

# IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

## 58.01.08 – IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS

DOCKET NO. 58-0108-2401

### NOTICE OF RULEMAKING – PROPOSED RULE

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. This action is authorized by Chapter 1, Title 39, Idaho Code.

**PUBLIC HEARING SCHEDULE:** No hearings have been scheduled. Pursuant to Section 67-5222(2), Idaho Code, a public hearing will be held if requested in writing by twenty-five (25) persons, a political subdivision, or an agency. Written requests for a hearing must be received by the undersigned on or before September 20, 2024. If no such written request is received, a public hearing will not be held.

**DESCRIPTIVE SUMMARY:** The Environmental Protection Agency (EPA) issued an adaptive and flexible National Primary Drinking Water Regulation (NPDWR) under the Safe Drinking Water Act (SDWA) to manage risks of per- and polyfluoroalkyl substances (PFAS) in drinking water. [89 FR 32532](#) (effective June 25, 2024). The purpose of this rulemaking is to incorporate by reference the NPDWR for PFAS into IDAPA 58.01.08, Idaho Rules for Public Drinking Water Systems. The proposed rule updates federal regulations incorporated by reference with the July 1, 2024 Code of Federal Regulations (CFR) effective date. The July 1, 2024 CFR is a codification of federal regulations published in the Federal Register as of July 1, 2024.

The final NPDWR for PFAS establishes Maximum Contaminant Level Goals (MCLGs) and enforceable Maximum Contaminant Levels (MCLs) for six PFAS compounds: perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorohexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), hexafluoropropylene oxide dimer acid (HFPO-DA, commonly known as GenX Chemicals), and perfluorobutane sulfonic acid (PFBS).

EPA's final rule represents data-driven drinking water standards that are based on the best available science and meet the requirements of SDWA. For the six PFAS, EPA considered PFAS health effects information, evidence supporting dose-additive health concerns from co-occurring PFAS, as well as national and state data for the levels of multiple PFAS in finished drinking water.

The state of Idaho has two years to obtain primacy of this rule from EPA, otherwise EPA will remain the regulatory authority for this rule over Idaho's approximately 2,000 public water systems. This proposed rule will provide the Department of Environmental Quality regulatory authority for this final rule, which is required to support a primacy package.

The proposed rule text is in legislative format. Language the agency proposes to add is underlined. Language the agency proposes to delete is struck out. It is these additions and deletions to which public comment should be addressed. If adopted by the Idaho Board of Environmental Quality and approved by concurrent resolution of the 2025 Idaho Legislature, the rule will become effective on July 1, 2025, unless otherwise specified in the concurrent resolution.

**INCORPORATION BY REFERENCE:** Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the materials cited are being incorporated by reference into this rule:

Adoption of federal regulations is necessary to maintain state program primacy, allows DEQ to keep its rules up to date with federal regulation changes, and simplifies compliance for the regulated community. Incorporation by reference ensures that Idaho's rules will be neither more nor less stringent than the federal rule. Information for obtaining a copy of the federal regulations is included in the rule.

In compliance with Idaho Code 67-5223(4), DEQ prepared a brief synopsis detailing the substantive differences between the previously incorporated material and the latest revised edition or version of the incorporated material being proposed for incorporation by reference. The Overview of Incorporations by Reference is available at <https://www.deq.idaho.gov/drinking-water-docket-no-58-0108-2401/>

**FISCAL IMPACT:** The following is a specific description, if applicable, of any negative fiscal impact on the state

General Fund greater than ten thousand dollars (\$10,000) during the fiscal year resulting from this rulemaking: Not applicable.

**NEGOTIATED RULEMAKING:** Negotiated rulemaking was not conducted. DEQ determined that negotiated rulemaking is not feasible pursuant to Section 67-5220, Idaho Code, due to the simple nature of this rulemaking and because DEQ has no discretion with respect to adopting federal regulations that are necessary to maintain state program primacy.

**IDAHO CODE SECTION 39-107D STATEMENT:** This proposed rule does not regulate an activity not regulated by the federal government, nor is it broader in scope or more stringent than federal regulations.

**ASSISTANCE ON TECHNICAL QUESTIONS:** For assistance on questions concerning this proposed rulemaking, contact Tyler Fortunati at [tyler.fortunati@deq.idaho.gov](mailto:tyler.fortunati@deq.idaho.gov) or (208) 373-0410.

**SUBMISSION OF WRITTEN COMMENTS:** Anyone may submit written comments regarding this proposed rule. The Department will consider all written comments received on or before October 4, 2024. Submit written comments to:

Tyler Fortunati  
Department of Environmental Quality  
1410 N. Hilton, Boise, ID 83706  
[Tyler.fortunati@deq.idaho.gov](mailto:Tyler.fortunati@deq.idaho.gov)

Dated this 4th day of September, 2024.

