

3745-300-10 Ground water classification and response requirements.

(A) Definitions. As used in this rule:

- (1) "Capture zone" means all unsaturated and saturated subsurface areas that presently contribute or will contribute ground water to a well.
- (2) "Consolidated saturated zone" means a saturated zone in bedrock.
- (3) "Gallons" means U.S. gallons.
- (4) "Ground water" means, for purposes of conducting a voluntary action, water underlying a property in a saturated zone that:
  - (a) Is capable of yielding, within eight hours after purging, a minimum of one and one-half gallons of water as determined in accordance with paragraph (D)(6) of rule 3745-300-07 of the Administrative Code; and
  - (b) Has an in situ hydraulic conductivity greater than  $5.0 \times 10^{-6}$  centimeters per second as determined in accordance with standards of paragraph (D)(6) of rule 3745-300-07 of the Administrative Code.

This definition only applies to voluntary actions conducted under Chapter 3746. of the Revised Code and this chapter.

- (5) "Saturated zone" means a part or layer of the earth's crust, excluding the capillary zone, in which all voids are filled with water.
  - (6) "Sole source aquifer" means an aquifer designated as a sole source aquifer under section 1424 (E) of the Safe Drinking Water Act (1974) at 42 U.S.C.A 300F, as amended.
  - (7) "Unconsolidated saturated zone" means any saturated zone that is not in bedrock, including, but not limited to, saturated zones in soil, gravel, sand, silt, clay or fill materials.
- (B) Obligation to classify ground water. ground water as defined in paragraph (A)(4) of this rule underlying a property must be classified in accordance with the criteria of this rule and requirements of paragraphs (D)(6) and (D)(7) of rule 3745-300-07 of the Administrative Code unless one of the following conditions apply:
- (1) The ground water does not contain concentrations of chemical(s) of concern in excess of unrestricted potable use standards as determined in accordance with a "Phase II Property Assessment" conducted in accordance with RULE 3745-300-07 of the Administrative Code; or

- (2) Remedial actions consistent with the remedial actions required for critical resource ground water are implemented for ground water exceeding unrestricted potable use standards underlying and emanating from the property.

[Comment: low yield saturated zones that do not contain ground water as defined in paragraph (A)(4) of this rule may be contained within the point of compliance for direct contact soil standards as described at paragraph (B)(2)(d) of rule 3745-300-08 or paragraph (H)(3)(a) of rule 3745-300-09 of the Administrative Code, consistent with the pathways identified in accordance with paragraphs (D)(1) and (D)(2) of rule 3745-300-07 of the Administrative Code]

(C) Ground water classification system.

- (1) Ground water that meets any of the following criteria is classified as critical resource ground water:

- (a) The ground water is being used by a public water system and is part of a wellhead protection area which has been endorsed by Ohio EPA as meeting the requirements of the Ohio wellhead protection program or has been submitted to Ohio EPA for review and endorsement;

- (b) The ground water is part of an unconsolidated saturated zone that is capable of yielding water at a time-weighted average rate greater than one hundred gallons per minute over a twenty-four hour period as determined in accordance with paragraph (D)(6) of rule 3745-300-07 of the Administrative Code; or

- (c) The ground water is in a consolidated saturated zone that is part of a sole source aquifer.

- (2) Ground water that does not meet any of the criteria for critical resource ground water and meets any of the following criteria is classified as "Class A" ground water:

- (a) The ground water is in a saturated zone that is currently utilized as a source of water used for potable purposes on the property or within one-half mile of the boundary of the property; or

- (b) The ground water has a background level of total dissolved solids of less than three thousand milligrams per liter, and

- (i) The ground water is in a saturated zone that is capable of yielding water at a time-weighted average rate greater than one-tenth of a gallon per minute over a twenty-four hour period as determined in accordance with paragraph (D)(6) of rule 3745-300-07 of the

Administrative Code; or

(ii) The ground water is in a saturated zone that yields less than three gallons per minute but greater than one tenth of a gallon per minute as determined in accordance with paragraph (D)(6) of rule 3745-300-07 of the Administrative Code, and the ground water yield is less than fifty per cent of the yield of another saturated zone present under the property, which is the likely source of water used for potable purposes within one mile of the property.

(3) Ground water that does not meet any of the criteria for either critical resource ground water or "Class A" ground water, as determined in accordance with paragraph (D)(6) of rule 3745-300-07 of the Administrative Code, is classified as "Class B" ground water.

(D) Urban setting designation criteria and process.

(1) An urban setting designation may only be used for purposes of determining applicable standards under this chapter and may only be requested through a certified professional. A certified professional may request an urban setting designation from the director for a property or properties meeting the following threshold criteria:

- (a) The property or properties for which designation is requested is entirely within the boundaries of a township with a population of twenty thousand or more residents in the unincorporated area of the township or entirely within the corporation boundaries of a city;
- (b) Not less than ninety per cent of the parcels within the city or township where the property or properties for which designation is requested is located are connected to a community water system. If less than ninety per cent of the parcels within one-half mile of the property being designated is connected to a community water system, an urban setting designation for the property may still be requested provided not less than seventy-five per cent of the parcels within the city or township where the property for which designation is requested is located is connected to a community water system and the parcels not connected are and will be unaffected by hazardous substances or petroleum on or emanating from the property;
- (c) The property or properties for which designation is requested is not located in a wellhead protection area that has been endorsed by Ohio EPA as meeting the requirements of the Ohio wellhead protection program or submitted to Ohio EPA for review and endorsement. An urban setting designation for a

property or properties located within a wellhead protection area may still may be requested if the owner of the community water system has an endorsed wellhead protection plan for that wellhead protection area and the owner consents in writing to the designation;

- (d) Wells installed or used for potable water supply purposes are not located within one-half mile of the property boundary of the property or properties for which designation is requested as determined in accordance with the requirements of paragraph (D)(7) of rule 3745-300-07 of the Administrative Code. if potable wells are located within one-half mile of the property boundary, the property or properties may still be designated, if:
- (i) The wells are community water system supply wells with a wellhead protection plan endorsed by the Ohio EPA as meeting the requirements of the Ohio wellhead protection program and the owner of the public water system consents in writing to the designation;
  - (ii) The certified professional requesting the designation demonstrates that the capture zones of any wells installed or used for potable water supply purposes within one-half mile of the property boundary do not extend under the property or properties for which the designation is requested; and
- (e) When the property or properties for which designation is requested is located over a sole source aquifer in a consolidated saturated zone or an unconsolidated saturated zone capable of sustaining a yield greater than one hundred gallons per minute as determined in accordance with paragraph (D)(6) of rule 3745-300-07 of the Administrative Code, the certified professional requesting the designation, through consultation with the owner of the community water system and the appropriate legislative authority or its authorized representative, must demonstrate that there is not a reasonable expectation that there will be any wells installed or used for potable water supply purposes within one-half mile of the property boundary. The certified professional must, at a minimum, consider all of the following criteria to make this demonstration:
- (i) The presence of legally enforceable, reliable restrictions on ground water use, other than those imposed for wellhead protection or ground water protection purposes;
  - (ii) Whether current land use patterns within one-half mile of the property boundary or ground water quality make development of a well

impractical;

- (iii) Whether ninety per cent or more of the parcels within one-half mile of the property being designated is connected to a community water system;
- (iv) Whether the capture zones of any wells that can reasonably be expected to be installed or used within one-half mile of the property boundary would not extend under the property or properties for which designation is requested.

