/American Congress on Surveying and Mapping" (ALTA/ACSM) survey, fulfills this rule. Instead, this rule requires a simple boundary survey that presents the specified information in a reducible and reproducible plat format.]
- (c) Site maps that show the property boundary, buildings, roads, utilities, surface waters, geologic cross-section locations, and other site features, as applicable.
  - (d) Geologic cross-sections, which include water level and saturated zone thickness if applicable.



- (e) Ground water flow maps, which include water level measurements if applicable.
  - (f) The location of each identified area and exposure unit, if any, which were evaluated in making the determination that the property complies with applicable standards.
  - (g) The locations of all borings, monitoring wells, and other sampling locations, as required by paragraph (J)(14)(a) of rule 3745-300-07 of the Administrative Code, if applicable.
  - (h) Conceptual site model figure or diagram, if applicable.
  - (i) Site maps that show the location of remedial activities performed, if applicable.
  - (j) The locations where remedial activities were or are being implemented pursuant to rule 3745-300-11 of the Administrative Code.
  - (k) A survey plat or plats, completed (signed and sealed) by a professional surveyor licensed under Ohio law, that delineates the portions of the property that are subject to engineering controls or any activity and use limitations, as required by paragraph (J)(14)(e) of rule 3745-300-07 of the Administrative Code. The plat shall be scaled for printing on "8.5 x 11" inch-sized paper. ~~The plat shall~~ and maintain readability when printed as an attachment to the plan.
  - (l) All maps required by this rule shall include the following:
    - (i) A citation that indicates accuracy including the author, and date of current source.
    - (ii) Scale. The scale shall maintain readability even if reproduced without color.
- (8) Summary tables which provide the following:
- (a) Regarding all COCs identified in environmental media on or from the property, the summary tables shall include the following:
    - (i) A description of the COCs by name or type.
    - (ii) The source of such COCs, if known.

- (iii) The locations and concentration levels in affected media prior to any remediation.
    - (iv) The concentration levels at the time of issuance of the no further action letter.
  - (b) Summary exposure point concentrations for current and reasonable anticipated post-remedy pathways, if applicable, in soil, ground water, and vapor intrusion pathways.
- (9) When institutional controls (use restrictions or activity and use limitations) are relied upon for the property to comply with applicable standards, provide a demonstration as applicable.
  - (a) When the volunteer does not intend to request a covenant not to sue from the director, and Ohio EPA is not obligated to review the no further action letter pursuant to division (C) of section 122.654 of the Revised Code, the following document is required:
    - (i) A copy of the institutional controls (use restrictions), that is one of the following:
      - (a) Bearing the mark of recordation of the county recorder's office of the county in which the property is located.
      - (b) Entered in the appropriated register for "registered land," as defined in section 5309.01 of the Revised Code.
    - (ii) The institutional controls shall be consistent with rule 3745-300-11 of the Administrative Code and other applicable laws.
  - (b) When the volunteer intends to either request a covenant not to sue from the director, or to request that the director make a determination pursuant to division (C) of section 122.654 of the Revised Code, the following document is required:
    - (i) A copy of the proposed environmental covenant for the property that is both of the following:
      - (a) In compliance with section 5301.82 of the Revised Code.
      - (b) Includes the activity and use limitations developed in accordance with rule 3745-300-11 of the Administrative Code and other applicable laws.

- (ii) If only a portion of the property is the subject to the activity and use limitations (i.e., the activity and use limitations do not apply to the entire property), the environmental covenant shall include additional legal description and survey plat of the portion of the property that is subject to the activity and use limitations. The survey plat shall be completed by a professional surveyor under Ohio law. The plat shall be scaled for printing on "8.5 x 11" inch-sized paper. ~~The plat shall~~ and maintain readability when printed as an attachment to the environmental covenant.
  - (10) A legal description of the property that is subject to the no further action letter.
  - (11) A copy of the operation and maintenance plan and a copy of the proposed operation and maintenance agreement prepared in accordance with rule 3745-300-11 of the Administrative Code, if the documents are required by that rule.
  - (12) A copy of the risk mitigation plan prepared in accordance with rule 3745-300-11 of the Administrative Code, if the plan is required by that rule.
  - (13) A copy of the consolidated standards permit and supporting documents issued pursuant to section 3746.15 of the Revised Code, if any.
  - (14) A copy of the approval of a variance or case-by-case determination obtained pursuant to rule 3745-300-12 of the Administrative Code, if any.
  - (15) A copy of the affidavit prepared in connection with the voluntary action by which the certified professional issued the no further action letter in accordance with paragraph (Q) of this rule and rule 3745-300-05 of the Administrative Code.
  - (16) Any other information the certified professional considers relevant.
- (F) Certified professional's request to the volunteer. Upon issuance of a no further action letter, the certified professional shall send a copy of the no further action letter to the volunteer. The no further action letter shall be accompanied by the following:
- (1) A written request that the volunteer notify the certified professional as to whether or not the volunteer directs the certified professional to submit the no further action letter to Ohio EPA.
  - (2) A written notice informing the volunteer of the following:
    - (a) The no further action letter may be submitted to Ohio EPA only by a certified professional.