Janeena White  
Senior Operations Analyst  
Department of Environmental Quality  
1410 N. Hilton Street  
Boise, Idaho 83706  
208-373-0151  
[Janeena.White@deq.idaho.gov](mailto:Janeena.White@deq.idaho.gov)

**THE FOLLOWING IS THE PROPOSED TEXT OF DOCKET NO. 58-0108-2401**  
**(Only Those Sections With Amendments Are Shown.)**

**58.01.08 – IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS**

**002. INCORPORATION BY REFERENCE AND AVAILABILITY OF REFERENCED MATERIALS.**

**01. Incorporation by Reference. (7-1-24)**

**a.** [40 CFR Part 141](#), revised as of July 1, 2023~~4~~ (excluding annual monitoring provisions in 40 CFR 141.854(a)(4),(d),(e),(f) and (h), and the Aircraft Drinking Water Rule in Subpart X); and [40 CFR Part 143](#), revised as of July 1, 2023~~4~~. ~~(7-1-24)~~(    )

**b.** American Water Works Association (AWWA) Standards, effective December 2022, available for a fee from AWWA, <https://www.awwa.org/Publications/Standards/Standards-List> or available to be viewed through the

Department's state office. (7-1-24)

**02. Availability of Specific Referenced Material.** Copies of specific documents referenced within these rules are available at the following locations: (7-1-24)

**a.** Recommended Standards for Water Works – Policies for the Review and Approval of Plans and Specifications for Public Water Supplies: a report of the Water Supply Committee of the Great Lakes -- Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, most current edition, <https://www.health.state.mn.us/communities/environment/water/tenstates/standards.html>. (7-1-24)

**b.** Manual of Individual and Non-Public Water Supply Systems (EPA 570/9-91-004), published by the U.S. Environmental Protection Agency, <https://nepis.epa.gov>. (7-1-24)

**c.** NSF/ANSI Standard 53-2020, Drinking Water Treatment Units -- Health Effects, available from the National Sanitation Foundation, <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-53-2020?product\\_id=2212861](https://www.techstreet.com/nsf/standards/nsf-ansi-53-2020?product_id=2212861). (7-1-24)

**d.** NSF/ANSI Standard 55-2020, Ultraviolet Microbiological Water Treatment Systems, available from the National Sanitation Foundation, <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-55-2020?product\\_id=2229644](https://www.techstreet.com/nsf/standards/nsf-ansi-55-2020?product_id=2229644). (7-1-24)

**e.** NSF/ANSI Standard 58-2020, Reverse Osmosis Drinking Water Treatment Systems, available from the National Sanitation Foundation, <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-58-2020?product\\_id=2206515](https://www.techstreet.com/nsf/standards/nsf-ansi-58-2020?product_id=2206515). (7-1-24)

**f.** NSF/ANSI/CAN Standard 60-2021, Drinking Water Treatment Chemicals -- Health Effects, available from the National Sanitation Foundation, <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-can-60-2021?product\\_id=2239369](https://www.techstreet.com/nsf/standards/nsf-ansi-can-60-2021?product_id=2239369). (7-1-24)

**g.** ANSI/NSF Standard 61-2021, Drinking Water System Components -- Health Effects, available from the National Sanitation Foundation, <https://www.techstreet.com/nsf/> (or) [https://www.techstreet.com/nsf/standards/nsf-ansi-can-61-2021?product\\_id=2240016](https://www.techstreet.com/nsf/standards/nsf-ansi-can-61-2021?product_id=2240016). (7-1-24)

**h.** Manual of Cross-Connection Control, Current Edition, Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, <https://www.uscfoundationstore.com/Manual-of-Cross-Connection-Control-Tenth-Edition-P44.aspx>. (7-1-24)

**i.** Manual of design for Slow Sand Filtration (1991), published by AWWA Research Foundation <https://www.directtextbook.com/isbn/0898675510>. (7-1-24)

**j.** Slow Sand Filtration (1991), published by the American Society of Civil Engineers American Society of Civil Engineers, <https://www.amazon.com/Slow-Sand-Filtration-Gary-Logsdon/dp/0872628477>. (7-1-24)

**k.** Slow Sand Filtration and Diatomaceous Earth Filtration for Small Water Systems, DOH Pub #331-204 (4/03), Washington State Department of Health, Division of Environmental Health, Office of Drinking Water, <https://www.scribd.com/document/163696548/331-204-pdf>. (7-1-24)

**l.** Recommended Operations and Optimization Goals, Slow Sand Filtration, DOH Pub #331-601 (6/21), Washington State Department of Health, Division of Environmental Health, Office of Drinking Water, <https://www.doh.wa.gov/Portals/1/Documents/Pubs/331-601.pdf>. (7-1-24)

**m.** Water System Design Manual, DOH Pub #331-123 (Rev. 6-20), Washington State Department of Health, Division of Environmental Health, Office of Drinking Water, <https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemDesignandPlanning/SystemDesign>. (7-1-24)