(2) Approval or denial of a request for an urban setting designation. An urban setting designation may not be used for purposes of classifying ground water and determining applicable standards under this chapter and Chapter 3746. of the Revised Code until the director approves of a request for an urban setting designation in accordance with this paragraph.

(a) Request for approval of designation. A certified professional must send a written request to the director for approval of an urban setting designation. The request for approval must include, at a minimum, the following:

(i) A cover letter requesting the director's approval of an urban setting designation, which includes the name and address of the volunteer(s), a description of the location and size of the property or properties, and if known, whether the legislative authority of the city or township in which the property or properties is located is in favor of or in opposition to the proposed urban setting designation;

(ii) An affidavit by the certified professional which affirms that:

(A) The urban setting threshold criteria contained in paragraphs (D)(1)(a) to (D)(1)(e) of this rule are met;

(B) True and accurate copies of all documents which form the basis of the certified professional's determination that the urban setting threshold criteria in PARAGRAPH (D)(2) OF THIS RULE HAVE BEEN MET ARE ATTACHED;

(C) A true and accurate copy of a legal description of the property or properties for which the urban setting designation is requested is attached;

(D) Notice, as required by paragraph (D)(2)(b) of this rule, was

provided; and

(iii) The documents identified in paragraphs (D)(2)(a)(ii)(b) and (D)(2)(a)(ii)(c) of this rule.

(b) Notice. notification of a request for the director's approval of an urban setting designation must be provided to the legislative authority or authorized representative of any county, township and municipality in which the property or properties for which the designation is sought is located, and to the legislative authority of any county, township and municipality whose boundaries are within one-half mile of the property or properties for which the designation is sought. the notice must be made contemporaneously with a request for approval under paragraph (D)(2)(a) of this rule. the notice must include, at a minimum, the following:

(i) An explanation of the “Voluntary Action Program”;

(ii) The purpose of an urban setting designation;

(iii) The threshold criteria for an urban setting designation and the fact that the director must approve of the designation after consulting with the city or township in which the property or properties is located;

(iv) A copy of paragraph (D) of this rule;

(v) The location of and a description of the property or properties for which the designation is sought;

(vi) The applicable standards that apply to the ground water and source or source areas of ground water contamination, if approval for the urban setting designation is not received;

(vii) The applicable standards that apply to the ground water and source or source areas of ground water contamination, if approval for the urban setting designation is received;

(viii) A statement which advises the legislative authority that the director will consult with it regarding the designation and it is encouraged to provide written comments or any information relevant to the director's consideration of the urban setting designation; and

(ix) That a decision may be made by the director within ninety days after the director has consulted with the city or township where the property for which the designation is sought is located.

- (c) Information. After receipt of a complete request for approval of an urban setting designation, the director may request any additional information from the certified professional, the volunteer, local jurisdictions or residents, which may be relevant to determining whether or not to approve of the urban setting designation. Failure by a certified professional or volunteer to cooperate with any request under this paragraph may result in the director's refusal to consider the request for approval. At the director's discretion, a public meeting may be held on the request for approval.
- (d) Consultation. no later than ninety days after receipt of a complete request for approval of an urban setting designation the director will complete consultation with the legislative authority or authorized representative of the city or township in which the property or properties is located, or any other persons which the director deems appropriate, to obtain sufficient information for determining whether to approve or deny the request, as provided in paragraph (D)(2)(e) of this rule.
- (e) Criteria for approval or denial. the director may approve or deny the request for approval of an urban setting designation, after consulting with the legislative authority or authorized representative of the township or city where the property for which the designation is sought is located. the director may approve or deny a request for approval under this paragraph upon consideration of one or more of the following factors, as relevant:
  - (i) Whether all of the applicable threshold criteria contained in paragraphs (D)(1)(a) TO (D)(1)(e) of this rule have been met for the property for which the designation has been sought;
  - (ii) The potential impact of the designation on jurisdictions surrounding the township or city where the property for which the designation is sought is located;
  - (iii) The potential impact of the intended designation on regional water resource needs and the consistency of the designation with any existing regional water resource obligations of the city or township where the property for which the designation is sought is located;
  - (iv) Whether the ground water in the region or area where the property or properties for which the designation is sought is not currently being used by residents as a source of water used for potable purposes such that the risk of exposure to humans of contaminated ground water as a result of the designation is not likely;

- (v) Whether the ground water in the region or area where the property or properties for which the designation is sought is located is not reasonably expect to be used as a future source of water used for potable purposes by residents such that a risk of exposure to humans of contaminated ground water as a result of the designation is not likely;

[Comments: for purposes of evaluating whether the ground water in the region or area where the property or properties for which the designation is sought will be used as a future source of potable water, the director will consider: the likelihood of future water use by local residents in light of the existence of regional, commingled contamination in the area surrounding the property or properties for which the designation is sought; the existence of reasonably available alternative potable water sources, other than the ground water proposed for designation, to satisfy the future needs of local residents; and the existence of reliable, legally enforceable local laws which restrict or prohibit the use of the ground water proposed for designation, such that the risk of exposure of humans to contaminated ground water as a result of the designation is not likely.]

- (vi) The availability and feasibility of treatment systems at community water systems that are capable of preventing exposures to ground water with concentrations of chemical(s) of concern in excess of potable use standards; and
- (vii) Any other factors pertaining to the request for approval that the director considers relevant to determine whether the urban setting designation will be protective of public health, safety, and the environment.

(f) Costs. The volunteer seeking the urban setting designation is responsible for reimbursing the agency for all of its costs incurred to review and consider the request for approval of the urban setting designation. A statement of costs will be sent to the volunteer after the request for approval is approved, denied, or withdrawn. The volunteer must pay the costs, in full, within sixty days of receipt of the statement of costs.

(g) Timing. the director will approve or deny a request for approval of an urban setting designation within ninety days after:

- (i) Receiving a complete request, as set forth in paragraph (D)(2)(a) of this rule; and
- (ii) Consultation with the city or township, as provided in paragraph

(D)(2)(d) of this rule.

The director may extend the time for approving or denying a request for approval if he determines that an extension of time is necessary to properly consider the request. If the director extends the time for considering the request for approval he will notify the volunteer, and other interested persons, of an extended deadline for denying or approving the request.

(E) Protection of ground water meeting unrestricted potable use standards.

