



NEW PUBLIC WATER SYSTEM/WELL APPLICATION INSTRUCTIONS

PWS-0903-PR_IN1

(Appendix A of PWS-0903-PR)



DIVISION OF DRINKING and GROUND WATERS
NEW PUBLIC WATER SYSTEM/WELL APPLICATION INSTRUCTIONS

Complete this application as accurately and thoroughly as possible. Ohio EPA will use the information the owner provides to evaluate the proposed well to determine if it meets applicable requirements for siting a public water system well. If your system purchases water from a municipality and has installed supplemental disinfection or treatment in your premise plumbing system, please contact the Central Office Emerging Contaminant Section at (614) 644-2752 for instructions. This application is not intended to address these types of water systems."

Submittal of this document to Ohio EPA does **NOT** constitute approval to use the well once it has been drilled. A public water system will be required to conduct a pumping test and, collect new well chemical samples in accordance with Ohio Administrative Code (OAC) Chapter 3745-9, and submit detail plans for review and approval for every new well, including existing wells at new public water systems. Additional information will likely be required from the PWS as part of the plan approval process. **Approval to use the well is not granted until acceptable detail plan drawings have been submitted to and approved by the director of Ohio EPA.**

A public water system shall own all the land or obtain an easement or lease of the sanitary isolation radius (the required isolation distance from potential sources of contamination) of a public water system well, and such easement or lease shall be recorded with the county recorder. If a proposed well may be impacted by flooding, a larger isolation radius, additional well construction standards (such as raising the casing and vent, protecting the well from flood debris, etc.), and additional testing following flood events may be required.

SITE MAP & DRAWINGS

A site map **must** be provided with this application. All site maps must be to scale, including a **north arrow and the scale used**, and show all of the features listed below that exist within **400 feet** of your well(s). Possible sources for maps include tax maps, plat maps, and county maps. Indicate the location of your active **well(s)** as accurately as possible. **If any other wells exist on your property, show their locations and label them as "currently in use" or "not in use."**

All site maps must contain:

1. Proposed and existing well locations
2. Property lines
3. Location of any easements needed for access to well(s)
4. Existing water bodies (streams, ponds, waterways or ditches)
5. Roads and railroads
6. Buildings (proposed and existing)
7. The proposed water line from the well to the treatment plant
8. Potential contaminant sources. These include, but are not limited to:
 - a. wastewater treatment systems and septic tanks, including their discharge locations
 - b. oil and gas production wells (active or capped)
 - c. mining operations
 - d. waste or product storage tanks (above or below ground)
 - e. landfills, old or new refuse disposal areas and demolition fill areas
 - f. pipe lines (sewer mains, gas mains, oil mains, etc.)
 - g. manufacturing facilities
 - h. fields subject to application of manure, biosolids, treated wastewater, pesticides or fertilizer

If you already have **drawings, blueprints, or maps** of your facility, particularly those showing how water is used within the building and where pressure tanks and other treatment units will be placed, include one copy of those drawings with this application.



DIVISION OF DRINKING and GROUND WATERS

NEW PUBLIC WATER SYSTEM/WELL APPLICATION INSTRUCTIONS **CRITERIA APPLICABLE TO ALL PUBLIC WATER SYSTEM WELLS**

The following criteria required by OAC 3745-9-05 are applicable to all public water system wells:

1. A minimum of 25 feet of solid, watertight casing must extend below the ground surface.
2. The minimum casing diameter shall be five inches and sized to allow the well to produce water that is adequate for the intended use, and to allow for the installation and maintenance of the well and related pumping equipment.
3. Steel or thermoplastic (i.e., PVC) well casing shall be used and shall conform to the minimum thickness, pipe specification and joint specifications described in OAC 3745-9-05.
4. Thermoplastic well casing shall not be installed where potential or known contaminants may degrade or permeate plastic and must not be driven.
5. All annular spaces shall be of sufficient size so that the grout can be properly placed.
6. The well cap/seal shall be a watertight, secured with screws or other appropriate connections, and vented to the atmosphere. Well caps, pitless adapter or pitless unit, must conform with "Water System Council Pitless Adapter Standard PAS-97, Performance Standards for Sanitary Water Well Pitless Adapters, pitless Units, and Watertight Well Caps" (2012).
7. A vent shall be provided on all well caps and seals except for those used on deep well single pipe packer jet installations, or flowing wells where the flow rate is greater than the pumping rate of the permanent pump. A well vent shall be self-draining, screened with a noncorroding mesh screen of fifteen to thirty mesh, pointed downward at or above the top of the casing or pitless unit. A vent shall terminate not less than twelve inches above ground surface, and at least twelve inches above the well house floor or concrete apron surface. The well vent shall extend a minimum of three feet above the one-hundred-year floodplain elevation, or highest known flood elevation, whichever is higher.
8. The pitless adapter or pitless unit shall be lead free; conform with "Water System Council Pitless Adapter Standard PAS-97, Performance Standards and Recommended Installation Procedures for Sanitary Water Well Pitless Adapters, Pitless Units, and Well Caps," (2012) or with an alternative standard acceptable to the director; and if welded, have connections to steel well casing made watertight in accordance with welding procedures in the "American Welding Society Structural Welding Code, AWS D1.1/D1.M:2002" (2002).
9. OAC 3745-9-05 requires that the top of the casing extend at least three feet above the 100-year flood or the highest known flood elevation, whichever is higher.
10. The casing may extend 8 inches above finished grade for wells that were installed prior to May 1, 2003 per OAC 3745-9-02(H), otherwise the casing shall under no circumstance extend less than 12 inches above finished grade.
11. Defective, visibly damaged or reject pipe shall not be used as casing or liner pipe for wells.
12. Casing shall extend continuously, at a minimum, either to the top of the aquifer or to the top of the non-water bearing consolidated formations above an aquifer.