- (b) The volunteer may receive a covenant not to sue in connection with the voluntary action only if the certified professional submits the no further action letter to Ohio EPA on behalf of the volunteer.
  - (3) An affidavit, prepared in accordance with paragraph (Q) of this rule, by the certified professional who issued the no further action letter.
- (G) Volunteer's notice to certified professional. Promptly after receipt of the no further action letter and the request described in paragraph (F)(1) of this rule, the volunteer shall do the following:
- (1) Provide notice to the certified professional which indicates whether or not the volunteer directs the certified professional to submit the no further action letter to Ohio EPA in a manner prescribed by Ohio EPA.
  - (2) Provide notice to Ohio EPA which indicates whether or not the volunteer directs the certified professional to submit the no further action letter to Ohio EPA.
- (H) Certified professional's response to volunteer's notice. Promptly after receipt of the written notice pursuant to paragraph (G) of this rule, the certified professional shall do either of the following:
- (1) Submit an electronic version of the no further action letter to Ohio EPA, in a manner prescribed by Ohio EPA, on behalf of the volunteer, if the volunteer's notice indicates that the volunteer directs the certified professional to submit the no further action letter to Ohio EPA. The no further action letter shall include the following:
    - (a) The certified professional's original affidavit executed in accordance with paragraph (Q) of this rule.
    - (b) Administrative information, in accordance with paragraph (I) of this rule.
    - (c) A transmittal letter, in accordance with paragraph (F) of this rule.
    - (d) Volunteer notification to the certified professional, in accordance with paragraph (G) of this rule.
  - (2) Send the original no further action letter to the volunteer promptly after receipt of the notice, if the notice indicates that the volunteer does not direct the certified professional to submit the no further action letter to Ohio EPA.
- (I) Request for a covenant not to sue. When the certified professional submits the no further action letter to Ohio EPA, in accordance with paragraph (G) of this rule, the certified

professional shall submit the no further action letter in the format prescribed by Ohio EPA and described in paragraph (E) of this rule, and shall provide administrative information for Ohio EPA to process the request. The administrative information shall include the following:

- (1) Identification of the tax parcel numbers and the taxing districts for the property.  
If any portion of the property includes less than an entire tax parcel, the no further action letter shall include a map that indicates the affected tax parcel numbers, and the included and excluded portions, as described in paragraph (E) (7) of this rule.
- (2) Payment and fees information based on the current fee structure defined by Ohio EPA.
- (3) Eligibility determination of class C releases and non-class C releases of underground storage tank systems regulated by the bureau of underground storage tank regulations.
- (4) Property information including the name and contact information of the volunteer, the certified professional, and the property owner.
- (5) Remedy information, including whether or not the no further action letter includes a proposed environmental covenant, an operation and maintenance plan, or a risk mitigation plan.
- (6) The date that remedial activities began for the property, and a description of the remedial activities that began on that date.

(J) [Reserved.]

(K) Withdrawal of request for a covenant not to sue. The volunteer may, through the certified professional, withdraw from Ohio EPA the submittal of a no further action letter for the property and the request for a covenant not to sue.

(L) Recording of documents by the volunteer. If a covenant not to sue is issued by the director, the volunteer who is issued the covenant not to sue shall ensure that the certified professional's executive summary of the no further action letter, in the format described in paragraph (E) of this rule, the covenant not to sue, and the environmental covenant for the property, if any, are recorded, in the same manner as a deed to the property, in the office of the county recorder of the county in which the property is located.

(M) Submittal of supporting documentation. Upon receipt of the covenant not to sue by the volunteer, the certified professional shall provide, at a minimum, the following

supporting documentation evaluated by the certified professional in accordance with paragraph (D) of this rule to determine that the property meets or shall meet applicable standards and that the property was eligible to participate in the voluntary action program, as applicable:

- (1) The phase I property assessment report completed in accordance with rule 3745-300-06 of the Administrative Code, and any updates to the phase I property assessment report.
  - (2) Any sampling plans, remediation reports, closure reports, laboratory reports with dates, and compliance reports.
  - (3) The phase II property assessment report completed in accordance with rule 3745-300-07 of the Administrative Code.
  - (4) A description of all COCs identified in environmental media, the source of such COCs, if known, and the locations and concentration levels of such COCs prior to and after any remediation.
  - (5) A property-specific risk assessment report completed in accordance with rule 3745-300-09 of the Administrative Code, if such a property-specific assessment was used in lieu of, or in addition to, generic numerical standards established in rule 3745-300-08 of the Administrative Code.
  - (6) Information that demonstrates that the property conforms with each of the exposure assumptions used to calculate the applicable standards for the property, including all exposure assumptions used to calculate the generic numerical standards established in rule 3745-300-08 of the Administrative Code and all exposure assumptions used to determine the applicable standards under rule 3745-300-09 of the Administrative Code, as applicable to the property.
  - (7) All affidavits prepared in connection with the voluntary action in accordance with paragraphs (O) to (Q) of this rule, and as required by rules 3745-300-04 and 3745-300-05 of the Administrative Code.
  - (8) Documentation of the measures completed to justify a pathway deferral, if a pathway deferral was completed in accordance with rule 3745-300-11 of the Administrative Code.
  - (9) Any other information the certified professional considers relevant.
- (N) Transfers. A no further action letter, a covenant not to sue, and any agreement authorized to be entered into under Chapter 3746. of the Revised Code and this

chapter may be transferred by the recipient to any other person by assignment or in conjunction with the acquisition of title to the property to which such document applies.

