IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

58.01.08 – IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS

DOCKET NO. 58-0108-2501

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 17, 2025. If no such written request is received, a public hearing will not be held.

DESCRIPTIVE SUMMARY: This rulemaking has been initiated to update incorporation by reference of the federal Consumer Confidence Report Rule and the Lead and Copper Rule. This rulemaking also makes non-substantive changes for clarity and ease of use, and a correction from previous rulemakings.

Incorporation by Reference of Consumer Confidence Report Rule
The Environmental Protection Agency (EPA) published the final Consumer Confidence Report (CCR) rule revisions in the Federal Register, 89 FR 45980, effective May 24, 2024 (40 CFR Part 141, Subpart O). The purpose of this rulemaking is to incorporate by reference the revisions 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, 2025 Code of Federal Regulations (CFR) effective date. The July 1, 2025 CFR is a codification of federal regulations published in the Federal Register as of July 1, 2025.

EPA's final rule revisions improve readability, clarity and understandability of CCRs as well as the accuracy and accessibility of content and information presented, improve risk communication in CCRs, incorporate electronic delivery options, provide supplemental information regarding lead levels and control efforts, shorten certification deadlines, and increase report frequency and require systems that serve 10,000 or more persons to provide CCRs to customers biannually (twice a year). The updates aim to improve understandability, transparency, and public health communication.

CCRs were originally created under the “Right to Know” provisions to increase the amount of information made available by a community public water system to their consumers. The 2018 American Water Infrastructure Act required EPA to add revisions to the CCR requirements to improve consumer understanding of the information provided.

Incorporation by Reference of Lead and Copper Rule Improvements Rule
EPA published the final Lead and Copper Rule Improvements (LCRI) rule revisions in the Federal Register, 89 FR 86626, effective December 30, 2024 (40 CFR Part 141, Subpart I). The purpose of this rulemaking is to incorporate by reference the revisions 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, 2025 Code of Federal Regulations (CFR) effective date. The July 1, 2025 CFR is a codification of federal regulations published in the Federal Register as of July 1, 2025.

In this rule, EPA has finalized requirements for drinking water systems to replace lead and certain galvanized service lines. The final rule also removes the lead trigger level, reduces the lead action level to 0.010 mg/L, and strengthens tap sampling procedures to improve public health protection and simplify implementation relative to the 2021 Lead and Copper Rule Revisions (LCRR). Further, this final rule strengthens corrosion control treatment, public communication and education, consumer awareness, requirements for small systems, and sampling in schools and child-care facilities. The final rule will significantly reduce the adverse human health impacts of exposure to toxic lead in drinking water.

In this rule, EPA extends the comprehensive deadline to November 1, 2027, for full compliance. The inventory deadline, which was October 16, 2024, was maintained. The state of Idaho has two years to obtain primacy of these rules from EPA, otherwise EPA will remain the regulatory authority for these rules over Idaho’s approximately 763 community public water systems and 249 non-community non-transient public water systems. These proposed rules

will provide the Department of Environmental Quality regulatory authority for the final rules, which is required to support primacy packages.

Non-substantive Revisions
These proposed rules also include non-substantive revisions for clarity and ease of use for water systems and other end users and delete outdated, obsolete language. These non-substantive revisions provide:

- Further regulatory reduction by removing incorporations by reference to specific sections of the Code of Federal Regulations that are already previously incorporated by reference through the overall subpart.
- Reorganization of the rule chapter so that the incorporations by reference of the subparts to 40 CFR 141 follow the same order as the federal regulations.
- One minor correction to the definition of "Non-Potable Fluids or Gases" (IDAPA 58.01.08.003.38) to ensure clarity of intent and application for gases that are lighter than air. The definition of "Non-Potable Fluid or Gases" was revised during Docket No. 58-0108-2301. This correction reinstates the definition to its previous version.
- Additional language was added for clarification in proposed rule Subsection 101.01, Approved Laboratories. This revision conforms proposed rule Subsection 101.01 with 40 CFR 141.28, which is incorporated by reference, and provides public drinking water systems with more flexibility to comply with sample analysis requirements by allowing use of laboratories certified by EPA for drinking water analysis. This clarification is necessary because, under the current rule (Subsection 100.08), it appears that systems are limited to using laboratories certified or granted reciprocity by the Idaho Department of Health and Welfare, Bureau of Laboratories.

