

**\*\*\* DRAFT – NOT FOR FILING \*\*\***

3745-510-240      **Hydrogeologic investigation procedures, equipment, and methodologies.**

The report on the hydrogeologic investigation identified in rule 3745-510-100 of the Administrative Code shall include clearly labeled and tabbed pages for the section titled "Hydrogeologic Investigation Procedures, Equipment, and Methodologies," and shall include the following:

(A) A description and an explanation of why a particular subsurface investigatory method and sampling method were chosen to characterize the geomorphologic, geologic, and hydrogeologic properties for the purpose of preparing the topic reports specified in rules 3745-510-231 to 3745-510-235 of the Administrative Code. The procedures, methodologies, and equipment used to sample and analyze ground water from the uppermost aquifer and all significant zones of saturation above the uppermost aquifer system shall be the same as those required for the ground water sampling plan in accordance with rule 3745-506-200 of the Administrative Code. The description and explanation shall include the following:

(1) Appropriate subsurface investigatory methods used to collect data including but not limited to geophysical surveys, soil gas surveys, and borings (such as piezometers, monitoring wells, and test pits).

(2) Depth of site characterization, which shall extend from the ground surface to the bottom of the uppermost aquifer system, with the following exceptions:

(a) The applicant, owner, or operator may limit the maximum depth of the site investigation to one hundred fifty feet below the basal elevations of the disposal limits, unless paragraph (A)(2)(c) of this rule applies.

(b) If the uppermost aquifer system is a consolidated stratigraphic unit, the applicant, owner, or operator may limit the investigation of the uppermost aquifer system to the upper twenty-five feet of the saturated portion of the uppermost aquifer system.

(c) If publicly available information on the regional aquifer indicates that an unconsolidated aquifer system capable of sustaining a yield of at least one hundred gallons per minute for a twenty-four-hour period may exist beneath the facility, and the applicant, owner, or operator proposes to assign a yield of less than one hundred gallons per minute for a twenty-four-hour period, the applicant, owner, or operator shall extend the depth of the site investigation to obtain adequate site-specific information about the aquifer system to justify the assignment of lower yield.

(d) If it is necessary to evaluate below the limits established in paragraphs (A)(2)(a) or (A)(2)(b) or this rule to demonstrate the facility meets siting

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criteria, the applicant, owner, or operator may extend the subsurface investigation beyond those limits.

(B) The procedures used to protect samples from damage and adverse effects during transportation of the samples to the place of testing.

(C) The analytical procedures and methodology used to characterize the unconsolidated and consolidated materials obtained from borings including but not limited to test pits, drilling, and other investigation methods.

(D) The methodology, equipment, and procedures used to define the uppermost aquifer system and all significant zones of saturation above the uppermost aquifer system, including the following:

(1) Well and piezometer construction specifications.

(2) Water level measurement procedures.

(3) The methodologies, equipment, and procedures used to determine the ground water quality and any contamination in the uppermost aquifer system and the significant zones of saturation above the uppermost aquifer system. The methodologies, equipment, and procedures shall be the same as those required for the ground water sampling and analysis plan in accordance with rule 3745-506-200 of the Administrative Code.