- (O) Affidavit requirement for volunteers and persons who performed work to support a request for issuance of a no further action letter. When a volunteer or a person who performed work to support a request for the issuance of a no further action letter submits information, data, documents, or reports to a certified professional, accredited laboratory, a certified laboratory, or Ohio EPA, the volunteer or person shall provide the submittal under affidavit. The affidavit shall be based on the knowledge, information, and belief of that volunteer or person, and shall include the following:

- (1) The name of the affiant.
- (2) A statement that the affiant is authorized to submit the affidavit on behalf of the volunteer, with the name of the entity with whom the affiant is employed or retained if the affiant is not employed or retained by the volunteer.
- (3) The name and address of the property subject to the voluntary action.
- (4) The purpose for which the information, data, documents, or reports are submitted.

[Comment: For example, when a person performs work to support a request for issuance of a no further action letter, such as a consultant who completes a phase I property assessment or a property-specific risk assessment report, the consultant's affidavit identifies the submittal purpose and the report name.]

- (5) An identification of all information, data, documents, or reports submitted with the affidavit.
- (6) When information, data, documents, or reports are submitted to a certified professional to support a request for issuance of a no further action letter, a statement that the work indicated by the submittal was conducted in compliance with all applicable local, state, and federal laws and regulations.
- (7) A statement attesting that all information, data, documents, or reports submitted by the affiant are true, accurate, and complete.

[Comment: Paragraph (O) of this rule does not apply to information, data, documents, or reports provided by any federal, state, or local governmental entity in response to a public records request.]

(P) Affidavit requirement for accredited and certified laboratories. The information, data, documents, or reports submitted by ~~an accredited or~~ certified laboratory to a volunteer, a certified professional, Ohio EPA, or any other person to support a request for issuance of a no further action letter shall be submitted by affidavit. ~~Each~~

(1) Each time that information, data, documents, or reports are submitted by a certified laboratory in order to conduct or complete a voluntary action, an authorized representative of the certified laboratory shall submit an affidavit based upon the certified laboratory's knowledge, information, and belief, that includes the following:

~~(1)~~(a) The name of the affiant.

~~(2)~~(b) A statement attesting that the affiant is authorized to submit the affidavit on behalf of the certified laboratory.

~~(3)~~(c) Name and address of the property that is the subject of the voluntary action.

~~(4)~~(d) A statement attesting that the purpose for which the information, data, documents, or reports are submitted is to support a request for issuance of a no further action letter.

~~(5)~~(e) An identification of all information, data, documents, or reports submitted with the affidavit.

~~(6)~~(f) A statement attesting that the certified laboratory performed the analyses documented in the submittal in accordance with the laboratory's current certificate issued under the voluntary action program, and that the laboratory was certified for each analyte, parameter group, and method used at the time the laboratory performed the analyses.

~~(7)~~(g) A statement attesting that, at the time of analysis, the analyses were performed pursuant to the certified laboratory's standard operating procedures and quality assurance program plan in accordance with rule 3745-300-04 of the Administrative Code.

~~(8)~~(h) A statement attesting that all information, data, documents, or reports submitted by the certified laboratory in support of the request for issuance of a no further action letter are true, accurate, and complete.

(2) Affidavit requirements for accredited laboratories. Each time that information, data, documents, or reports are submitted by an accredited laboratory in order to conduct or complete a voluntary action, an authorized representative of



the accredited laboratory shall submit an affidavit based upon the accredited laboratory's knowledge, information, and belief, that includes the following:

- (a) The name of the affiant.
- (b) A statement attesting that the affiant is authorized to submit the affidavit on behalf of the accredited laboratory.
- (c) Name and address of the property that is the subject of the voluntary action.
- (d) A statement attesting that the purpose for which the information, data, documents, or reports are submitted is to support a request for issuance of a no further action letter.
- (e) An identification of all information, data, documents, or reports submitted with the affidavit.
- (f) A statement attesting that the accredited laboratory performed the analyses documented in the submittal in accordance with the laboratory's current accreditation and that the laboratory was accredited for each analyte, parameter group, and method used at the time the laboratory performed the analyses.
- (g) A statement attesting that, at the time of analysis, the analyses were performed pursuant to the accredited laboratory's standard operating procedures and quality assurance program plan.
- (h) A statement attesting that all information, data, documents, or reports submitted by the accredited laboratory in support of the request for issuance of a no further action letter are true, accurate, and complete.