(1) When any ground water in a saturated zone underlying the property complies with the unrestricted potable use standards as determined by a "Phase II Property Assessment" conducted in accordance with rule 3745-300-07 of the Administrative Code, the remedial activities undertaken in connection with a voluntary action at or upon the property must ensure that migration of hazardous substances or petroleum from source or source areas on the property will not result in unrestricted potable use standards being exceeded anywhere within a saturated zone.

(2) No other provision of this chapter modifies the requirements of this paragraph.

[Comment: rule 3745-300-15 of the Administrative Code describes requirements for remedial activities which must be undertaken to comply with this paragraph.]

(F) Response requirements for ground water exceeding unrestricted potable use standards.

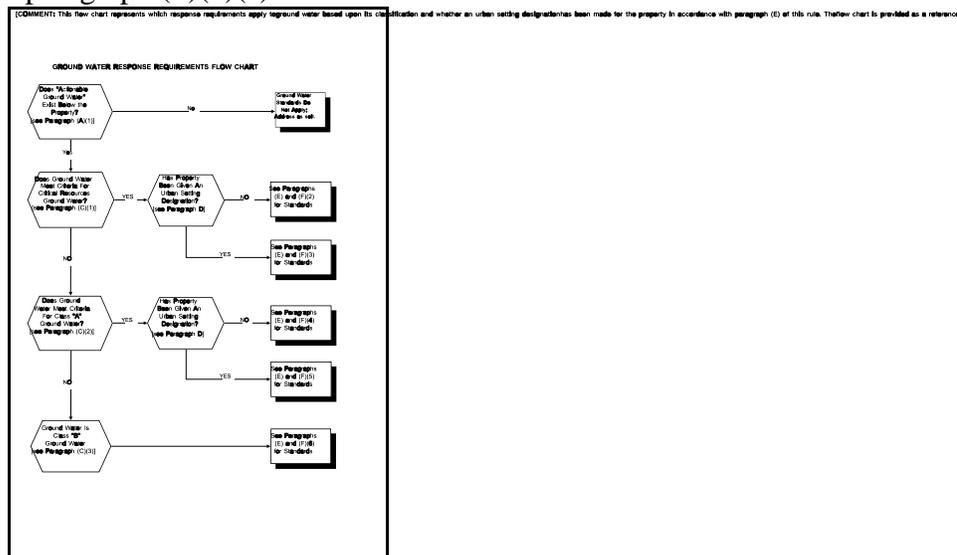
(1) Applicability.

(a) When a volunteer determines that ground water underlying or emanating from a property exceeds a standard for residential potable use based on a "Phase II Property Assessment" conducted in accordance with rule 3745-300-07 of the Administrative Code, the volunteer must meet the requirements described in this paragraph based on the ground water classification(s) made in accordance with paragraphs (B) and (C) of this rule, paragraph (D)(6) of rule 3745-300-07 of the administrative code and an urban setting designation made in accordance with paragraph (D) of this rule, if applicable. All remedial activities including institutional or engineering controls must be implemented in accordance with rule 3745-300-15 of the Administrative Code.

(b) A volunteer may not use the applicable ground water standards of paragraph (F)(2)(b), (F)(2)(c), (F)(3)(b), (F)(3)(c), (F)(4)(b), (F)(4)(c), (F)(5)(b), (F)(5)(c), (F)(6)(b) or (F)(6)(c) of this rule regarding off-property source

or source areas of ground water contamination, if any of the following apply:

- (i) The owner of the voluntary property is the owner or operator of any property, other than the voluntary property, on which any source or source area is located, and hazardous substances or petroleum have emanated from the off-property source or source area onto the voluntary property;
  - (ii) The owner of the voluntary property was an owner or operator of any property, other than the voluntary action property, on which any source or 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 or source area onto the voluntary property;
  - (iii) The volunteer, or owner if different from the volunteer, caused or contributed to the source or source areas or release of the off-property source;
  - (iv) 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 ground water standard than would otherwise be applicable in this rule; or
  - (v) The volunteer is a parent, subsidiary, or other commonly owned entity of any party identified in paragraphs (F)(1)(b)(i) to (F)(1)(b)(iv) of this rule.
- (c) A volunteer to whom any of the conditions described in paragraphs (F)(1)(b)(i) to (F)(1)(b)(v) of this rule apply must presume that the ground water contamination is attributable entirely to source or source areas that were or are located on the property, and use the applicable standards of paragraphs (F)(2)(a), (F)(3)(a), (F)(4)(a), (F)(5)(a) or (F)(6)(a) of this rule in accordance with paragraph (F)(1)(a) of this rule.



(2) Critical resource ground water without an urban setting designation.

A volunteer must meet the following minimum requirements at a property where ground water underlying the property has been classified as critical resource ground water in accordance with paragraphs (B) and (C) of this rule and paragraph (D)(6) of rule 3745-300-07 of the Administrative Code and an urban setting designation has not been made in accordance with paragraph (D) of this rule:

(a) When ground water contamination is attributable entirely to sources or source areas that were or are located on the property, the following minimum requirements in paragraphs (F)(2)(a)(i) to (F)(2)(a)(viii) of this rule must be met:

(i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water with concentrations of chemical(s) of concern in excess of unrestricted potable use standards, or restore the ground water underlying the property to those unrestricted potable use standards;

[Comment: engineering controls may include the use of water treatment systems.]

(ii) Ground water emanating from the property must not exceed unrestricted potable use standards, except when the ground water discharges to a surface water body immediately adjoining the property's boundary, in which case, the applicable standards established in accordance with paragraph (D)(1) of rule 3745-300-08 of the Administrative Code, for the surface water body receiving the discharge must be met at the point of discharge;

(iii) When ground water that has emanated from the property has caused or is reasonably anticipated to cause concentrations of chemical(s) of concern in ground water to exceed unrestricted potable use standards at off-property wells used for potable purposes, one or more of the following measures must be implemented to ensure that the ground water users have a continuing supply of water that does not contain chemical(s) of concern at concentrations above unrestricted potable use standards:

(B) Restore the contaminated ground water to unrestricted potable use standards; or

(B) Provide a reliable alternate water supply or water treatment

system that:

(I) Provides a volume of potable water sufficient for the intended use; and

(II) Is provided for a period of time no shorter than the time that the ground water supply of off-property ground water users exceeds unrestricted potable use standards; and

(iv) The remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

(A) Ensure protection of humans on and off the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water. for the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers.; and

(B) Ensure protection of important ecological resources on and off the property; and

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

(v) When ground water that has emanated from a property has concentrations of chemical(s) of concern in excess of unrestricted potable use standards, or is reasonably anticipated to have levels of chemical(s) of concern in excess of unrestricted potable use standards, the volunteer, and any subsequent owners relying on a no further action letter, must conduct the following activities with the specified frequencies, so long as the ground water, which has

emanated from the property, continues to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards:

