3745-9-04 **Well siting.**

(A) Public water system and nonpotable wells as defined in rule 3745-9-01 of the Administrative Code shall be located in accordance with the following:

(1) Other than a well for the removal of contaminants, the maximum practical distance from potential or known sources of contamination and only where it can be maintained in a sanitary condition.

(2) Other than a well for the removal of contaminants, only where surface and subsurface conditions will not allow contaminants to be conducted into the well.

(3) Where adequately protected from physical damage.

(4) Not within ten feet of or within the foundation of any building, unless the building is a pumphouse.

(5) Where the well is accessible for cleaning, treatment, repair, alteration, testing and such other actions as may be necessary.

(6) Not constructed within a pit, vault or other structure that may subject the well casing to deterioration or contamination.

(B) In addition to paragraph (A) of this rule, a public water system well shall meet the following:

(1) A public water system owns all the land or obtains an easement or lease of the sanitary isolation radius of a public water system well, and such easement or lease is recorded with the county recorder.

[Comment: The director recommends ownership by the public water system of land at least within the sanitary isolation radius.]

(2) The sanitary isolation radius is determined from the estimated average daily water demand of the public water system well. Estimated average daily water demand may be determined by the director from the pumping design rate of the well, as illustrated in the following table:

Sanitary Isolation Radius

| Estimated Average Daily Water Demand (Q gallons per day) | Sanitary Isolation Radius (feet) |
|---|---|

| | |
|---|---|
| 0 - 2500 | 50 |
| 2501 - 10,000 | square root of Q |
| 10,001 - 50,000 | 50 + Q/200 |
| Over 50,000 | 300 |

(3) The director may specify greater sanitary isolation requirements for a public water system well where conditions are determined to exist such that the sanitary isolation radius set forth in paragraph (B)(2) of this rule is insufficient to protect the public health and the public water system from contaminants.

(4) Potential sources of contamination are not to be constructed or placed within the sanitary isolation radius of a public water system well.

(5) Not be located in a floodway without prior acceptance of the director.

[Comment: An owner or operator of a public water system that proposes to locate a well in a one hundred year floodplain or floodway must also obtain approval from state or local floodplain management agencies as appropriate.]

(6) Be located at a minimum in accordance with the following:

(a) Fifty feet from streams and lakes.

(b) Three hundred feet from a human or animal waste management facility.

(c) Three hundred feet from a land application area, stockpile, storage or staging area.

(d) One hundred feet from a land application area field if the waste is injected or three hundred feet if the waste is surface applied, but in no case within the sanitary isolation radius of the well.

(e) Three hundred feet from a soil absorption system handling more than ten thousand gallons per day.

(f) One thousand feet from a landfill or monofill.

(g) Five hundred feet from a construction and demolition debris facility.

(7) Be sited such that no landfill or monofill is located within the proposed well's drinking water source protection area.

(C) In addition to paragraphs (A) and (B) of this rule, a public water system well used by a community or nontransient noncommunity public water system shall be located such that the following are not located within the proposed well's inner management zone:

(1) Human or animal waste management facility, except when a well is used by the facility.

(2) Soil absorption system handling more than ten thousand gallons per day in an area where the Ohio environmental protection agency has determined the aquifer has a high susceptibility to contamination.

(3) Land application stockpile, storage or staging area where the Ohio environmental protection agency has determined the aquifer has a high susceptibility to contamination.

(D) In instances where a proposed public water system well cannot be feasibly located such that the conditions specified in paragraphs (B)(2), (B)(6), (B)(7), and (C) of this rule are met, the director may grant a variance in accordance with paragraph (F) of rule 3745-9-02 of the Administrative Code. The applicant shall make an adequate demonstration that documents the site hydrogeology, engineering controls, or other physical barriers are sufficient to minimize the risk of contamination being drawn into the well.

(E) The director may require a hydrogeologic investigation to select the location of a well to ensure that contaminants will not be drawn into the well and that a sufficient quantity of ground water exists for the intended purpose. These investigations may be required where, without limitation, one of these well siting circumstances exist: potential or known contamination; hydrogeologic setting that may allow transport of contaminants; or initial development of a community well field. The investigation shall be conducted by a qualified ground water professional. A hydrogeological investigation is a study of the subsurface and geologic conditions. Information shall be collected, without limitation, about the type and thickness of geologic materials, the occurrence of ground water, how it flows in pore spaces and fractures, and the quantity and quality of the ground water.

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