(Q) Affidavit requirement for the certified professional. For each no further action letter issued to a volunteer or submitted to Ohio EPA that requests a covenant not to sue from the director, the certified professional shall submit an affidavit with the no further action letter. Each affidavit shall be issued based upon the certified professional's knowledge, information, and belief, and shall include the following:

- (1) The name of the certified professional.
- (2) The name and address of the property that is the subject of the no further action letter, each volunteer, and the property owner.
- (3) A statement attesting that the certified professional read all standards of conduct in paragraph (E) of rule 3745-300-05 of the Administrative Code and met

the standards of conduct while the certified professional rendered professional services regarding the voluntary action at the property.

- (4) A statement attesting that the property is eligible for the voluntary action program pursuant to rule 3745-300-02 of the Administrative Code and section 3746.02 of the Revised Code.
- (5) A statement attesting that the voluntary action was conducted, and that the no further action letter was issued in accordance with this chapter and Chapter 3746. of the Revised Code.
- (6) A statement attesting that the voluntary action was conducted in compliance with all applicable local, state, and federal laws and regulations and any previous noncompliance was addressed in accordance with such laws and regulations.
- (7) A statement attesting that the no further action letter, and any information, data, documents, or reports submitted with the no further action letter are true, accurate, and complete.

[Comment: To assist in compliance with this rule, Ohio EPA provides example affidavit language on Ohio EPA's voluntary action program web site.]

Effective:

Five Year Review (FYR) Dates: 10/17/2024

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Certification

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Date

Promulgated Under: 119.03  
Statutory Authority: 3746.04  
Rule Amplifies: 3746.11, 3746.12, 3746.20  
Prior Effective Dates: 12/29/1995, 12/16/1996, 04/19/2006, 03/01/2009,  
08/01/2014, 05/26/2016, 10/17/2019

3745-300-14

**Audits.**

(A) The director shall conduct audits in connection with no further action letters issued under section 3746.11 of the Revised Code for any of the following purposes:

- (1) To determine whether, after completion of voluntary actions conducted pursuant to this chapter and Chapter 3746. of the Revised Code, the properties upon which the voluntary actions were conducted meet applicable standards.
- (2) To review the qualifications of and work performed by certified professionals under this chapter and Chapter 3746. of the Revised Code to determine whether the certified professionals possess the qualifications required for certification pursuant to rule 3745-300-05 of the Administrative Code and whether the certified professionals' performance in the voluntary action program has resulted in the issuance of no further action letters that are not consistent with applicable standards.
- (3) To review the qualifications of and work performed by ~~certified~~ laboratories to determine whether the ~~certified~~ laboratories possess the qualifications required for certification pursuant to rule 3745-300-04 of the Administrative Code and whether the ~~certified~~ laboratories' performance under this chapter and Chapter 3746. of the Revised Code has resulted in the issuance of no further action letters that are not consistent with applicable standards.

(B) Audits selected from the random audit pool shall be conducted in accordance with paragraph (F) of this rule. The director shall select no further action letters for audit from the random audit pool by any method the director deems necessary.

(C) The director may select no further action letters for audit from the discretionary audit pool by any method the director deems necessary. Audits of no further action letters selected from the discretionary audit pool may be conducted by the director in accordance with paragraph (F) of this rule, or by any other means. The director may conduct a discretionary audit for any reason including, but not limited to, any no further action letters that meet any of the following criteria:

- ~~(1) Was prepared by an individual who was certified under division (D) of section 3746.07 of the Revised Code, but not certified pursuant to rule 3745-300-05 of the Administrative Code.~~
- ~~(2) Relied upon analyses by a laboratory certified under division (E) of section 3746.07 of the Revised Code, but not certified under rule 3745-300-04 of the Administrative Code for the analyte, parameter group, and method used in support of the no further action letter.~~

- ~~(3)~~(1) The director has reason to believe the no further action letter was submitted fraudulently.
  - ~~(4)~~(2) Was prepared by a certified professional whose certification was subsequently revoked in accordance with rule 3745-300-05 of the Administrative Code.
  - ~~(5)~~(3) Relied upon analyses by a certified laboratory whose certification was subsequently revoked in accordance with rule 3745-300-04 of the Administrative Code or whose accreditation was subsequently revoked.
  - ~~(6)~~(4) Was the basis for a covenant not to sue which was subsequently revoked under this chapter and Chapter 3746. of the Revised Code.
  - ~~(7)~~(5) The certified professional, volunteer, or owner of the property has notified the director, in compliance with paragraph (E)(2)(f) of rule 3745-300-05 of the Administrative Code, that relevant facts, data, or other information existed at the time the no further action letter was issued which indicates applicable standards were not met.
  - ~~(8)~~(6) Pertains to a voluntary action for which a risk assessment was conducted in accordance with rule 3745-300-09 of the Administrative Code.
  - ~~(9)~~(7) Pertains to a voluntary action that included, as a remedial activity, either an engineering control as described in rule 3745-300-11 of the Administrative Code or institutional control which restricts access to or use of the property pursuant to rule 3745-300-11 of the Administrative Code.
- (D) At a minimum, the director shall select no further action letters to be audited such that the total number of no further action letters selected for audit from both the random audit pool and discretionary audit pool result in the following:
- (1) The selection of no less than twenty-five per cent of all no further action letters involving remedial activities that were submitted to the director during the previous calendar year.
  - (2) The selection of no less than twenty-five per cent of all no further action letters not involving remedial activities that were submitted to the director during the preceding calendar year.
- (E) Compliance audits may be conducted in accordance with paragraph (F) of this rule, or by any other means selected by the director. The director may conduct a compliance audit for any purpose or combination of purposes described in paragraph (A) of this rule.