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 2026 Idaho Legislature, the rule will become effective on July 1, 2026, 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. An electronic link to the incorporated material is available 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 based on the following:

- DEQ has no discretion with respect to adopting federal regulations that are necessary to maintain state program primacy, and
- The remaining changes are organizationally-related, formatting-based, add clarity, or remove duplicative and unnecessary rule language, all of which are non-substantive changes.

While the rule is open for regulatory updates, DEQ proposes to reorganize sections for clarity and ease of use for water systems and other end users, ensuring no substantive changes are made outside of the two previously discussed incorporations by reference.

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 or (208) 373-0140.

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 1, 2025. Submit written comments to:

Tyler Fortunati
Department of Environmental Quality
1410 N. Hilton, Boise, ID 83706
tyler.fortunati@deq.idaho.gov

Dated this 3rd day of September, 2025.

Diane Cutler
Rules and Planning Analyst
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THE FOLLOWING IS THE PROPOSED TEXT OF DOCKET NO. 58-0108-2501
(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, ~~2024~~2025 (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, 2024. ~~(7-1-25)~~( )

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. (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. (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. (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. (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. (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. (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. (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. (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. (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. (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)

003. DEFINITIONS.
The definitions set forth in 40 CFR 141.2 are incorporated by reference, The terms "board," "director," "department," and "person" have the meaning provided in Section 39-103, Idaho Code. The term "watersheds" has the meaning provided in Section 39-3602, Idaho Code. The terms "distribution system," "license," "responsible charge," and "responsible charge operator" have the meaning provided in Section 54-2403, Idaho Code. The term "public utility" has the meaning provided in Section 61-129, Idaho Code. The term "pesticide" has the meaning provided in Section 22-3401, Idaho Code. (7-1-24)

01. Aquifer. A geological formation of permeable saturated material, such as rock, sand, gravel, etc., capable of yielding an economic quantity of water to wells and springs. (7-1-24)

02. Backflow. The reverse from normal flow direction in a plumbing system or water system caused by back pressure or back siphonage. (7-1-24)

03. Capacity. The capabilities required of a public drinking water system (PWS) in order to achieve and maintain compliance with these rules and the requirements of the federal Safe Drinking Water Act (SDWA). It is divided into three (3) main elements: (7-1-24)

a. Technical capacity means the PWS has the physical infrastructure to consistently meet drinking water quality standards and treatment requirements and is able to meet the requirements of routine and emergency operations. It further means the ability of PWS personnel to adequately operate and maintain the PWS and to otherwise implement technical knowledge. Training of operator(s) is required, as appropriate, for the system size and complexity. (7-1-24)

b. Financial capacity means the financial resources of the PWS, including an appropriate budget; rate structure; cash reserves sufficient for current operation and maintenance, future needs and emergency situations; and adequate fiscal controls. (7-1-24)

c. Managerial capacity means that the management structure of the PWS embodies the aspects of system operations, including, but not limited to; (7-1-24)

i. Short and long range planning; (7-1-24)

ii. Personnel management; (7-1-24)

iii. Fiduciary responsibility; (7-1-24)

iv. Emergency response; (7-1-24)

v. Customer responsiveness; (7-1-24)

vi. Source water protection; (7-1-24)

vii. Administrative functions such as billing and consumer awareness; and (7-1-24)

viii. Ability to meet the intent of the federal SDWA. (7-1-24)