- (A) Identify any visual evidence of ground water use prior to issuance of a no further action letter for the property by current property owners or users in areas where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
- (B) Review Ohio Department of Natural Resources water well log information prior to issuance of a no further action letter for the property to determine whether ground water wells have been installed on the properties on which ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
- (C) Send a written notification by certified mail prior to issuance of a no further action letter for the property to all owners of properties in areas where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards that includes the following:
  - (I) The location and a description of the property where the voluntary action has taken place;
  - (II) A summary of the releases of the chemical(s) of concern that were assessed as part of the voluntary action and remedial activities that have been or are being taken at the property;
  - (III) A description of the concentrations of chemical(s) of concern in ground water that has or may migrate onto or under the properties in areas where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
  - (IV) A summary of the unrestricted potable use standards for the chemical(s) of concern that have emanated from the property;

- (V) A description of the requirements contained in paragraphs (F)(2)(a)(v) TO (F)(2)(a)(viii) of this rule for the volunteer, or subsequent owners relying on an no further action letter, to address exposures of humans to ground water with levels of chemical(s) of concern in excess of applicable standards; and
  - (VI) A request for information concerning any current or intended use of ground water in areas where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards along with the name, address and phone number of a representative of the volunteer, or subsequent owner relying on an no further action letter who can be notified of any current or intended use of ground water or contacted for further information;
- (D) Review Ohio Department of Natural Resources water well log information, no less frequently than annually, for the properties on which ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards, to determine whether new ground water wells have been installed;
- (E) Identify any known changes and, at a minimum, annually inquire of changes in ownership of properties in areas where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
- (F) Provide the notification required by paragraph (F)(2)(a)(v)(c) of this rule to owners of properties identified under paragraph (F)(2)(a)(v)(e) of this rule; and
- (G) Identify other information that is known to the volunteer, or owner, if different, regarding changes in the use of ground water in areas where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards; and
- (vi) Based on the information obtained in paragraph (F)(2)(a)(v) of this

rule, the volunteer must identify off-property receptor populations for the ground water pathway as determined in accordance with paragraph (D)(3)(b)(i) of rule 3745-300-09 of the Administrative Code;

(vii) For each receptor population identified pursuant to paragraph (F)(2)(a)(vi) of this rule that uses the ground water for potable purposes, one or more of the measures contained in paragraphs (F)(2)(a)(iii)(a) and (F)(2)(a)(iii)(b) of this rule must be implemented to ensure that those receptor populations have a continuing supply of water that does not exceed unrestricted potable use standards; and

(viii) For each receptor population identified pursuant to paragraph (F)(2)(a)(vi) of this rule for which an exposure pathway exists other than that identified pursuant to paragraph (F)(2)(a)(vii) of this rule, implement measures that reliably prevent human exposure to ground water in excess of applicable standards for those exposures.

[Comment: the requirements contained in paragraphs (F)(2)(a)(v) to (F)(2)(a)(viii) of this rule will also be included in an operation and maintenance plan or operation and maintenance agreement with the Ohio EPA as described in rule 3745-300-15 of the Administrative Code, the remedy rule.]

(b) When ground water contamination is attributable entirely to sources or source areas that were or are located off the property as determined by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code, the following minimum requirements in paragraphs (F)(2)(b)(i) to (F)(2)(b)(iii) of this rule must be met:

(i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water with concentrations of chemical(s) of concern in excess of unrestricted potable use standards, or restore the ground water underlying the property to those unrestricted potable use standards;

(ii) Implement remedial activities for sources or source areas of contamination on the property to prevent leaching of chemical(s) of concern from those sources or source areas that is reasonably anticipated will result in unrestricted potable use standards being exceeded in ground water emanating from the property, as determined in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code;

(iii) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

(A) Ensure protection of humans on the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water. for the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers.; and

(B) Ensure protection of important ecological resources on the property.

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” conducted in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

(c) When ground water contamination is partially attributable to sources or source areas that were or are located off the property as determined by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code, and the chemical(s) of concern from sources or source areas off the property are the same as those from sources or source areas on the property the following minimum requirements in paragraphs (F)(2)(c)(i) to (F)(2)(c)(ix) of this rule must be met:

(i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water with concentrations of chemical(s) of concern in excess of unrestricted potable use standards, or restore the ground water underlying the property to those unrestricted potable use standards;

(ii) Implement remedial activities for sources or source areas of contamination on the property to prevent leaching of chemical(s) of

concern from those sources or source areas that is reasonably anticipated would result in unrestricted potable use standards being exceeded in ground water emanating from the property, as determined in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code;

(iii) When the individual or collective effect of sources or source areas on the property have caused or are reasonably anticipated to cause the concentrations of chemical(s) of concern to exceed unrestricted potable use standards in ground water at off-property wells used for potable purposes as determined in accordance with rule 3745-300-07 of the Administrative Code, one or more of the following measures must be implemented to ensure that the ground water users have a continuing supply of water that does not contain chemical(s) of concern at concentrations above unrestricted potable use standards:

(A) Restore the contaminated ground water to unrestricted potable use standards; or

(B) Provide a reliable alternate water supply or water treatment system that:

(I) Provides a volume of water sufficient for the intended use; and

(II) Is provided for a period of time no shorter than the time that the ground water supply of off-property ground water users exceeds unrestricted potable use standards; and

(iv) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

(A) Ensure protection of humans on the property from exposures to ground water not related to potable use of the ground water. For the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. Examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering;

water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers.; and

(B) Ensure protection of important ecological resources on the property; and

(v) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

(A) Ensure protection of humans off the property from exposures to ground water not related to potable use of the ground water unless the individual or collective effect of sources or source areas on the property have not caused and are not reasonably anticipated to cause applicable standards to be exceeded, as determined in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code. For the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers.; and

(B) Ensure protection of important ecological resources off the property, unless the individual or collective effect of sources or source areas on the property have not caused and are not reasonably anticipated to cause applicable standards to be exceeded, as determined in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code; and

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

(vi) When the individual or collective effect of sources or source areas on the property have caused or are reasonably anticipated to cause the concentrations of chemical(s) of concern to exceed unrestricted potable use standards in ground water that has emanated or will emanate from a property, the volunteer, and any subsequent owners relying on a no further action letter, must conduct the following activities with the specified frequencies, so long as the ground water which has emanated from the property continues to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards:

- (B) Identify any visual evidence of ground water use prior to issuance of a no further action letter for the property by current property owners or users in areas where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
- (A) Review Ohio Department of Natural Resources water well log information prior to issuance of a no further action letter for the property to determine whether ground water wells have been installed on the properties on which ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
- (C) Send a written notification by certified mail prior to issuance of a no further action letter for the property to all owners of properties in areas where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards that includes the following:
  - (i) The location and a description of the property where the voluntary action has taken place;
  - (ii) A summary of the releases of the chemical(s) of concern that were assessed as part of the voluntary action and remedial activities that have been or are being taken at the property;
  - (iii) A description of the concentrations of chemical(s) of concern in ground water that has or may migrate

onto or under the properties in areas where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;