(F) Audits of a no further action letter may be conducted for any purpose or combination of purposes described in paragraph (A) of this rule in accordance with one or both of the following procedures:

(1) Tier I audit.

(a) Prior to commencing a tier I audit of a no further action letter, the director shall provide reasonable advance notice of the audit to the volunteer for whom the no further action letter was prepared, the certified professional who prepared the no further action letter, the current owner of the property, if different from the volunteer and, as appropriate, any ~~certified~~ laboratory which performed analyses which formed the basis for the no further action letter, and any other parties deemed necessary. The notice shall include a request that the certified professional who prepared the no further action letter make available all documents relied upon by the certified professional and required to be itemized on the document list in the no further action letter pursuant to rule 3745-300-13 of the Administrative Code, and any other documents which the director determines are necessary to perform an audit pursuant to this rule.

(b) When a certified professional receives a notice as described in paragraph (F)(1)(a) of this rule, the certified professional shall deliver the requested documentation to Ohio EPA not more than thirty days after the certified professional's receipt of the request.

(c) When conducting a tier I audit, the director may do the following:

(i) Request that a certified professional, a ~~certified~~ laboratory, a volunteer, or a person responsible for maintaining compliance with applicable standards at a property submit any or all documents pertaining to the no further action letter being audited.

(ii) Visit a property or place of business, after reasonable advance notice and during the normal operating hours of the business, to perform a review of the documents stored at that property or place of business.

(iii) Conduct a site walkover of the property upon which the voluntary action was conducted.

(d) All documents requested pursuant to paragraph (F)(1)(c)(i) of this rule shall be submitted to the director not later than thirty days after receipt of the request.

(2) Tier II audit.

- (a) If the documents produced and reviewed pursuant to paragraph (F)(1) of this rule are inadequate to substantiate that applicable standards are met as described in the no further action letter, or if the director has a reasonable belief that the no further action letter has been based on fraudulent or inaccurate information or documentation, the director may do the following:
  - (i) Inspect a property, after reasonable advance notice, investigate or inspect conditions, equipment, or practices, and conduct sampling to determine compliance with applicable standards, this chapter, or Chapter 3746. of the Revised Code.
  - (ii) Take any other action the director deems necessary to determine whether the no further action letter was prepared in compliance with applicable standards, this chapter, or Chapter 3746. of the Revised Code.
- (b) In addition to tier II audits conducted pursuant to paragraph (F)(2)(a) of this rule, the director may, at the director's discretion, randomly perform tier II audits on any no further action letter selected for audit.
- (c) Nothing in this rule shall diminish the director's ability to conduct criminal or other investigations under Chapter 3704., 3714., 3734., 3746., 3750., 3753., 6109., or 6111. of the Revised Code.
- (G) The director shall complete all investigatory auditing activities by December thirty-first of the year in which an audit is conducted pursuant to paragraphs (B) to (E) of this rule and division (B) of section 3746.17 of the Revised Code, and the director shall issue all audit findings by March first of the year after that in which an audit is conducted.
- (H) The person responsible for maintaining compliance with applicable standards at a property subject to an audit may request one informal meeting with Ohio EPA to discuss the technical aspects of that audit. Ohio EPA shall be available for such meeting after the conclusion of all investigatory auditing activities and prior to the issuance of audit findings.
- (I) The time limits required by this rule shall not prevent the director, at the director's discretion, from granting one thirty-day extension to any person subject to this rule. The director may extend any time limits imposed upon the director under this rule for a period not to exceed thirty days.