13. The casing and borehole shall be sufficiently straight and vertical to allow for normal installation and operation of the pump and uniform placement of grout.
14. Well screens shall be installed where the geological formations are unconsolidated or incompetent.
15. The well shall be constructed in accordance with the requirements for specific geologic conditions in 3745-9-06 of the Administrative Code.

The following criteria required by OAC 3745-9-07 and OAC 3745-9-09 are applicable to all public water system wells:

1. The well must be properly grouted, which requires that all annular spaces be completely filled with grout from the ground surface to the bottom of the annular space.
2. The only accepted grout is bentonite and cement.
3. Mechanical development techniques shall be used to develop the well upon completion and shall continue until turbidity or sand content in the well is minimal. Chemical development may also be utilized with prior consultation with the District Office.



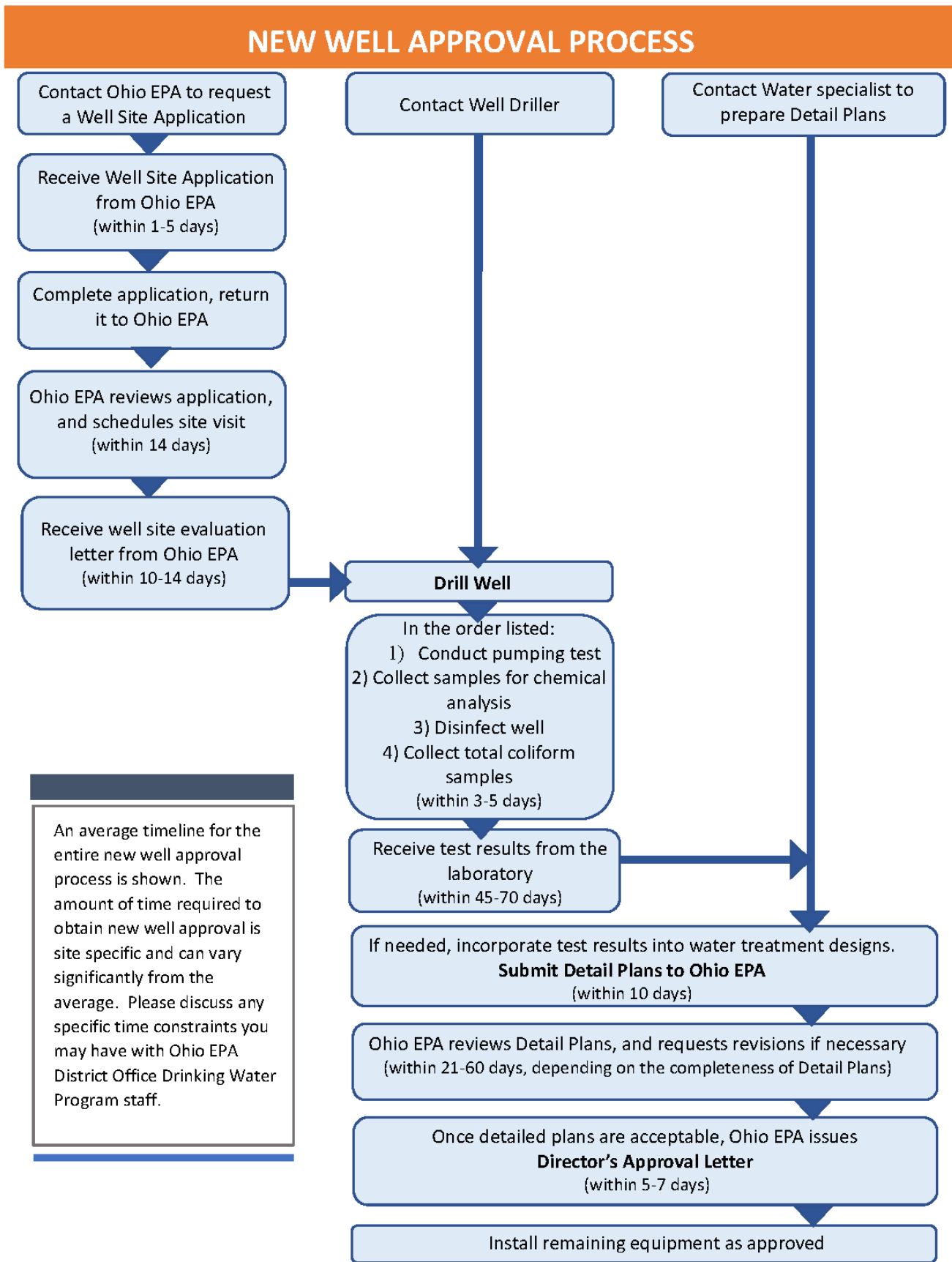
DIVISION OF DRINKING and GROUND WATERS

NEW PUBLIC WATER SYSTEM/WELL APPLICATION INSTRUCTIONS **OHIO REVISED CODE 6109.072 CONSIDERATIONS AND APPLICATION CONTENTS**

No person shall install a public water system well without an approved well siting application issued by the director of environmental protection in accordance with chapter 6109 of the Ohio Revised Code and any rules adopted under it. In addition to meeting the siting requirements established under section 6109.04 of the Revised Code and the rules adopted under it, a person that submits a well siting application for a public water system well shall include all of the following in the application:

- (1) For a new public water system or an existing public water system that proposes an increase in the withdrawal of waters of the state, an evaluation of alternatives for the provision of drinking water, including the potential for tie-in to a regional water system;
 - (2) For a new public water system or an existing public water system that proposes an increase in the withdrawal of waters of the state, asset management program information in accordance with section 6109.24 of the Revised Code and the rules adopted under it;
 - (3) For an existing public water system, a description of the asset management program impacts of installing the well, including impacts to any existing asset management program and the potential for tie-in to a regional water system;
 - (4) For a public water system well that has the capacity to withdraw waters of the state in an amount requiring registration pursuant to section 1521.16 of the Revised Code, a general plan, subject to approval of the director, that includes both of the following:
 - (a) The information required to be submitted under section 6109.07 of the Revised Code and the rules adopted under it;