- (iv) A summary of the unrestricted potable use standards for the chemical(s) of concern that have emanated from the property;
  - (v) A description of the requirements contained in paragraphs (F)(2)(c)(vi) to (F)(2)(c)(ix) of this rule for the volunteer, or subsequent owners relying on a no further action letter, to address exposures of humans to ground water with levels of chemical(s) of concern in excess of applicable standards; and
  - (vi) A request for information concerning any current or intended use of ground water in areas where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards along with the name, address and phone number of a representative of the volunteer, or subsequent owner relying on a no further action letter who can be notified of any current or intended use of ground water or contacted for further information;
- (d) Review Ohio Department of Natural Resources water well log information, no less frequently than annually, for the properties on which ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards, to determine whether new ground water wells have been installed;
- (e) Identify any known changes and, at a minimum, annually inquire of changes in ownership of properties in areas where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
- (f) Provide the notification required by paragraph (F)(2)(c)(vi)(c) of this rule to owners of properties identified under paragraph (F)(2)(c)(vi)(e) of this rule; and

(g) Identify other information that is known to the volunteer or owner, if different, regarding changes in the use of ground water in areas where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards; and

(vii) Based on the information obtained in paragraph (F)(2)(c)(vi) of this rule, the user must identify off-property receptor populations for the ground water pathway as determined in accordance with paragraph (D)(3)(b)(i) of rule 3745-300-09 of the Administrative Code;

(viii) For each receptor population identified pursuant to paragraph (F)(2)(c)(vii) of this rule that uses the ground water for potable purposes, one or more of the measures contained in paragraphs (F)(2)(c)(iii)(a) and (F)(2)(c)(iii)(b) of this rule must be implemented to ensure that those receptor populations have a continuing supply of water that does not exceed unrestricted potable use standards; and

(ix) For each receptor population identified pursuant to paragraph (f)(2)(c)(vii) of this rule for which an exposure pathway exists other than that identified pursuant to paragraph (f)(2)(c)(viii) of this rule, implement measures that reliably prevent human exposure to ground water in excess of applicable standards for those exposures.

[Comment: the requirements contained in paragraphs (F)(2)(c)(vi) to (F)(2)(c)(ix) of this rule will also be included in an operation and maintenance plan or an operation and maintenance agreement with Ohio EPA as described in rule 3745-300-15 of the Administrative Code, the remedy rule.]

(d) The volunteer must comply with the requirements contained in paragraphs (F)(2)(a) of this rule for chemical(s) of concern in ground water contributed by sources or source areas on the property, which are different than chemical(s) of concern identified by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code as originating from sources or source areas that were or are located off the property.

(3) Critical resource ground water with an urban setting designation.

A volunteer must meet the following minimum requirements at A property where ground

water underlying the property has been classified as critical resource ground water in accordance with paragraphs (B) and (C) of this rule and paragraph (D)(6) of rule 3745-300-07 of the Administrative Code and an urban setting designation has been made in accordance with paragraph (D) of this rule:

- (a) When ground water contamination is attributable entirely to sources or source areas that were or are located on the property as determined by a “Phase II Property Assessment” conducted in accordance with rule 3745-30-07 of the administrative code, the following minimum requirements in paragraphs (F)(3)(a)(i) to (F)(3)(a)(viii) of this rule must be met:
  - (i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water in excess of unrestricted potable use standards, or restore the ground water underlying the property to those unrestricted potable use standards; and
  - (ii) Ground water emanating from the property must not exceed standards for unrestricted potable use when it reaches a distance of one-half mile from the property boundary; and
  - (iii) When ground water that has emanated from the property has caused or is reasonably anticipated to cause unrestricted potable use standards to be exceeded at off-property wells used for potable purposes beyond one-half mile from the property boundary, as determined by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code, one or more of the following measures must be implemented to ensure that the ground water users have a continuing supply of water that does not contain chemical(s) of concern at concentrations above unrestricted potable use standards:
    - (a) Restore the contaminated ground water that supplies water to those identified wells to unrestricted potable use standards; or
    - (b) Provide a reliable alternate water supply or water treatment system that:
      - (i) Provides a volume of water sufficient for the intended use; and
      - (ii) Is provided for a period of time no shorter than the time that the ground water supply of off-property ground

water users exceeds unrestricted potable use standards; and

(iv) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

(a) Ensure protection of humans on and off the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water. For the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers; and

(b) Ensure protection of important ecological resources on and off the property; and

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

(v) When ground water that has emanated from a property has concentrations of chemical(s) of concern in excess of unrestricted potable use standards, or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards at a distance of one-half mile from the property, the volunteer, or subsequent owners relying on a no further action letter, must conduct the following activities with the specified frequencies, so long as the ground water, which has emanated from the property beyond a distance of one half mile from the property boundary, continues to exceed the unrestricted potable use standards:

(a) Identify any visual evidence of ground water use prior to issuance of a no further action letter for the property by current property

owners or users in areas beyond a distance of one half mile from the property boundary where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;

- (b) Review Ohio Department of Natural Resources water well log information prior to issuance of a no further action letter for the property to determine whether ground water wells have been installed on the properties beyond a distance of one half mile from the property boundary on which ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
- (c) Send a written notification by certified mail prior to issuance of a no further action letter for the property to all owners of properties in areas beyond a distance of one half mile from the property boundary where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards that includes the following:
  - (i) The location and a description of the property where the voluntary action has taken place;
  - (ii) A summary of the releases of the chemical(s) of concern that were assessed as part of the voluntary action and remedial activities that have been or are being taken at the property;
  - (iii) A description of the concentrations of chemical(s) of concern in ground water that has or may migrate onto or under the properties in areas beyond a distance of one half mile from the property boundary where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
  - (iv) A summary of the unrestricted potable use standards for the chemical(s) of concern that have emanated from the property;

- (v) A description of the requirements contained in paragraphs (F)(3)(a)(v) to (F)(3)(a)(viii) of this rule for the volunteer, or owner, if different, to address exposures of humans to ground water with levels of chemical(s) of concern in excess of applicable standards; and
  - (vi) A request for information concerning any current or intended use of ground water in areas beyond a distance of one half mile from the property boundary where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards along with the name, address and phone number of a representative of the volunteer, or owner, if different, who can be notified of any current or intended use of ground water or contacted for further information;
- (d) Review Ohio Department of Natural Resources water well log information, no less frequently than annually, for the properties beyond a distance of one half mile from the property boundary on which ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards, to determine whether new ground water wells have been installed;
- (e) Identify any known changes and, at a minimum, annually inquire of changes in ownership of properties in areas beyond a distance of one half mile from the property boundary where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
- (f) Provide the notification required by paragraph (F)(3)(a)(v)(c) of this rule to owners of properties identified under paragraph (F)(3)(a)(v)(e) of this rule; and
- (g) Identify other information that is known to the volunteer or owner, if different, regarding changes in the use of ground water in areas beyond a distance of one half mile from the property boundary where ground water has or is reasonably anticipated to have concentrations of chemical(s) of

concern in excess of unrestricted potable use standards; and

- (vi) Based on the information obtained in paragraphs (F)(3)(a)(v)(a) to (F)(3)(a)(v)(f) of this rule, the volunteer must identify off-property receptor populations for the ground water pathway as determined in accordance with paragraph (D)(3)(b)(i) of rule 3745-300-09 of the Administrative Code;
- (vii) For each receptor population identified in paragraph (F)(3)(a)(vi) of this rule that uses the ground water for potable purposes, one or more of the measures contained in paragraphs (F)(3)(a)(iii)(a) and (F)(3)(a)(iii)(b) of this rule must be implemented to ensure that those receptor populations have a continuing supply of water that does not exceed unrestricted potable use standards; and
- (viii) For each receptor population identified in paragraph (F)(3)(a)(vi) of this rule for which an exposure pathway exists other than that identified in paragraph (F)(3)(a)(vii) of this rule, implement measures that reliably prevent human exposure to ground water in excess of applicable standards for those exposures.