- (J) If requested by the director, upon proper identification and stating the necessity and purpose of the inspection, the volunteer or current owner of a property shall allow the director access to the property to conduct all audit activities pursuant to this rule. Nothing in this rule shall limit the authority of the director provided in section 3746.21 of the Revised Code.
- (K) Ohio EPA shall provide the person responsible for maintaining compliance with applicable standards at a property with a split sample of any soil, water, or sediment sample obtained or removed from a property, if prior to sampling, a written request is made by the person responsible for maintaining compliance with applicable standards at a property. With sufficient prior notice, Ohio EPA shall provide, at cost, appropriate sampling containers to the person who makes such a request.
- (L) The director shall issue audit findings pursuant to this rule which include a determination of whether applicable standards, and all other requirements established under this chapter or Chapter 3746. of the Revised Code have been met, and whether additional actions are required to attain compliance. After an audit is completed:
- (1) If the director finds that a certified professional or certified laboratory either did not possess the required qualifications for certification or that work performed by the certified professional or certified laboratory in connection with a voluntary action resulted in the issuance of a no further action letter that is not consistent with the applicable standards, the director may either suspend or revoke the certification of the certified professional or the certified laboratory.
  - (2) If the director finds that the performance of a certified professional or certified laboratory has resulted in the issuance of no further action letters that are not consistent with applicable standards, the director shall notify persons for whom the certified professional or certified laboratory has performed work in connection with a voluntary action of the audit findings.
  - (3) If the director finds that a property no longer complies with the applicable standards upon which issuance of a covenant was based, the director, by certified mail, return receipt requested, shall notify the person responsible for maintaining compliance with those standards of that finding, and of the requirements of division (B)(3) of section 3746.12 of the Revised Code.
  - (4) The recipient of a notice provided under paragraph (L)(3) of this rule and division (B)(2) of section 3746.12 of the Revised Code, within thirty days after the notice was mailed, shall notify the director of the recipient's intention to return the property to compliance with the applicable standards upon which the covenant was based, and shall enter into a compliance schedule agreement with the director. The compliance schedule agreement shall establish a reasonable



period of time to return to compliance with those applicable standards. If the recipient of the notice fails to take both of these actions in the required time frame, the director, by issuance of an order as a final action under Chapter 3745. of the Revised Code, shall revoke the covenant not to sue issued for the property.

- (5) If the director finds that a person with whom the director entered into a compliance schedule agreement under this rule and division (B)(3) of section 3746.12 of the Revised Code failed to return the property to which the agreement pertains to compliance with the applicable standards within the time established in the agreement, the director, by issuance of an order as a final action under Chapter 3745. of the Revised Code, shall revoke the covenant not to sue issued for the property.
- (M) Nothing in this rule shall diminish the director's ability to conduct criminal or other investigations under Chapter 3704., 3714., 3734., 3745., 3746., 3750., 3751., 3752., 3753., 6109., or 6111. of the Revised Code.

Effective:

Five Year Review (FYR) Dates: 10/17/2024

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Certification

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Date

Promulgated Under: 119.03  
Statutory Authority: 3746.04  
Rule Amplifies: 3746.17, 3746.18, 3746.19, 3746.31  
Prior Effective Dates: 12/29/1995, 03/04/2002, 03/01/2009, 08/01/2014,  
05/26/2016, 10/17/2019

3745-300-15

**Incorporated by reference - voluntary action program.**

This chapter includes references to certain matter or material. The text of the incorporated materials is not included in the rules in this chapter. The materials are hereby made part of these rules in this chapter. For materials subject to change, only the specific version specified in this rule is incorporated. Any amendment or revision to a referenced document is not incorporated unless and until this rule is amended to specify the new dates.

(A) Code of Federal Regulations (CFR) reference, 40 CFR 122.26. This regulation can generally be found in most Ohio public libraries, the state library of Ohio, and electronically at <http://www.ecfr.gov>. This regulation may be purchased from "U.S. Government Printing, Superintendent of Documents, Mail Stop SSOP, Washington DC" 20402-9328. As published in the July 1, 2018 CFR.

(B) Federal statute references. These laws may generally be found in most Ohio public libraries, or electronically at <http://www.gpo.gov/fdsys>. Information and copies may be obtained by writing to "U.S. Government Bookstore, 732 N. Capitol Street NW, Washington, DC" 20401. The federal laws listed in this rule are those versions of the laws amended through July 1, 2018.

(1) Atomic Energy Act of 1954, 42 U.S.C. 2011.

(2) Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601.

(3) Occupational Health and Safety Act, 84 stat. 1590, 29 U.S.C. 651.

(4) Resource Conservation and Recovery Act of 1976 (RCRA) or Solid Waste Disposal Act, 42 U.S.C. 6901.

(5) Safe Drinking Water Act, 42 U.S.C. 300f.

(6) Water Pollution Control Act, 33 U.S.C. 1251.

(C) Government literature. The availability of these documents is provided with each paragraph. The documents listed in this paragraph are those versions amended through July 1, 2018 unless otherwise specified.

(1) Ohio governmental literature from sources other than Ohio EPA.

(a) Ohio department of commerce, division of state fire marshal, bureau of underground storage tanks ~~tanks~~ tank regulations documents.

(i) Bureau of underground storage tank regulations. ~~<https://www.com.ohio.gov/fire/BUSTRAAdministrativeRules.aspx>~~

<https://fireacademy.com.ohio.gov/fire/BUSTRAdministrativeRules.aspx>.

- (ii) Leaking underground storage tank list. ~~<https://com.ohio.gov/fire/BUSTRResources.aspx>~~. <https://fireacademy.com.ohio.gov/fire/BUSTRResources.aspx>.