**n.** Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources (March 1991 Edition), U.S. Environmental Protection Agency, <http://>

[water.epa.gov/lawsregs/rulesregs/sdwa/swtr/upload/guidsws.pdf](https://water.epa.gov/lawsregs/rulesregs/sdwa/swtr/upload/guidsws.pdf). (7-1-24)

**o.** Standard Methods for the Examination of Water and Wastewater, a joint publication of the American Public Health Association, the Water Environment Federation, and the American Water Works Association, [www.standardmethods.org](http://www.standardmethods.org). (7-1-24)

**p.** “Idaho Standards for Public Works Construction,” Local Highway Technical Assistance Council, <https://lhtac.org/resources/ispwc>. (7-1-24)

**q.** Memorandum of Understanding between the Idaho Department of Environmental Quality and the Idaho Division of Building Safety Plumbing Bureau, Idaho Department of Environmental Quality, 1410 North Hilton, Boise, Idaho 83706, [www.deq.idaho.gov](http://www.deq.idaho.gov). (7-1-24)

**r.** Implementation Guidance for the Long Term 2 Enhanced Surface Water Treatment Rule, Idaho Department of Environmental Quality, <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/6040>. (7-1-24)

**s.** Implementation Guidance for the Stage 2 Disinfectants and Disinfection Byproducts Rule, Idaho Department of Environmental Quality, <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/4790>. (7-1-24)

**t.** Implementation Guidance for the Drinking Water Program-Ground Water Rule, Idaho Department of Environmental Quality, <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/4778>. (7-1-24)

**u.** AWWA Recommended Practice for Backflow Prevention and Cross-Connection Control (M14), current edition available from the AWWA, <https://engage.awwa.org/PersonifyEbusiness/Store/Product-Details/productId/46494412>. (7-1-24)

**v.** Membrane Filtration Guidance Manual (EPA 815-R-06-009) published by the U.S. Environmental Protection Agency, [https://sswm.info/sites/default/files/reference\\_attachments/EPA%202005%20Membrane%20Filtration%20Guidance%20Manual.pdf](https://sswm.info/sites/default/files/reference_attachments/EPA%202005%20Membrane%20Filtration%20Guidance%20Manual.pdf). (7-1-24)

**w.** Ultraviolet Disinfection Guidance Manual for the Final Long Term 2 Enhanced Surface water Treatment Rule (EPA 815-R-06-007) published by the U.S. Environmental Protection Agency, <https://www.epa.gov/dwreginfo/long-term-2-enhanced-surface-water-treatment-rule-documents>. (7-1-24)

**x.** Improving Clearwell Design for CT Compliance, Report #90756, available from the Water Research Foundation, <https://www.waterrf.org/research/projects/improving-clearwell-design-ct-compliance>. (7-1-24)

**y.** Surface Water Treatment Rule Compliance Guidance, dated January 10, 1996, Idaho Department of Environmental Quality, <https://www.deq.idaho.gov/public-information/laws-guidance-and-orders/guidance/>. (7-1-24)

**z.** Uniform Plumbing Code, available through the Idaho Division of Building Safety, 1090 E. Watertower St., Meridian, Idaho 83642; and at the Division of Building Safety, <http://dbs.idaho.gov>. (7-1-24)

**aa.** Optimizing Water Treatment Plant Performance Using the Composite Correction Program (EPA/625/6-91/027) published by the U.S. Environmental Protection Agency, [https://cfpub.epa.gov/si/si\\_public\\_record\\_report.cfm?Lab=NRMRL&direntryid=23902](https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&direntryid=23902). (7-1-24)

**03. Precedence.** In the event of conflict or inconsistency between the language in these rules and that found in any document incorporated by reference, these rules prevail. (7-1-24)

**(BREAK IN CONTINUITY OF SECTIONS)**

**005. DISAPPROVAL DESIGNATION.**

The Department may assign a disapproved designation to a PWS when: (7-1-24)

01. **Defects.** There are design or construction defects, significant deficiencies, or health hazards; or (7-1-24)
02. **Operating Procedures.** Operating procedures constitute a health hazard; (7-1-24)
03. **Quality.** Violations of chemical, microbiological, ~~or~~ radiological, or per- and polyfluoroalkyl substances maximum contaminant levels or action levels of these rules; (7-1-24)( )
04. **Monitoring.** Violations of monitoring requirements as specified in these rules; (7-1-24)
05. **Unapproved Source.** An unapproved source of drinking water is used or the PWS is interconnected with a disapproved water system; or (7-1-24)
06. **Non-Payment of Annual Fee Assessment.** The annual drinking water system fee assessment is not paid as set forth in Section 010. (7-1-24)