[Comment: the requirements contained in paragraphs (F)(3)(a)(v) to (F)(3)(a)(viii) of this rule will also be included in an operation and maintenance plan or operation and maintenance agreement with the Ohio EPA as described in rule 3745-300-15 of the Administrative Code, the remedy rule.]

- (b) When ground water contamination is attributable entirely to sources or source areas that were or are located off the property as determined by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code, the following requirements in paragraphs (F)(3)(b)(i) to (F)(3)(b)(iii) of this rule must be met:
  - (i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water with concentrations of chemical(s) of concern in excess of unrestricted potable use standards, or restore the ground water underlying the property to those unrestricted potable use standards;
  - (ii) Implement remedial activities for sources or source areas of contamination on the property to prevent leaching of chemical(s) of concern from those sources or source areas that is reasonably anticipated will result in unrestricted potable use standards being exceeded in ground water at a distance of one-half mile from the property boundary, as determined in accordance with rules 3745-

300-07 and 3745-300-09 of the Administrative Code;

(iii) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

(a) Ensure protection of humans on the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water. For the purposes of this rule, exposures to contaminants of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers; and

(b) Ensure protection of important ecological resources on the property.

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

(c) When ground water contamination is partially attributable to sources or source areas that were or are located off the property as determined by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code and the chemical(s) of concern from sources or source areas off the property are the same as those from sources or source areas on the property, the following requirements in paragraphs (F)(3)(c)(i) to (F)(3)(c)(ix) of this rule must be met:

(i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water in excess of unrestricted potable use standards, or restore the ground water underlying the property to those unrestricted potable use standards;

(ii) Implement remedial activities for sources or source areas of

contamination on the property to prevent leaching of chemical(s) of concern from those sources or source areas that is reasonably anticipated will result in unrestricted potable use standards being exceeded in ground water at a distance of one-half mile from the property boundary, as determined in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code;

(iii) When the individual or collective effect of sources or source areas on the property have caused or are reasonably anticipated to cause the concentrations of chemical(s) of concern in ground water that has emanated from the property to exceed unrestricted potable use standards at off-property wells used for potable purposes beyond a distance of one-half mile from the property boundary as determined by a "Phase II Property Assessment" conducted in accordance with rules 3745-300-07 of the Administrative Code, one or more of the following measures must be implemented to ensure that the ground water users have a continuing supply of water that does not contain chemical(s) of concern at concentrations above unrestricted potable use standards:

(a) Restore the contaminated ground water to unrestricted potable use standards; or

(b) Provide a reliable alternate water supply or water treatment system that:

(i) Provides a volume of water sufficient for the intended use; and

(ii) Is provided for a period of time no shorter than the time that the ground water supply of off property ground water users exceeds unrestricted potable use standards; and

(iv) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

(a) Ensure protection of humans on the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water. for the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and

exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers; and

- (b) Ensure protection of important ecological resources on the property; and
- (v) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:
  - (a) Ensure protection of humans off the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water, unless the individual or collective effect of sources or source areas on the property have not caused and are not reasonably anticipated to cause applicable standards to be exceeded. for the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers.; and
  - (b) Ensure protection of important ecological resources off the property, unless the individual or collective effect of sources or source areas on the property have not caused and are not reasonably anticipated to cause applicable standards to be exceeded; and

[comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with rules 3745-300-07 AND 3745-300-09 OF the

## Administrative Code.]

(vi) When the individual or collective effect of sources or source areas on the property have caused or are reasonably anticipated to cause the concentrations of chemical(s) of concern to exceed unrestricted potable use standards in ground water at a distance of one-half mile from the property boundary, the volunteer, and any subsequent owners relying on a no further action letter, must conduct the following activities with the specified frequencies, so long as the ground water which has emanated from the property beyond a distance of one-half mile from the property boundary continues to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards:

- (a) Identify any visual evidence of ground water use prior to issuance of a no further action letter for the property by current property owners or users in areas beyond a distance of one half mile from the property boundary where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
- (b) Review Ohio Department of Natural Resources water well log information prior to issuance of a no further action letter for the property to determine whether ground water wells have been installed on the properties beyond a distance of one half mile from the property boundary on which ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
- (c) Send a written notification by certified mail prior to issuance of a no further action letter for the property to all owners of properties in areas beyond a distance of one half mile from the property boundary where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards that includes the following:
  - (i) The location and a description of the property where the voluntary action has taken place;
  - (ii) A summary of the releases of the chemical(s) of concern that were assessed as part of the voluntary

action and remedial activities that have been or are being taken at the property;

- (iii) A description of the concentrations of chemical(s) of concern in ground water that has or may migrate onto or under the properties in areas beyond a distance of one half mile from the property boundary where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
  - (iv) A summary of the unrestricted potable use standards for the chemical(s) of concern that have emanated from the property;
  - (v) A description of the requirements contained in paragraphs (F)(3)(c)(vi) to (F)(3)(c)(ix) of this rule for the volunteer, or owners, if different, to address exposures of humans to ground water with levels of chemical(s) of concern in excess of applicable standards; and
  - (vi) A request for information concerning any current or intended use of ground water in areas beyond a distance of one half mile from the property boundary where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards along with the name, address and phone number of a representative of the volunteer, or owner, if different, can be notified of any current or intended use of ground water or contacted for further information;
- (d) Review Ohio Department of Natural Resources water well log information, no less frequently than annually, for the properties beyond a distance of one half mile from the property boundary on which ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards, to determine whether new ground water wells have been installed;