- (iii) Registered underground storage tank list. August 2018. <https://apps.com.ohio.gov/fire/OTTER/>.

- (iv) "Technical Guidance Manual for the 2017 Closure, Corrective Action, and Petroleum Contaminated Soil Rules." 2017. ~~[https://www.com.ohio.gov/documents/fire\\_2017\\_Technical\\_Guidance\\_Manual.pdf](https://www.com.ohio.gov/documents/fire_2017_Technical_Guidance_Manual.pdf)~~ [https://fireacademy.com.ohio.gov/documents/fire\\_2017\\_Technical\\_Guidance\\_Manual.pdf](https://fireacademy.com.ohio.gov/documents/fire_2017_Technical_Guidance_Manual.pdf).

(b) Ohio department of natural resources documents.

- (i) Ohio department of natural resources, including ground water resources maps. ~~<http://www2.ohiodnr.gov/>~~ <https://ohiodnr.gov/discover-and-learn/land-water/ohio-river-watershed/groundwater-maps-publications>.
- (ii) Ohio department of natural resources "search file well logs." ~~<http://water.ohiodnr.gov/search-file-well-logs>~~. <https://ohiodnr.gov/business-and-industry/services-to-business-industry/gis-mapping-services/water-well-locator-gis-mapping-service>.

- (2) Ohio EPA technical documents. These documents are generally available in most Ohio public libraries and the state library of Ohio. Information and copies may be obtained by writing to "Voluntary Action Program, Lazarus Government Center, P.O. Box 1049, Columbus, OH" 43216-1049.

(a) Ohio EPA. "Biological Criteria for the Protection of Aquatic Life: Volume II: User's Manual for Biological Field Assessment of Ohio Surface Waters." Electronic pdfs are as follows:

- (i) October 1987, updated January 1988 version at ~~<http://www.epa.ohio.gov/Portals/35/documents/Vol2.pdf>~~. <http://wwwapp.epa.state.oh.us/dsw/bioassess/Volume2.pdf>.

- (ii) November 2006 version at ~~<http://epa.ohio.gov/Portals/35/documents/BioCrit88Vol2-Updates2006.pdf>~~. [https://epa.ohio.gov/static/Portals/35/documents/BioCrit88\\_Vol2-Updates2006.pdf](https://epa.ohio.gov/static/Portals/35/documents/BioCrit88_Vol2-Updates2006.pdf).
- (b) Ohio EPA. "Biological Criteria for the Protection of Aquatic Life: Volume III: Standardized Biological Field Sampling and Laboratory Methods for Assessing Fish and Macroinvertebrate Communities. Division of Surface Water." October 1989, as amended through June 2015. ~~[https://www.epa.ohio.gov/portals/35/documents/BioCrit15\\_Vol3.pdf](https://www.epa.ohio.gov/portals/35/documents/BioCrit15_Vol3.pdf)~~. [https://epa.ohio.gov/static/Portals/35/documents/BioCrit15\\_Vol3.pdf](https://epa.ohio.gov/static/Portals/35/documents/BioCrit15_Vol3.pdf).
- (c) Ohio EPA. "Biocriteria manual" means collectively, unless specified otherwise, "Biological Criteria for the Protection of Aquatic Life: Volume II" and "Biological Criteria for the Protection of Aquatic Life: Volume III."
- (d) Ohio EPA. Division of environmental response and revitalization database. ~~<http://epa.ohio.gov/derr/Database-Request>~~. <https://epa.ohio.gov/divisions-and-offices/environmental-response-revitalization/reports-and-data/database-request>.
- (e) Ohio EPA. "Ecological Risk Assessment Guidance Document." Division of Environmental Response and Revitalization. February 2003, as amended through August 2018. <https://epa.ohio.gov/portals/30/rules/RR-031.pdf> <https://epa.ohio.gov/static/Portals/30/rules/RR-031.pdf>.
- (f) Ohio EPA. "Evaluation of Background Metal Soil Concentrations" 2013 through July 2019 updates. Electronic pdf: ~~<https://epa.ohio.gov/portals/30/vap/docs/Evaluation%20of%20Background%20Metal%20Soil%20Concentrations.pdf>~~. <https://epa.ohio.gov/static/Portals/30/vap/docs/Evaluation%20of%20Background%20Metal%20Soil%20Concentrations.pdf>.
- (g) Ohio EPA. "Manual of Ohio EPA Surveillance Methods and Quality Assurance Practices. Division of Surface Water." 2006, amended in 2012. Electronic pdf: ~~[http://www.epa.ohio.gov/portals/35/documents/Field\\_Manual\\_4\\_13\\_12\\_revision.pdf](http://www.epa.ohio.gov/portals/35/documents/Field_Manual_4_13_12_revision.pdf)~~. <https://epa.ohio.gov/static/Portals/35/bioasses/2021-DSW-FieldSampling-Manual-Main.pdf>.
- (h) Ohio EPA. "Sample Collection and Evaluation of Vapor Intrusion to Indoor Air for the Remedial Response, Resource Conservation and Recovery Act and Voluntary Action Programs." March 2020. Electronic pdf: <https://epa.ohio.gov/portals/30/rules/Vapor>