04. Components of Finished Water Storage. Storage is available to serve the system if the storage structure or facility is elevated sufficiently or is equipped with sufficient booster pumping capability to pressurize the system. Components of finished water storage are further defined as: (7-1-24)

a. Dead Storage is storage that is either not available for use in the system or can provide only substandard flows and pressures. (7-1-24)

b. Effective storage is all storage other than dead storage and is made up of the additive components described in Paragraphs c. through f. of this Subsection. (7-1-24)

c. Operational storage supplies water when, under normal conditions, the sources are off. This component is the larger of; (7-1-24)

i. The volume required to prevent excess pump cycling and ensure that the following volume components are full and ready for use when needed; or (7-1-24)

ii. The volume needed to compensate for the sensitivity of the water level sensors. (7-1-24)

d. Equalization Storage is storage of finished water in sufficient quantity to compensate for the difference between a water system's maximum pumping capacity and peak hour demand. (7-1-24)

e. Fire Suppression Storage is the water needed to support fire flow in those systems that provide it. (7-1-24)

f. Standby storage provides a measure of reliability or safety factor if sources fail or when unusual conditions impose higher than anticipated demands. Normally used for emergency operation, if standby power is not provided, to provide water for eight (8) hours of operation at average day demand. (7-1-24)

05. Composite Correction Program (CCP). A systematic approach to identifying opportunities for improving the performance of water treatment and implementing changes that will capitalize on these opportunities. The CCP consists of two (2) elements: (7-1-24)

a. Comprehensive Performance Evaluation (CPE). As defined in 40 CFR 141.2. (7-1-24)

b. Comprehensive Technical Assistance (CTA) is the implementation phase that is carried out if the CPE results indicate improved performance potential. During the CTA phase, the PWS must identify and systematically address plant-specific factors. The CTA consists of follow-up to the CPE results, implementation of process control priority setting techniques, and maintaining long term involvement to systematically train staff and administrators. (7-1-24)

06. Confining Layer. A nearly impermeable subsurface stratum which is located adjacent to one (1) or more aquifers and does not yield a significant quantity of water to a well. (7-1-24)

07. Consumer. Any person served by a PWS. (7-1-24)

08. Consumer Confidence Report (CCR). An annual report that community water systems must deliver to their customers. The reports must contain information on the quality of the water delivered by the PWS and characterize the risks (if any) from exposure to contaminants detected in the drinking water in an accurate and understandable manner. (7-1-24)

09. Cross Connection. An actual or potential connection or piping arrangement between a drinking water system and another source that could introduce contamination into the potable water system through backflow, backsiphoning, or backpressure. (7-1-24)

10. Dead End Main. A distribution main of any diameter and length that does not loop back into the distribution system. (7-1-24)

11. Direct Integrity Test (DIT). A physical test applied to a microfiltration or ultrafiltration membrane unit in order to identify integrity breaches. (7-1-24)

12. Drinking Water System. All mains, pipes, and structures through which water is obtained and distributed, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks and appurtenances, collectively or severally, actually used or intended for use for the purpose of furnishing water for drinking or general domestic use. (7-1-24)

13. Effective Contact Time. For the purpose of these rules, effective contact time means the time in minutes that it takes for water to move from the point of completely mixed chemical application to the point where residual concentration is measured. It is the "T" in contact time (CT) calculations and is either "demonstrated" or "calculated." It is the contact time sufficient to achieve the inactivation of target pathogens under the expected range of raw water pH and temperature variation and must be demonstrated through tracer studies or other evaluations or calculations acceptable to the Department. "Improving Clearwell Design for CT Compliance," referenced in Subsection 002.02, contains information that may be used as guidance for these calculations. (7-1-24)

14. Equivalent Dwelling Unit (EDU). A unit of measure that standardizes all land use types (housing, retail, office, etc.) to the level of demand created by a single-family detached housing unit within a water system. The demand for one (1) equivalent dwelling unit is equivalent to the amount of water provided to the average single-family detached housing unit within a water system. For example, a business designed to use three (3) times as much water as an average single-family detached housing unit will have a demand of three (3) equivalent dwelling units. (7-1-24)

15. Exemption. A temporary deferment of compliance with a maximum contaminant level or

treatment technique requirement which may be granted only if the PWS demonstrates to the satisfaction of the Department that the PWS cannot comply due to compelling factors and the deferment does not cause an unreasonable risk to public health. (7-1-24)

16. Facility Plan. The facility plan for a PWS describes the overall system, including sources of water, treatment processes and facilities, pumping stations and distribution piping, finished water storage, and waste disposal. It is a comprehensive planning document for infrastructure and includes a plan for the future of the system/ facility, including upgrades and additions. It is usually updated on a regular basis due to anticipated or unanticipated growth patterns, regulatory requirements, or other infrastructure needs. A facility plan is sometimes referred to as a master plan or facilities planning study. In general, a facility plan is an overall system-wide plan as opposed to a project specific plan. (7-1-24)