**(BREAK IN CONTINUITY OF SECTIONS)**

**050. MAXIMUM CONTAMINANT LEVELS AND MAXIMUM RESIDUAL DISINFECTANT LEVELS.**

01. **Maximum Contaminant Levels for Inorganic Contaminants.** 40 CFR 141.11 and 141.62 are incorporated by reference. (7-1-24)
02. **Maximum Contaminant Levels for Organic Contaminants.** 40 CFR 141.61 is incorporated by reference. (7-1-24)
03. **Maximum Contaminant Levels for Turbidity.** 40 CFR 141.13 is incorporated by reference. (7-1-24)
04. **Maximum Contaminant Levels for Radionuclides.** 40 CFR 141.66 is incorporated by reference. (7-1-24)
05. **Maximum Contaminant Levels for Microbiological Contaminants.** 40 CFR 141.63 is incorporated by reference. (7-1-24)
06. **Maximum Contaminant Levels for Disinfection Byproducts.** 40 CFR 141.64 is incorporated by reference. (7-1-24)
07. **Maximum Residual Disinfectant Levels.** 40 CFR 141.65 is incorporated by reference. (7-1-24)
08. **Maximum Contaminant Levels for Per- and Polyfluoroalkyl Substances (PFAS).** 40 CFR 141.61(c)(2) is incorporated by reference. ( )

**051. -- 099. (RESERVED)**

**100. MONITORING AND ANALYTICAL REQUIREMENTS.**

40 CFR Part 141, Subpart C, is incorporated by reference. (7-1-24)

01. **Total Coliform Sampling and Analytical Requirements.** The Total Coliform Rule, 40 CFR 141.21, is incorporated by reference. The Revised Total Coliform Rule, 40 CFR Part 141, Subpart Y, is incorporated by reference, excluding the annual monitoring provisions in 40 CFR 141.854 (a)(4), (d), (e), (f) and (h). (7-1-24)
02. **Turbidity Sampling and Analytical Requirements.** 40 CFR 141.22 is incorporated by reference.

- (7-1-24)
03. **Inorganic Chemical Sampling and Analytical Requirements.** 40 CFR 141.23 is incorporated by reference. (7-1-24)
04. **Organic Chemicals, Sampling and Analytical Requirements.** 40 CFR 141.24 is incorporated by reference. (7-1-24)
05. **Analytical Methods for Radioactivity.** 40 CFR 141.25 is incorporated by reference. (7-1-24)
06. **Monitoring Frequency and Compliance Requirements for Radioactivity in Community Water Systems.** 40CFR 141.26 is incorporated by reference. (7-1-24)
07. **Alternate Analytical Techniques.** 40 CFR 141.27 is incorporated by reference. (7-1-24)
08. **Approved Laboratories.** 40 CFR 141.28 and 141.852(b) are incorporated by reference. All analyses conducted pursuant to these rules, except those listed below, must be performed in laboratories certified or granted reciprocity by the Idaho Department of Health and Welfare, Bureau of Laboratories, as provided in IDAPA 16.02.13, "Rules Governing Certification of Idaho Water Quality Laboratories." The following analyses may be performed by any person acceptable to the Department: (7-1-24)
- a. pH; (7-1-24)
  - b. Turbidity (Nephelometric method only); (7-1-24)
  - c. Daily analysis for fluoride; (7-1-24)
  - d. Temperature; (7-1-24)
  - e. Disinfectant residuals, except ozone, will be analyzed using the Indigo Method or an acceptable automated method pursuant to Subsection 300.05.d.; (7-1-24)
  - f. Alkalinity; (7-1-24)
  - g. Calcium; (7-1-24)
  - h. Conductivity; (7-1-24)
  - i. Silica; and (7-1-24)
  - j. Orthophosphate. (7-1-24)
09. **Monitoring of Consecutive Water Systems.** 40 CFR 141.29 is incorporated by reference. (7-1-24)
10. **Disinfection Residuals, Disinfection Byproducts, and Disinfection Byproduct Precursors.** 40 CFR Part 141, Subpart L, is incorporated by reference. (7-1-24)
11. **Monitoring.** The department may alter the monitoring requirements specified in these rules if the department determines that such alteration is necessary to adequately assess the level of contamination. (7-1-24)
12. **Special Monitoring for Sodium.** 40 CFR 141.41 is incorporated by reference. (7-1-24)
13. **Special Monitoring for Corrosivity Characteristics.** 40 CFR 141.42 is incorporated by reference. (7-1-24)
- 14. Monitoring & Analytical Requirements for Per- and Polyfluoroalkyl Substances (PFAS).** 40

CFR 141.901 and 141.902 are incorporated by reference. ( )

101. -- 149. (RESERVED)

