



Division of Drinking and Ground Waters Response to Comments

Second Round of Draft Revisions to Well Standards and Plan Approval Rules

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Agency Contact for this Package

Susan Kramer, Division of Drinking and Ground Waters (DDAGW)
(614) 644-2752, Susan.Kramer@epa.ohio.gov

Ohio EPA issued public notice and requested a second round of interested party comments for the period of Oct. 13, 2015 to Oct. 28, 2015 on draft revisions to rules in the Ohio Administrative Code (OAC). This document summarizes the comments and questions received during the interested party public comment period.

Ohio EPA reviewed and considered all comments received during the interested party comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. The name of the commenter follows the comment in parentheses.

3745-9-02, Scope and exemptions

Comment 1: “The phrase *private water system contractor* is confusing since (D)(1) and (D)(2) refer to public water systems, and with regard to the reference to the requirements of (D) in paragraph (E). If the intent of these sections of the rule is to say that any contractor to a public water system shall be registered with ODH, perhaps the words *water system* should be dropped from the phrase. The

first sentence of (D) would then read *After April 1, 2016, only private ~~water system~~ contractors holding a valid registration with the Ohio department of health...*" (Steve Champa, Eagon & Associates)

Response 1: DDAGW drafted the rule with this terminology to be consistent with the Ohio Department of Health's (ODH) private water system rules. However, the Agency agrees with the recommended changes and will revise the rule accordingly.

3745-9-05, Well construction

Comment 2: In paragraph (A)(7), "the text reads *Casing shall extend to the top of the aquifer, or the top of the non-water bearing consolidated formation above an aquifer. In the case of unconfined, unconsolidated aquifers it is common to extend the casing deeper into the aquifer. We suggest the wording be modified to say the casing should extend, at a minimum, to the top of the aquifer or the top of the non-water bearing consolidated formation above an aquifer.*" (Bruce, Whitteberry, Greater Cincinnati Water Works)

Response 2: DDAGW agrees with the observation that in unconfined, unconsolidated aquifers it is common practice to extend the casing deeper into the aquifer, creating a continuous casing between the ground surface and the screened interval. DDAGW has revised the paragraph. Please note, the paragraph you referenced is paragraph (A)(6) of this rule.

Comment 3: In paragraph (B)(6)(c), "the reference to a *director approved standard* is vague. Are there other standards that would need to be met besides those already described in (B)(6)? If so, can they be specified in the rule?" (Steve Champa, Eagon & Associates)

Response 3: Currently, only the ANSI/NSF standard referenced in paragraph (B)(6) is available. The reference to a 'director approved standard' was included for flexibility in case another industry standard is provided prior to the next revision of this rule.

3745-9-08, Well disinfection

Comment 4: In paragraph (C)(2)(a), "we suggest the text be modified to *A mechanical cleaning of the well casing and screen to remove loose debris, sediment, mineral encrustation and bacterial slime before disinfection.*" (Bruce, Whitteberry, Greater Cincinnati Water Works)

Response 4: DDAGW agrees with the recommendation and has revised the rule language.

3745-9-09, Well development and pumping test

Comment 5: In paragraph (B)(2), a suggested revision is *“Be used to demonstrate that the well can supply water at the anticipated permanent design pumping rate while at a minimum maintaining the operational capacity of the well field and without degrading the water quality of any well in the well field.”* (Steve Champa, Eagon & Associates)

Response 5: The suggested rule revision has been added.

Comment 6: Paragraph (B)(4)(b)(ii) states, *The constant pumping test shall not commence until water level has recovered to at least ninety percent of the drawdown cause by the step-drawdown test.* “What is the practicality of the pause between the step test and constant rate pumping test? Once pumping begins, the aquifer is ‘disturbed’ i.e. the drawdown cone begins altering the hydrogeological character of the aquifer. Depending on the aquifer, ninety percent recovery may take less than an hour or may take an extended period of a day or more. Ninety percent recovery may not be even attainable in some locations.” (Phil Van Atta, City of Dayton Water Department)

Response 6: The need for pause is to allow for some recovery in the aquifer prior to the constant rate pumping test and get a better picture of the performance. The pause allows for last minute adjustments to the anticipated permanent design pumping rate.

The language in paragraph (B)(4)(b)(ii) will be revised to the following: *The constant rate pumping test shall not commence until the water level has recovered to at least ninety per cent of the drawdown caused by the step-drawdown test or twenty-four hours after the completion of the step-drawdown test, whichever comes first.*

Comment 7: In response to paragraph (B)(5)(b)(ii), “it should be noted that recovery from pumping may not provide useful data in the cases where drawdown from the pumping test well is complicated by interference drawdown from operation of another nearby well(s). In such cases it may still make sense to monitor recovering water levels, but the 90 percent recovery criteria should be waived.” (Steve Champa, Eagon & Associates)

Response 7: DDAGW agrees with the comment and will revise the language in paragraph (B)(5)(b)(ii) to the following: *Recovery water level measurements shall be taken immediately after termination of the constant pumping test at time intervals of five minutes for the first hour and every thirty minutes thereafter until the water level has recovered to at least ninety percent of the drawdown caused by the pumping test or twenty-four hours after the completion of the pumping test, whichever comes first.*

Comment 8: Paragraph (B)(5)(b)(iii) states, *For high use wells, all pumping tests shall include water level measurements from observation or surrounding wells...* “The

installation of an observation well will add additional costs for new well permits. The goal to collect data for analysis is understandable, particularly for aquifer characterization. Perhaps, this requirement should be applied to new well fields. Existing well fields have fully characterized aquifers. In addition, pumping over long periods of time alters the aquifer beyond its original state.” (Phil Van Atta, City of Dayton Water Department)

Response 8: DDAGW contacted the City of Dayton Water Department to clarify their comment. Their well fields contain over fifty wells and many pumping tests have been conducted to date. These tests have resulted in a fully characterized aquifer system. In this circumstance, the requirements mentioned in the comment may not be applicable. In a circumstance such as this one, DDAGW would recommend a variance be requested.

Comment 9: In response to paragraph (B)(6)(a)(ii), “Can the requested data tables be submitted in digital format? Digital tables will allow for transmittal of data in a readily usable form and will avoid an extensive waste of paper, especially when pressure transducers and data loggers are used to record water-level data at short time intervals.” (Steve Champa, Eagon & Associates)

Response 9: The rule does not specify what format in which you must provide data to the DDAGW, so you may submit data electronically.

Guidelines for Design of Small Public Water Ground Water Systems (Greenbook)

Comment 10: Recommendations made in Comment #5 and Comment #9 also apply to sections 3.9(B)(10)(a) and 3.9(B)(3) of the Greenbook. (Steve Champa, Eagon & Associates)

Response 10: See responses to Comment #5 and Comment #9.

End of Response to Comments