17. Filtrate. As the term relates to microfiltration and ultrafiltration, the product water or the portion of the feed stream that has passed through the membrane. (7-1-24)

18. Finished Water Storage Structures or Facilities. Finished water storage structures or facilities are defined as: (7-1-24)

a. Above-ground storage structure or facility is a finished water storage structure or facility with a bottom elevation above normal ground surface. (7-1-24)

b. Ground-level storage structure or facility is a finished water storage structure or facility with a bottom elevation at normal ground surface. (7-1-24)

c. Partially buried storage structure or facility is a finished water storage structure or facility with a bottom elevation below normal ground surface and any portion of the structure or facility above normal ground surface. (7-1-24)

d. Below-ground storage structure or facility is a finished water storage structure or facility with a bottom elevation and top elevation below normal ground surface. (7-1-24)

19. Fire Flow Capacity. The water system capacity, in addition to maximum day demand, that is available for fire fighting purposes within the water system or distribution system pressure zone. Adequacy of the water system fire flow capacity is determined by the local fire authority or through a hydraulic analysis performed by a licensed professional engineer to establish required fire flows in accordance with the International Fire Code as adopted by the State Fire Marshal. (7-1-24)

20. Fire Suppression Storage. The water needed to support fire flow in those systems that provide it. See also the definition of Components of Finished Water Storage in these rules. (7-1-24)

21. Fixture Protection. The practice of installing backflow prevention assemblies or devices to isolate one (1) or more cross connections within a customer’s facility. (7-1-24)

22. Flux. The throughput of a pressure-driven membrane filtration process expressed as flow per unit of membrane area, usually in gallons per square foot per day or liters per hour per square meter. (7-1-24)

23. Health Hazard. Any condition, operation, or practice in a PWS which creates, or has the potential to create, an acute or immediate danger to the consumer's health. (7-1-24)

24. Indirect Integrity Monitoring. Monitoring some aspect of filtrate water quality that is indicative of the removal of particulate matter. (7-1-24)

25. Inorganic. Generally refers to compounds that do not contain carbon and hydrogen. (7-1-24)

26. Internal or In-Plant Isolation. The practice of installing backflow prevention assemblies to protect an area within a water customer’s structure, facility, or premises from contaminating another part of the structure, facility, or premises. (7-1-24)

27. Like-Kind Replacement. Repair or replacement of a system component that is identical in capacity, exhibits equivalent design, operational, and material parameters, and does not result in an increase in system capacity or alter existing methods or processes. (7-1-24)

28. Log. Logarithm to the base ten (10). In the context of these rules, it is used in the determination of removal or inactivation efficiencies. It is expressed as the logarithm to the base ten (10) or "log" of the concentration of the feed or raw water minus the log of the concentration in the filtrate or product water. For example, if the incoming feed or raw water concentration is one hundred (100), and the outgoing filtrate or product water concentration is ten (10), a 10-fold reduction was attained; or 1-log removal. 1-log removal also equates to ninety percent (90%) removal, as ninety (90) of the original feed concentration counts had been removed, leaving ten (10) in the filtrate. Similarly, 2-log equates to ninety-nine percent (99%) removal. (7-1-24)

29. Log Removal Value (LRV). LRV is a measure of filtration removal efficiency for a target organism, particulate, or surrogate expressed as Logarithm to the base ten (10). (7-1-24)

30. Material Deviation. A change from the design plans that significantly alters the type or location of system components. (7-1-24)

31. Material Modification. Modifications of an existing PWS that increase system capacity or alter the methods or processes employed. Increasing system capacity occurs by adding a new water source to a PWS, increasing the pumping and hydraulic capacity of the PWS, increasing potable water demand, or increasing the number of service connections. Altering methods or processes employed occurs by adding new, or altering existing, system components to satisfy increasing potable water demand, or changing engineering design intent of potable water delivery or treatment. Maintenance as outlined in the approved operation and maintenance manual, or maintenance that does not meet the criteria of a material modification described in this definition, is not a material modification. Like-kind replacement is not considered a material modification. (7-1-24)