**150. REPORTING, PUBLIC NOTIFICATION, RECORDKEEPING.**

- 01. Reporting Requirements.** 40 CFR 141.31 is incorporated by reference. (7-1-24)
- 02. Public Notification of Drinking Water Violations.** 40 CFR Part 141, Subpart Q is incorporated by reference. (7-1-24)
- 03. Record Maintenance.** 40 CFR 141.33 is incorporated by reference. (7-1-24)
- 04. Reporting for Unregulated Contaminant Monitoring Results.** 40 CFR 141.35 is incorporated by reference. (7-1-24)
- 05. Reporting and Record Keeping Requirements for the Interim Enhanced Surface Water Treatment Rule.** 40 CFR 141.175 is incorporated by reference. (7-1-24)
- 06. Reporting and Record Keeping Requirements for the Disinfectants and Disinfectant Byproducts Rule.** 40 CFR 141.134 is incorporated by reference. (7-1-24)
- 07. Reporting and Record Keeping Requirements for the Revised Total Coliform Rule.** 40 CFR 141.861 is incorporated by reference. (7-1-24)
- 08. Public Notification.** The Department may require the owner of a PWS that has been disapproved to notify the public. The manner, content, and timing of this notification will be determined by the Department. This is in addition to any provisions set forth in Section 150 that may also apply. (7-1-24)
- 09. Public Notification for Low System Pressure.** (7-1-24)
- a.** During unplanned or emergency situations, when water pressure within the system is known to have fallen below twenty (20) psi, the water supplier must notify the Department, provide public notice to the affected customers within twenty-four (24) hours, and disinfect or flush the system as appropriate. When sampling and corrective procedures have been conducted and after determination by the Department that the water is safe, the water supplier may re-notify the affected customers that the water is safe for consumption. The water supplier must notify the affected customers if the water is not safe for consumption. (7-1-24)
- b.** During planned maintenance or repair situations, when water pressure within the system is expected to fall below twenty (20) psi, the water supplier must provide public notice to the affected customers prior to the planned maintenance or repair activity and notify customers that the water is safe for consumption. (7-1-24)

**10. Reporting and Record Keeping Requirements for Per- and Polyfluoroalkyl Substances (PFAS).** 40 CFR 141.904 is incorporated by reference. ( )

**(BREAK IN CONTINUITY OF SECTIONS)**

**351. CONTROL OF PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS).** 40 CFR 141 Subpart Z is incorporated by reference. ( )

~~351~~**2.** -- 399. (RESERVED)

**(BREAK IN CONTINUITY OF SECTIONS)**

**510. SITING AND CONSTRUCTION OF WELLS.**

Written approval by the Department is required before water from any new or reconstructed well may be served to the public. Any supplier of water for a PWS served by one (1) or more wells must ensure that the following requirements are met: (7-1-24)

**01. Site Approval.** Prior to drilling, the site of a PWS well must be approved in writing by the Department. A well site evaluation report must be submitted prior to or concurrent with the PER for the well. The well site evaluation must take into account the proposed size, depth, and location of the well. The evaluation may include, but is not limited to the following types of information: (7-1-24)

- a. An evaluation of the quality of anticipated groundwater. (7-1-24)
- b. Identification of the known aquifers and the extent of each aquifer, based on the stratigraphy, sedimentation, and geologic structure beneath the proposed well site. (7-1-24)
- c. An estimate of hydrologic and geologic properties of each aquifer and confining layers. (7-1-24)
- d. Prediction of the sources of water to be extracted by the well and the drawdown of existing wells, springs, and surface water bodies that may be caused by pumping the proposed well. This prediction may be based on analytical or numerical models as determined by the Idaho Department of Water Resources permitting process. (7-1-24)
- e. Demonstration of the extent of the capture zone of the well, based on the well’s design discharge and on aquifer geology, using estimates of hydraulic conductivity and storativity. (7-1-24)
- f. Description of potential sources of contamination including, but not limited to, sewers and sewage treatment/disposal facilities, highways, railroads, landfills, outcroppings of consolidated water-bearing formations, chemical facilities, waste disposal wells, and agricultural uses within five hundred (500) feet of the well site. (7-1-24)

**02. Location.** In vulnerable settings, the Department may require engineering or hydrologic analysis to determine if the required setback distance is adequate to prevent contamination. Each well must be staked by the design engineer or licensed professional geologist prior to drilling and meet the following minimum distances:

<b>Minimum Distances from a Public Water System Well</b>	
Frost free hydrant	5 feet
Property line	50 feet
Gravity wastewater line	50 feet
Any potential source of contamination	50 feet
Pressure wastewater line	100 feet
Class A Municipal Reclaimed Wastewater Pressure distribution line	50 feet
Individual home septic tank	100 feet
Individual home disposal field	100 feet
Individual home seepage pit	100 feet
Privies	100 feet
Livestock	50 feet
Drainfield - standard subsurface disposal module	100 feet