- (e) Identify any known changes and, at a minimum, annually inquire of changes in ownership of properties in areas beyond a distance of one half mile from the property boundary where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards;
  - (f) Provide the notification required by paragraph (F)(3)(c)(vi)(c) of this rule to owners of properties identified under paragraph (F)(3)(c)(vi)(e) of this rule; and
  - (g) Identify other information that is known to the volunteer or owner, if different, regarding changes in the use of ground water in areas beyond a distance of one half mile from the property boundary where ground water has or is reasonably anticipated to have concentrations of chemical(s) of concern in excess of unrestricted potable use standards; and
- (vii) based on the information obtained in paragraphs (F)(3)(c)(vi) of this rule of this paragraph, the volunteer must identify off-property receptor populations for the ground water pathway as determined in accordance with paragraph (D)(3)(b)(i) of rule 3745-300-09 of the Administrative Code; and
- (viii) For each receptor population identified pursuant to paragraph (F)(3)(c)(vii) of this rule that uses the ground water for potable uses, one or more of the measures contained in paragraphs (F)(3)(c)(iii)(a) and (F)(3)(c)(iii)(b) of this rule must be implemented to ensure that those receptor populations have a continuing supply of water that does not exceed unrestricted potable use standards; and
- (ix) For each receptor population identified pursuant to paragraph (F)(3)(c)(vii) of this rule for which an exposure pathway exists other than that identified pursuant to paragraph (F)(3)(c)(viii) of this rule of this paragraph, implement measures that reliably prevent human exposure to ground water in excess of applicable standards for those exposures.

[Comment: the requirements contained in paragraphs (F)(3)(c)(vi) to (F)(3)(c)(ix) of this rule will also be included in an operation and maintenance plan or an operation and maintenance agreement with Ohio EPA as described in rule 3745-300-15 of the Administrative Code, the remedy rule.]

(d) A volunteer must comply with the requirements contained in paragraph (F)(3)(a) of this rule for chemical(s) of concern in ground water contributed by sources or source areas on the property, which are different than chemical(s) of concern identified by a "Phase II Property Assessment" conducted in accordance with rule 3745-300-07 of the Administrative Code as originating from sources or source areas that were or are located off the property.

(4) "Class A" ground water without an urban setting designation.

A volunteer must meet the following minimum requirements at a property where ground water underlying the property has been classified as "Class A" ground water in accordance with paragraphs (B) and (C) of this rule and paragraph (D)(6) of rule 3745-300-07 of the Administrative Code and an urban setting designation has not been made in accordance with paragraph (D) of this rule:

(a) When ground water contamination is attributable entirely to sources or source areas that were or are located on the property as determined by a "Phase II Property Assessment" conducted in accordance with rule 3745-300-07 of the Administrative Code, the following minimum requirements in paragraphs (F)(4)(a)(i) to (F)(4)(a)(iv) of this rule must be met:

(i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water with concentrations of chemical(s) of concern in excess of unrestricted potable use standards, or restore the ground water underlying the property to those unrestricted potable use standards;

(ii) Ground water emanating from the property must not exceed unrestricted potable use standards except when the ground water discharges to a surface water body immediately adjoining the property's boundary, in which case, the applicable standards established in paragraph (D)(1) of rule 3745-300-08 of the Administrative Code for the surface water body receiving the discharge must be met;

(iii) When ground water has emanated from the property and caused or is reasonably anticipated to cause unrestricted potable use standards to be exceeded at off-property wells used for potable purposes, as determined by a "Phase II Property Assessment" conducted in accordance with rule 3745-300-07 of the Administrative Code, one or more of the following measures must be implemented to ensure that the ground water users have a continuing supply of water that does not contain chemical(s) of concern at levels above

unrestricted potable use standards:

- (a) Restore the contaminated ground water to unrestricted potable use standards; or
- (b) Provide a reliable alternate water supply or water treatment system that:
  - (i) Provides a volume of water sufficient for the intended use; and
  - (ii) Is provided for a period of time no shorter than the time that the ground water supply of off-property ground water users exceeds unrestricted potable use standards, and
- (iv) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:
  - (a) Ensure protection of humans on and off the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water. for the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers; and
  - (b) Ensure protection of important ecological resources on and off the property.

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

- (b) When ground water contamination is attributable entirely to sources or source areas that were or are located off the property as determined by a “Phase II

Property assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code, the following minimum requirements paragraphs (F)(4)(b)(i) to (F)(4)(b)(iii) of this rule must be met:

- (i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water with concentrations of chemical(s) of concern in excess of unrestricted potable use standards or restore the ground water underlying the property to those unrestricted potable use standards; and
- (ii) Implement remedial activities for sources or source areas of contamination on the property to prevent leaching chemical(s) of concern from those sources or source areas that is reasonably anticipated will result in unrestricted potable use standards being exceeded in ground water emanating from the property, as determined in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code;
- (iii) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:
  - (a) Ensure protection of humans on the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water. For the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers; and
  - (b) Ensure protection of important ecological resources on the property.

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

(c) When ground water contamination is partially attributable to sources or source areas that were or are located off the property as determined by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code and chemical(s) of concern from sources or source areas off the property are the same as those from sources or source areas on the property, the following minimum requirements in paragraphs (F)(4)(c)(i) to (F)(4)(c)(v) of this rule must be met:

(i) Implement Institutional Or Engineering Controls That Reliably Prevent Human Exposure On The Property To Ground Water With Concentrations Of Chemical(S) Of Concern In Excess Of Unrestricted Potable Use Standards Or Restore The Ground Water Underlying The Property To Those Unrestricted Potable Use Standards;

(ii) Implement Remedial Activities For Sources Or Source Areas Of Contamination On The Property, To Prevent Leaching Of Chemical(S) Of Concern From Those Sources Or Source Areas That Is Reasonably Anticipated Will Result In Unrestricted Potable Use Standards Being Exceeded In Ground Water Emanating From The Property, As Determined In Accordance With Rules 3745-300-07 And 3745-300-09 Of The Administrative Code;

(iii) When The Individual Or Collective Effect Of Sources Or Source Areas On The Property Have Caused Or Are Reasonably Anticipated To Cause The Concentrations Of Chemical(S) Of Concern To Exceed Unrestricted Potable Use Standards In Ground Water At Off-Property Wells Used For Potable Purposes As Determined In accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code, one or more of the following measures must be implemented to ensure that the ground water users have a continuing supply of water that does not contain chemical(s) of concern at levels above unrestricted potable use standards:

(a) Restore the contaminated ground water to unrestricted potable use standards; or

(b) Provide a reliable alternate water supply or water treatment system that:

(i) Provides a volume of water sufficient for the intended use; and

- (ii) Is provided for a period of time no shorter than the time that the ground water supply of off-property ground water users exceeds unrestricted potable use standards; and
- (iv) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:
  - (a) Ensure protection of humans on the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water. for the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers; and
  - (b) Ensure protection of important ecological resources on the property; and
- (v) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:
  - (a) Ensure protection of humans off the property from exposures to ground water not related to potable use of the ground water, unless the individual or collective effect of sources or source areas on the property have not caused and are not reasonably expected to cause applicable standards to be exceeded, as determined in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code. for the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent

contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers; and

- (b) Ensure protection of important ecological resources off the property, unless the individual or collective effect of sources or source areas on the property have not caused and are not reasonably expected to cause applicable standards to be exceeded.

