



Ohio Administrative Code

Rule 3745-525-910 Groundwater monitoring systems, 40 C.F.R. 257.91.

Effective: October 1, 2026

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- (A) Performance standard. The owner or operator of a CCR unit shall install a groundwater monitoring system that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that do the following:
- (1) Accurately represent the quality of background groundwater that has not been affected by leakage from a CCR unit. A determination of background quality may include sampling of wells that are not hydraulically upgradient of the CCR management area where the following occur:
 - (a) Hydrogeologic conditions do not allow the owner or operator of the CCR unit to determine what wells are hydraulically upgradient.
 - (b) Sampling at other wells will provide an indication of background groundwater quality that is as representative or more representative than that provided by the upgradient wells.
 - (2) Accurately represent the quality of groundwater passing the waste boundary of the CCR unit. The downgradient monitoring system shall be installed at the waste boundary that ensures detection of groundwater contamination in the uppermost aquifer. All potential contaminant pathways shall be monitored.
- (B) The number, spacing, and depths of monitoring systems shall be determined based upon site-specific technical information that shall include thorough characterization of the following:
- (1) Aquifer thickness, groundwater flow rate, groundwater flow direction including seasonal and temporal fluctuations in groundwater flow.
 - (2) Saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer, including, but not limited to, thicknesses, stratigraphy, lithology, hydraulic conductivities, porosities and effective porosities.
- (C) The groundwater monitoring system shall include the minimum number of monitoring wells necessary to meet the performance standards specified in paragraph (A) of this rule, based on the site-specific information specified in paragraph (B) of this rule. The groundwater monitoring system shall contain the following:
- (1) A minimum of one upgradient and three downgradient monitoring wells.
 - (2) Additional monitoring wells as necessary to accurately represent the quality of background groundwater that has not been affected by leakage from the CCR



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unit and the quality of groundwater passing the waste boundary of the CCR unit.

(D) The owner or operator of multiple CCR units may install a multiunit groundwater monitoring system instead of separate groundwater monitoring systems for each CCR unit.

(1) The multiunit groundwater monitoring system shall be equally as capable of detecting monitored constituents at the waste boundary of the CCR unit as the individual groundwater monitoring system specified in paragraphs (A) to (C) of this rule for each CCR unit based on the following factors:

(a) Number, spacing, and orientation of each CCR unit.

(b) Hydrogeologic setting.

(c) Site history.

(d) Engineering design of the CCR unit.

(2) [Reserved.]

(E) Monitoring wells shall be cased in a manner that maintains the integrity of the monitoring well borehole. This casing shall be screened or perforated and packed with gravel or sand, where necessary, to enable collection of groundwater samples. The annular space (i.e., the space between the borehole and well casing) above the sampling depth shall be sealed to prevent contamination of samples and the groundwater.

(1) The owner or operator of the CCR unit shall document and include in the operating record the design, installation, development, and decommissioning of any monitoring wells, piezometers and other measurement, sampling, and analytical devices. The qualified professional engineer shall be given access to this documentation when completing the groundwater monitoring system certification required under paragraph (F) of this rule.

(2) The monitoring wells, piezometers, and other measurement, sampling, and analytical devices shall be operated and maintained so that the devices perform to the design specifications throughout the life of the monitoring program.

(F) The owner or operator shall obtain a certification from a qualified professional engineer stating that the groundwater monitoring system has been designed and constructed to meet the requirements of this rule. If the groundwater monitoring system includes



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the minimum number of monitoring wells specified in paragraph (C)(1) of this rule, the certification shall document the basis supporting this determination.

- (G) The owner or operator of the CCR unit shall comply with the recordkeeping requirements specified in paragraph (H) of rule 3745-525-50 of the Administrative Code, the notification requirements specified in paragraph (H) of rule 3745-525-60 of the Administrative Code, and the internet requirements specified in paragraph (H) of rule 3745-525-70 of the Administrative Code.