<b>Minimum Distances from a Public Water System Well</b>	
Absorption module - large soil absorption system	150 - 300 feet, see IDAPA 58.01.03
Canals, streams, ditches, lakes, ponds and tanks used to store non-potable substances	50 feet
Storm water facilities disposing storm water originating off the well lot	50 feet
Municipal or industrial wastewater treatment plant	500 feet
Reclamation and reuse of municipal and industrial wastewater sites	See IDAPA 58.01.17
Biosolids application site	1,000 feet

(7-1-24)

**03. Construction Standards.** In addition to meeting the requirements of these rules, all wells must be constructed in accordance with IDAPA 37.03.09, “Well Construction Standards Rules,” and related rules and laws administered by the Idaho Department of Water Resources. All wells must comply with the drilling permit requirements of Section 42-235, Idaho Code.

(7-1-24)

a. Casing for steel pipe must meet the following requirements:

<b>STEEL PIPE</b>					
	<b>DIAMETER (inches)</b>		<b>THICKNESS (inches)</b>	<b>WEIGHT PER FOOT (pounds)</b>	
<b>SIZE</b>	<b>External</b>	<b>Internal</b>		<b>Plain Ends (calculated)</b>	<b>With Threads and Couplings (nominal)</b>
6 (id)	6.625	6.065	0.280	18.97	19.18
8	8.625	7.981	0.322	28.55	29.35
10	10.750	10.020	0.365	40.48	41.85
12	12.750	12.000	0.375	49.56	51.15
14 (od)	14.000	13.250	0.375	54.57	57.00
16	16.000	15.250	0.375	62.58	
18	18.000	17.250	0.375	70.59	
20	20.000	19.250	0.500	78.60	
22	22.000	21.000	0.500	114.81	
24	24.000	23.000	0.500	125.49	
26	26.000	25.000	0.500	136.17	
28	28.000	27.000	0.500	146.85	
30	30.000	29.000	0.500	157.53	

STEEL PIPE					
SIZE	DIAMETER (inches)		THICKNESS (inches)	WEIGHT PER FOOT (pounds)	
	External	Internal		Plain Ends (calculated)	With Threads and Couplings (nominal)
32	32.000	31.000	0.500	168.21	
34	34.000	33.000	0.500	178.89	
36	36.000	35.000	0.500	189.57	

\* id = inside diameter  
 \* od = outside diameter

(7-1-24)

**b.** The use of plastic well casing for PWS wells may be considered on a case-by-case basis. Plastic casing must meet or exceed ASTM Standard F480, current edition, and ANSI/NSF Standard 61. Plastic casing must also meet the following requirements: (7-1-24)

i. Have a minimum wall thickness equivalent to standard dimension ratio 21. However, diameters of 8 inches or greater or deep wells may require greater thickness to meet collapse strength requirements; (7-1-24)

ii. Must not be used at sites where permeation by hydrocarbons or degradation may occur; (7-1-24)

iii. Must be assembled using coupling or solvent welded joints. All coupling and solvents must meet ANSI/NSF Standard 14, ASTM F480, or similar requirements; and (7-1-24)

iv. Must not be driven. (7-1-24)

**c.** PWS wells must have no less than fifty-eight (58) feet of annular seal of not less than one and one-half (1 ½) inches thickness as measured from land surface to the bottom of the seal unless: (7-1-24)

i. It can be demonstrated to the Department’s satisfaction that there is a confining layer at lesser depth that is capable of preventing unwanted water from reaching the intake zone of the well; or (7-1-24)

ii. The best and most practical aquifer at a particular site is less than fifty-eight (58) feet deep; or; (7-1-24)

iii. The Department specifies a different annular seal depth based on local hydrologic conditions. (7-1-24)

**d.** Specifications must include allowable tolerances for plumbness and alignment in accordance with AWWA Standards, incorporated by reference into these rules at Subsection 002.01, or as otherwise approved by the Department. If the well fails to meet these requirements, it may be accepted by the Department if it does not interfere with the installation or operation of the pump or uniform placement of grout. (7-1-24)

**e.** Geological data must be collected at each pronounced change in formation and ~~shall be~~ recorded in the driller’s log. Supplemental data includes, but is not limited to, accurate geographical location such as latitude and longitude or GIS coordinates, and other information on accurate records of drillhole diameters and depths, assembled order of size and length of casing, screens and liners, grouting depths, formations penetrated, and water levels. (7-1-24)( )

**f.** The owner of each well must retain all records pertaining to each well until the well has been

- properly abandoned. (7-1-24)
- g.** Wells with intake screens must: (7-1-24)