32. Maximum Pumping Capacity. The pumping capacity with the largest source or pump out of service. (7-1-24)

33. Membrane Unit. A group of treatment systems or membrane modules that usually share common control and valving so that the group can be isolated for testing or cleaning. (7-1-24)

34. Microfiltration (MF). A low-pressure membrane filtration process with pore diameter normally in the range of 0.1 to 0.5 µm. (7-1-24)

35. Module. As the term relates to membrane filtration, it is the smallest component of a membrane unit in which a specific membrane surface area is housed. The component is typically equipped with a feedwater inlet, a filtrate outlet, and concentrate or backwash outlet structure. (7-1-24)

36. Nanofiltration (NF). A membrane filtration process that removes dissolved constituents from water. Nanofiltration is similar to reverse osmosis but allows a higher percentage of certain ions to pass through the membrane. These systems typically operate under higher pressure than microfiltration and ultrafiltration. (7-1-24)

37. New System. Any water system that meets, for the first time, the definition of a PWS, which includes systems that are entirely new construction or previously unregulated systems that increased either the population served or connections. (7-1-24)

38. Non-Potable Fluids ~~or Gases~~. Any fluids ~~or gases~~ that do not meet the definition of potable water. This definition also includes any gases that are heavier than air. ~~(7-1-24)~~( )

39. Non-Potable Mains. Pipelines that collect, deliver, or otherwise convey non-potable fluids. (7-1-24)

40. Non-Potable Services or Lines. Pipelines that collect, deliver, or otherwise convey non-potable fluids to or from a non-potable main. These pipelines connect individual facilities to the non-potable main. This term

also refers to pipelines that convey non-potable fluids from a pressurized irrigation system, reclaimed wastewater system, and other non-potable systems to individual consumers. (7-1-24)

41. Operating Shift. Any period of time during which a licensed operator must be present, or available, for proper operation or oversight of the PWS. (7-1-24)

42. Operational Storage. Operational storage supplies water when, under normal conditions, the sources are off. This component is the larger of the volume required to prevent excess pump cycling and ensure that the following volume components are full and ready for use when needed or the volume needed to compensate for the sensitivity of the water level sensors. See also the definition of Components of Finished Water Storage in these rules. (7-1-24)

43. Operation and Maintenance Manual. A comprehensive document that provides procedures for the operations and maintenance of the PWS. The manual typically covers three main subjects: a water system specific operations plan (see definition of Operations Plan); maintenance information and checklists; and manufacturer's product information (including trouble shooting information, a parts list and parts order form, special tools, spare parts list, etc.). An operation and maintenance manual may cover every aspect of the water system or any part of the water system, including but not limited to the following: treatment, pump stations, storage reservoirs, distribution system, pressure reducing valve stations, etc. (7-1-24)

44. Operations Plan. The operations plan is part of an operation and maintenance manual. Depending on which facilities of the PWS are being addressed, the operations plan may cover many types of information including but not limited to the following: daily, weekly, monthly, and yearly operating instructions; information specific to a particular type of treatment; location of valves and other key distribution system features; pertinent telephone and address contact information including the responsible charge PWS operator and PWS owner; operator safety procedures; alarm system; emergency procedures; trouble-shooting advice; water quality testing; depressurization events; customer service; and response to customer complaints. (7-1-24)

45. Owner/Purveyor of Water/Supplier of Water. The person, company, corporation, association, or other organizational entity which holds legal title to the PWS, who provides, or intends to provide, drinking water to the customers, and who is ultimately responsible for the PWS operation. (7-1-24)

46. Plant Design Capacity. The maximum design flow through treatment units. The minimum plant design capacity may be equal to peak hour demand but may also be equal to the maximum day demand if equalization storage is provided. (7-1-24)

47. Plant. A physical facility where drinking water is treated or processed. (7-1-24)

48. Point of Use (POU) Treatment System. A collection of POU treatment devices. (7-1-24)

49. Potable Mains. Pipelines that deliver potable water to multiple service connections. (7-1-24)

50. Potable Services. Pipelines that convey potable water from a service connection to the potable water main to individual consumers. (7-1-24)