- (3) U.S. environmental protection agency (U.S. EPA) technical documents. These documents are generally available in Ohio public libraries and the state library of Ohio. Documents listed without an address may be ordered by calling 800/490-9198. These documents may also be obtained by writing to "U.S. EPA/ NSCEP, P.O. Box 42419, Cincinnati, OH" 45242-0419. Documents listed with an address may also be obtained at that address. Many of these documents may be obtained via online ordering at [www.epa.gov/nscep](http://www.epa.gov/nscep). Some documents may be available for purchase, not free of charge.
- (a) U.S. EPA. "Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites." December 2002. <https://www.epa.gov/sites/production/files/2016-03/documents/upper-conf-limits.pdf>.
  - (b) U.S. EPA. "Comprehensive Environmental Response, Compensation, and Liability Information System" list. [http://www.epa.gov/enviro/html/cerclis/cerclis\\_query.html](http://www.epa.gov/enviro/html/cerclis/cerclis_query.html).
  - (c) U.S. EPA. "Exposure Factors Handbook. Office of Research and Development, National Center for Environmental Assessment." Washington, DC. EPA/600/P-95/002F. 2011 edition. <http://cfpub.epa.gov/ncea/efp/recordisplay.cfm?deid=236252>
  - (d) U.S. EPA. "Exposure Factors Handbook. 2017 Chapter 5 Update. <http://cfpub.epa.gov/ncea/efp/recordisplay.cfm?deid=337521>.
  - (e) U.S. EPA. "Federal Emergency Release Notification System List." <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockkey=910165XB.txt>.
  - (f) U.S. EPA. Federal Resource Conservation and Recovery Act corrective action facilities list. <https://www.epa.gov/hw/lists-facilities-resource-conservation-and-recovery-act-rcra-2020-corrective-action-baseline>.
  - (g) U.S. EPA. Federal Resource and Conservation Recovery Act generators list. August 2018. <https://www3.epa.gov/enviro/facts/rcrainfo/search.html>.
  - (h) U.S. EPA. Federal Resource Conservation and Recovery Act information database. August 2018. <https://www3.epa.gov/enviro/facts/rcrainfo/search.html>.
  - (i) U.S. EPA. Federal Resource Conservation and Recovery Act treatment, storage, and disposal facility list. <https://yosemite.epa.gov/osw/rcra.nsf/how-to-use?>

~~Open Form~~ <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100C7DP.PDF?Dockey=P100C7DP.PDF>

- (j) U.S. EPA. "Guidance for Comparing Background and Chemical Concentrations in Soil for CERCLA Sites." September 2002. Electronic pdf: <https://www.epa.gov/sites/production/files/2015-11/documents/background.pdf>.
- (k) U.S. EPA. Gerlach, R. W., and J. M. Nocerino. "Guidance for Obtaining Representative Analytical Laboratory Subsamples from Particulate Laboratory Samples." U.S. EPA, Washington, DC, EPA/600/R-03/027. November 2003. <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=2000GTWM.txt>.
- (l) U.S. EPA. "Guidance on Systematic Planning Using the Data Quality Objectives Process" Date: February 2006. Electronic pdf: <https://www.epa.gov/sites/production/files/2015-06/documents/g4-final.pdf>.
- (m) U.S. EPA. "Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. Office of Remedial Response. Office of Solid Waste and Emergency Response Directive." 9285.6 -03. 1991. <http://Rais.ornl.gov/documents/OSWERdirective9285.6-03.pdf>.
- (n) U.S. EPA. "Methods for Measuring the Toxicity and Bioaccumulation of Sediment-Associated Contaminants with Freshwater Invertebrates, March 2000, Second Edition. Office of Science and Technology, Office of Water, Washington, DC." EPA 600R-99/064. <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=30003SBA.txt>.

This is also referred to as the "U.S. EPA sediment toxicity test."

- (o) U.S. EPA. National Emission Standards for Hazardous Air Pollutants, or "NESHAPs." January 2018. <https://www.epa.gov/compliance/national-emission-standards-hazardous-air-pollutants-compliance-monitoring>.
- (p) U.S. EPA. Mason, B. "Preparation of Soil Sampling Protocols: Sampling Techniques and Strategies." U.S. EPA, Washington, DC. July 1992. <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=20008O5T.txt>.
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Effective:

Five Year Review (FYR) Dates: 10/17/2024

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Certification

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Date

Promulgated Under: 119.03  
Statutory Authority: 3746.04  
Rule Amplifies: 3746.04  
Prior Effective Dates: 12/29/1995, 12/16/1996, 03/04/2002, 04/19/2006,  
03/01/2009, 04/23/2012, 08/01/2014, 05/26/2016,  
10/17/2019, 12/29/2020