 - (b) Verification of registration pursuant to section 1521.16 of the Revised Code.
 - (5) For a public water system well that has new or increased capacities for withdrawal or consumptive use that require a permit issued under either section 1521.29 or 1522.12 of the Revised Code, a permit approved by the chief of the division of water resources in the department of natural resources pursuant to section 1521.29 or 1522.12 of the Revised Code.
- (C) If the director approves a well siting application, the applicant then shall submit to the director a copy of any certification, continuing monitoring, or other data or reports required by the chief of the division of water resources pursuant to a permit issued under either section 1521.29 or 1522.12 of the Revised Code and any revised ground water model required by the chief.

NEW PUBLIC WATER SYSTEM/WELL APPLICATION INSTRUCTIONS - TYPICAL APPROVAL PROCESS



An average timeline for the entire new well approval process is shown. The amount of time required to obtain new well approval is site specific and can vary significantly from the average. Please discuss any specific time constraints you may have with Ohio EPA District Office Drinking Water Program staff.

NEW PUBLIC WATER SYSTEM/WELL APPLICATION INSTRUCTIONS - ADDITIONAL INFORMATION

The owner is responsible for obtaining all other local and state permits as may be required by law. If the water system includes treatment devices that generate a waste stream (filter or softener backwash, etc.), it is the owner's responsibility to contact the Division of Surface Water at the appropriate Ohio EPA District Office for additional waste treatment requirements.

Return the completed and signed application, along with a site map and any other drawings or required attachments to the appropriate Ohio EPA District Office. Keep a completed copy of this application for your records. Questions about completing the application should be directed to the Drinking Water Program county representative at the appropriate Ohio EPA District Office. Once the application has been reviewed, Ohio EPA will contact the applicant to schedule a site visit. **Approval to operate the well will not be granted until after an acceptable set of detail plan drawings has been submitted to and approved by the director of Ohio EPA.**



Northwest District Office

347 North Dunbridge Road
Bowling Green, Ohio 43402-9398
(419) 352-8461

Northeast District Office

2110 East Aurora Road
Twinsburg, Ohio 44087
(330) 963-1200

Central District Office

P.O. Box 1049
Columbus, Ohio 43216-1049
(614) 728-3778

Southwest District Office

401 East Fifth Street
Dayton, Ohio 45402
(937) 285-6357

Southeast District Office

2195 Front Street
Logan, Ohio 43138
(740) 385-8501