    - i.** Be constructed of materials resistant to damage by chemical action of groundwater or cleaning operations. (7-1-24)
    - ii.** Have openings based on sieve analysis of formation, of gravel pack materials, or both. (7-1-24)
    - iii.** Have sufficient length and diameter to provide adequate specific capacity and aperture entrance velocity not to exceed point one (0.1) feet per second, or as otherwise approved by the Department. (7-1-24)
    - iv.** Be installed so that the pumping water level remains above the screen under all operating conditions, or otherwise approved by the Department. Where a bottom plate or sump is utilized, it must be of the same material as the screen, or as otherwise approved by the Department. Where a washdown assembly, tailpipe or sump is used below the screen, it may be made of a different material than the screen. (7-1-24)
  - h.** Permanent well casing must be surrounded by a minimum of one and one-half (1 ½) inches of grout to the depth required by Subsection 510.03.b., or by the Rules of the Idaho Department of Water Resources, whichever is greater. All casing identified in plans and specifications as temporary casing must be removed prior to well completion. (7-1-24)

    - i.** Neat cement grout consisting of cement that conforms to AWWA Standard A-100, and water, with not more than six (6) gallons of water per ninety-four (94) pounds of cement, must be used for one and one-half (1 ½) inch annular space. Additives may be used to increase fluidity and are subject to approval by the Department and the Idaho Department of Water Resources on a case-by-case basis. (7-1-24)
    - ii.** Bentonite grout must have a solids content not less than twenty-five (25) percent by weight when mixed with water and be specifically manufactured for use in sealing of well casing. Bentonite grout ~~shall~~ **must** not contain weighting agents to increase solids content. ~~Bentonite grout must~~ **and** not be used above the water table. All bentonite grout must be installed by positive displacement from the bottom up through a tremmie or float shoe. (7-1-24)( )
    - iii.** Where a dry annular space is to be sealed, a minimum of two (2) inches on all sides of the casing will be required to place bentonite to depths not greater than one hundred (100) feet, using #8 mesh granular bentonite. All dry pour granular bentonite must be tagged at appropriate intervals to verify placement. If a bridge occurs, a tremmie pipe must be washed or jetted through the bridge to allow for pumping of grout. Bentonite chips must be of sufficient size to accommodate proper placement for the existing subsurface conditions. (7-1-24)
    - iv.** Dry granular bentonite used in wells where a dry annular space is to be sealed with depths greater than one hundred (100) feet will require an annulus of at least three (3) inches on all sides of the casing, or as approved by the Department and the Idaho Department of Water Resources. If a bridge occurs, a tremmie pipe must be washed or jetted through the bridge to allow for pumping of grout. Bentonite chips must be of sufficient size to accommodate proper placement for the existing subsurface conditions. (7-1-24)
    - v.** All chip bentonite seals installed through water must only be used in annular spaces of at least four (4) inches on all sides of the casing. If a bridge occurs, a tremmie pipe must be washed or jetted through the bridge to allow for pumping of grout. Bentonite chips must be of sufficient size to accommodate proper placement for the existing subsurface conditions. Chip bentonite seals installed through water must be: (7-1-24)

      - (1) Installed in accordance with manufacturer’s specifications; or (7-1-24)
      - (2) Installed by pouring chips over a one-quarter (1/4) inch mesh screen for three-eighths (3/8) inch chips to remove fines to prevent bridging at the water table; or (7-1-24)
      - (3) Installed using coated pellets to retard hydration if approved by the Department and the Idaho Department of Water Resources. (7-1-24)

vi. Concrete may be approved on a case-by-case basis by the Department and the Idaho Department of Water Resources. Upon such approval, the approved method must use a six (6) sack minus one-half (1/2) inch Portland cement concrete and must be installed by positive displacement from the bottom up through a tremmie pipe. (7-1-24)

**04. Disinfection.** All tools, bits, pipe, and other materials to be inserted in the borehole must be cleaned and disinfected in accordance with the Well Construction Standards and permitting requirements of the Idaho Department of Water Resources. This applies to new well construction and repair of existing wells. (7-1-24)

**05. Well Completion Report.** Upon completion of a well, and prior to its use as a drinking water source, the following information and data must be submitted by the PWS to the Department. The well completion report must be submitted to the Department prior to or concurrent with the submittal of the preliminary engineering report for well house construction/modification. The well completion report must bear the imprint of an Idaho licensed professional engineer's or an Idaho licensed professional geologist's seal that is both signed and dated by the engineer or geologist: (7-1-24)