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with RULES 3745-300-07 AND 3745-300-09 of the Administrative Code.]

- (d) A volunteer must comply with the requirements contained in paragraph (F)(4)(a) of this rule for chemical(s) of concern in ground water contributed by sources or source areas on the property, which are different than chemical(s) of concern identified by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code as originating from sources or source areas that were or are located off the property.

- (5) “Class A” ground water with urban setting designation.  
a volunteer must meet the following requirements at a property where ground water underlying the property has been classified as “Class A” ground water in accordance with paragraphs (B) and (C) of this rule and paragraph (D)(6) of rule 3745-300-07 of the Administrative Code and an urban setting designation has been made in accordance with paragraph (D) of this rule:

- (a) When ground water contamination is attributable entirely to sources or source areas were or are located on the property, as determined by a “Phase II Property Assessment” Conducted in accordance with rule 3745-300-07 of the Administrative Code, the following minimum requirements in paragraphs (F)(5)(a)(i) to (5)(a)(ii) of this rule must be met:
  - (i) implement institutional or engineering controls that reliably prevent human exposure on the property to ground water with concentrations of chemical(s) of concern in excess of unrestricted potable use standards or restore the ground water underlying the

property to those unrestricted potable use standards; and

(ii) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

(a) Ensure protection of humans on and off the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water. For the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers.; and

(b) Ensure protection of important ecological resources on and off the property.

[Comment: such exposures must be evaluated as part of a Phase II Property Assessment in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

(b) When ground water contamination is attributable entirely to sources or source areas that were or are located off the property as determined by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code, the following minimum requirements in paragraphs (F)(5)(b)(i) to (F)(5)(b)(ii) of this rule must be met:

(i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water with concentrations of chemical(s) of concern in excess of unrestricted potable use standards or restore the ground water underlying the property to those unrestricted potable use standards; and

(ii) The remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

- (a) Ensure protection of humans on the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water. For the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. Examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers.; and
- (b) Ensure protection of important ecological resources on the property.

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

- (c) When ground water contamination is partially attributable to sources or source areas that were or are located off the property as determined by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code and the Chemical(s) of concern from sources or source areas off the property are the same as those from sources or source areas on the property. The following minimum requirements in paragraphs (F)(5)(c)(i) to (F)(5)(c)(iii) of this rule must be met:
  - (i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water with concentrations of chemical(s) of concern in excess of unrestricted potable use standards or restore the ground water underlying the property to those unrestricted potable use standards.
  - (ii) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:
    - (a) Ensure protection of humans on the property from exposures to chemical(s) of concern in ground water not related to

potable use of the ground water. For the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers; and

(b) Ensure protection of important ecological resources on the property; and

(iii) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

(a) Ensure protection of humans off the property from exposures to ground water not related to potable use of the ground water, unless the individual or collective effect of sources or source areas on the property have not caused and are not reasonably expected to cause applicable standards to be exceeded, as determined in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code. For the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of a inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers; and

(b) Ensure protection of important ecological resources off the property, unless the individual or collective effect of sources or source areas on the property have not caused and

are not reasonably expected to cause applicable standards to be exceeded, as determined in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

(d) A volunteer must comply with the requirements contained in paragraph (F)(5)(a) of this rule for chemical(s) of concern in ground water contributed by sources or source areas on the property, which are different than chemical(s) of concern identified by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code as originating from sources or source areas that were or are located off the property.

(6) “Class B” ground water.

A volunteer must meet the following minimum requirements at a property where ground water underlying the property has been classified as “Class B” ground water in accordance with paragraphs (B) and (C) of this rule and paragraph (D) of rule 3745-300-07 of the Administrative Code:

(a) When ground water contamination is attributable entirely to sources or source areas that were or are located on the property, the following minimum requirements in paragraphs (F)(6)(a)(i) to (F)(6)(a)(ii) of this rule must be met:

(i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water with concentrations of chemical(s) of concern in excess of unrestricted potable use standards or restore the ground water underlying the property to those unrestricted potable use standards; and

(ii) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

(a) Ensure protection of humans on and off the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water. For the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and

exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers; and

- (b) Ensure protection of important ecological resources on and off the property.

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

- (b) When ground water contamination is attributable entirely to sources or source areas that were or are located off the property as determined by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code, the following minimum requirements in paragraphs (F)(6)(b)(i) to (F)(6)(b)(ii) of this rule must be met:

- (i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water with concentrations of chemical(s) of concern in excess of unrestricted potable use standards or restore the ground water underlying the property to those unrestricted potable use standards; and

- (ii) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

- (a) Ensure protection of humans on the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water. For the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile

organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers.; and

- (b) Ensure protection of important ecological resources on the property.

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

- (c) When ground water contamination is partially attributable to sources or source areas that were or are located off the property as determined by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code and the chemical(s) of concern are from sources or source areas off the property are the same as those from sources or source areas on the property, the following minimum requirements in paragraphs (F)(6)(c)(i) to (F)(6)(c)(iii) of this rule must be met:

- (i) Implement institutional or engineering controls that reliably prevent human exposure on the property to ground water with concentrations of chemical(s) of concern in excess of unrestricted potable use standards or restore the ground water underlying the property to those unrestricted potable use standards; and

- (ii) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

- (a) Ensure protection of humans on the property from exposures to chemical(s) of concern in ground water not related to potable use of the ground water; and

- (b) Ensure protection of important ecological resources on the property; and

- (iii) The remedy or remedial activities must achieve compliance with applicable standards established under rule 3745-300-09 of the Administrative Code to:

- (a) Ensure protection of humans off the property from exposures to ground water not related to potable use of the ground water,

unless the individual or collective effect of sources or source areas on the property have not caused and are not reasonably expected to cause applicable standards to be exceeded. For the purposes of this rule, exposures to chemical(s) of concern in ground water not related to potable use of the ground water include exposures resulting from non-consumptive uses and exposures resulting from inadvertent contact with contaminated ground water. examples of such exposures include, but are not limited to: exposures to industrial process water; water used for lawn watering; water used for irrigation; shallow ground water contaminated with volatile organic compounds that volatilize into the breathing space of an inhabited structure such as a basement; and shallow ground water seeping into sub-surface utility tunnels or sewers; and

- (b) Ensure protection of important ecological resources off the property, unless the individual or collective effect of sources or source areas on the property have not caused and are not reasonably expected to cause applicable standards to be exceeded.

[Comment: such exposures must be evaluated as part of a “Phase II Property Assessment” in accordance with rules 3745-300-07 and 3745-300-09 of the Administrative Code.]

- (d) A volunteer must comply with the requirements contained in paragraphs (F)(6)(a) of this rule for chemical(s) of concern in ground water contributed by sources or source areas on the property, which are different than chemical(s) of concern identified by a “Phase II Property Assessment” conducted in accordance with rule 3745-300-07 of the Administrative Code as originating from sources or source areas that were or are located off the property.

Effective: \_\_\_\_\_

Certification: \_\_\_\_\_

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