- a. A copy of all well logs; (7-1-24)
- b. Results of test pumping, as specified in Subsection 510.06; (7-1-24)
- c. As constructed plans showing at least the following: (7-1-24)
  - i. Annular seal, including depth and sealant material used and method of application; (7-1-24)
  - ii. Casing perforations, results of sieve analysis used in designing screens installed in sand or gravel aquifers, gravel packs; and (7-1-24)
  - iii. Recommended pump location. (7-1-24)
- d. Other information as may be specified by the Department. (7-1-24)
- e. Sampling results for iron, manganese, corrosivity, and other secondary contaminants specified by the Department. Other monitoring requirements are specified in Subsections 510.05.e.i. through 510.05.e.iii. (7-1-24)

i. Community systems must submit results of analysis for total coliform, inorganic ~~chemical contaminants, and~~ organic chemicals ~~contaminants, and~~ radionuclide contaminants, and Per- and Polyfluoroalkyl Substances (PFAS) contaminants set forth in Subsections 050.01, 050.02, 050.05, 100.01, 100.03, 100.04, 100.05, ~~and~~ 100.06, and 100.14, unless analysis is waived pursuant to Subsection 100.07. (7-1-24)(    )

ii. Non-transient Non-community systems must submit results of analysis for total coliform, ~~and~~ inorganic and organic chemical contaminants, and Per- and Polyfluoroalkyl Substances (PFAS) contaminants listed in Subsections 050.01, 050.02, 100.01, 100.03, 100.04, and 100.14 unless analysis is waived pursuant to Subsection 100.07. (7-1-24)(    )

iii. Transient Non-community systems must submit results of a total coliform, nitrite, and nitrate analysis listed in Subsections 050.01, 100.01 and 100.03. (7-1-24)

**06. Test Pumping.** Upon completion of a groundwater source, test pumping must be conducted in accordance with the following procedures to meet the specified requirements: (7-1-24)

a. The well must be test pumped at the desired yield (design capacity) of the well for at least twenty-four (24) consecutive hours after the drawdown trend has stabilized, as determined by the supervising engineer or geologist. Alternatively, the well may be pumped at a rate of one hundred fifty percent (150%) of the desired yield for at least six (6) continuous hours after the drawdown trend has stabilized, as determined by the supervising engineer or geologist. The field pumping equipment must be capable of maintaining a constant rate of discharge during the test.

Discharge water must be piped an adequate distance to prevent recharge of the well during the test. If the well fails the test protocol, design of the PWS must be re-evaluated and submitted to the Department for approval. (7-1-24)

**b.** Upon completion of well development, the well must be tested for sand production. Fifteen (15) minutes after the start of the test pumping (at or above the design production rate), the sand content of a new well may not be more than five (5) parts per million. Sand production must be measured by a centrifugal sand sampler or other means acceptable to the Department. If sand production exceeds five (5) ppm, the well must be screened gravel packed, or re-developed. (7-1-24)

**c.** The following data must be provided: (7-1-24)

i. Static water level and stabilized drawdown; (7-1-24)

ii. Well yield in ~~gpm~~ gallons per minute and duration of the pump test, including a discussion of any discrepancy between the desired yield and the yield observed during the test; (7-1-24)(    )

iii. Water level in the well recorded at regular intervals during pumping; (7-1-24)

iv. Profile of water level recovery from the pumping level projected to the original static water level. (7-1-24)

v. Depth at which the test pump was positioned in the well; (7-1-24)

vi. Test pump capacity and head characteristics; (7-1-24)

vii. Sand production data. (7-1-24)

viii. Results of analysis based on the drawdown and recovery test pertaining to aquifer properties, long term yield, and boundary conditions affecting drawdown. (7-1-24)

**d.** The Department may allow the use of other pump test protocols that are generally accepted by engineering firms with specialized experience in well construction, by the well drilling industry, or as described in national standards (such as ANSI/AWWA A100), as long as the minimum data specified in Subsection 510.06.c. are provided. The Department welcomes more extensive data about the well, such as step-drawdown evaluations used in determining well capacity for test pumping purposes, zone of influence calculations, and any other information that may be of use in source protection activities or in routine PWS operations. (7-1-24)

**e.** Where aquifer yield, sustainability, or water quality are questionable, the Department, at its discretion, may require additional site-specific investigations that include test well construction, long-term pumping tests, or other means to demonstrate that the aquifer yield is sufficient to meet the long-term water requirements of the project. (7-1-24)

**07. Conversion of Non-Public Water System Wells for Public Water System Use.** Any existing well constructed for use other than as a PWS source may be considered for use as a PWS source on a case-by-case basis. The owner of such a well must demonstrate to the Department's satisfaction that the well site conforms to the requirements of Subsections 510.01, 510.02, and Section 512, the well is constructed in a manner that is protective of public health, and that both the quantity and quality of water produced by the well meet PWS standards set forth in these rules. (7-1-24)

**08. Monitoring Wells.** If monitoring (observation) wells are used and are intended to remain in service after completion of the water supply well, the observation wells must be constructed in accordance with the requirements for permanent wells and be protected at the upper terminal to preclude entrance of foreign materials in accordance with the "Well Construction Standard Rules," IDAPA 37.03.09. (7-1-24)

**09. Well Abandonment.** Well decommissioning (abandonment) must be performed in accordance with Department of Water Resources requirements set forth in IDAPA 37.03.09, "Well Construction Standard Rules." (7-1-24)