51. Potable Water. Water for human consumption. Also referred to as Water for Human Consumption or Drinking Water. (7-1-24)

52. Preliminary Engineering Report (PER). A report that addresses specific portions of the PWS or facility for which material modifications are being designed. Material modifications may include, but are not limited to, significant changes to existing processes or facilities, PWS expansion, addition of treatment, or installation of other processes and facilities. This report addresses specific purpose and scope, design requirements, alternative solutions, costs, operation and maintenance requirements, and other requirements as described in Section 503. Preliminary engineering reports are generally project specific as opposed to an overall system-wide plan, such as a facility plan. (7-1-24)

53. Premises Isolation or Containment. The practice of separating the customer's structure, facility,

or premises from the purveyor's PWS by means of a backflow prevention assembly installed on the service line before any distribution takes place. (7-1-24)

54. Protected Water Source. For the purposes of the Revised Total Coliform Rule (40 CFR Part 141, Subpart Y), a protected water source is a groundwater well that is not susceptible to contamination on the basis of well construction, hydrologic data, or contamination history. (7-1-24)

55. Public Notice. The notification to PWS consumers of information pertaining to that PWS including information regarding water quality or compliance status of the PWS. (7-1-24)

56. Public Drinking Water System (PWS). A system for the provision to the public of water for human consumption through pipes or, after August 5, 1998, other constructed conveyances, if such system has at least fifteen (15) service connections, regardless of the number of water sources or configuration of the distribution system, or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year. Such term includes: any collection, treatment, storage, and distribution facilities under the control of the operator of such system and used primarily in connection with such system; and any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Such term does not include any "special irrigation district." A public water system is either a "community water system" or a "non-community water system" as further defined as: (7-1-24)

a. Community water system. A PWS which serves at least fifteen (15) service connections used by year-round residents or regularly serves at least twenty-five (25) year-round residents. (7-1-24)

b. Non-community water system. A PWS that is not a community water system. A non-community water system is either a transient non-community water system or a non-transient non-community water system. (7-1-24)

c. Non-transient non-community water system. A PWS that is not a community water system and that regularly serves at least twenty-five (25) of the same persons over six (6) months per year. (7-1-24)

d. Transient non-community water system. A non-community water system which does not regularly serve at least twenty-five (25) of the same persons over six (6) months per year. (7-1-24)

57. Public Water System (PWS)/Water System/System. Means "public drinking water system." (7-1-24)

58. Pump House. A structure containing important water system components, such as a well, hydro-pneumatic tank, booster pump, pump controls, flow meter, well discharge line, or a treatment unit. Pump houses are often called well houses in common usage, even though in modern construction these structures may not contain either a well or a pump. These terms are used interchangeably in national standards and trade publications. (7-1-24)

59. Qualified Licensed Professional Engineer (QLPE). A professional engineer licensed by the state of Idaho; qualified by education or experience in the specific technical fields involved in these rules; and retained or employed by a city, county, quasi-municipal corporation, or regulated public utility for the purposes of plan and specification review. (7-1-24)

60. Quasi-Municipal Corporation. A public entity, other than community government, created or authorized by the legislature to aid the state in, or to take charge of, some public or state work for the general welfare. For the purpose of these rules, this term refers to drinking water districts. (7-1-24)

61. Raw Water. Raw water is any groundwater, spring water, or surface water utilized as source water prior to treatment for the purpose of producing potable water. (7-1-24)

62. Redundancy. The installation of duplicate components or backup systems that are designed to maintain minimum pressure and capacity of the PWS if any component fails or is otherwise out of service for maintenance or repair. (7-1-24)

63. Reverse Osmosis (RO). A membrane filtration process that removes dissolved constituents from water. Reverse osmosis is similar to nanofiltration but allows a lower percentage of certain ions to pass through the membrane. These systems typically operate under higher pressure than microfiltration and ultrafiltration. (7-1-24)

64. Resolution. As the term relates to membrane treatment, it is the size of the smallest integrity breach that contributes to a response from a direct integrity test when testing low pressure membranes. (7-1-24)

65. Reviewing Authority. For those projects requiring preconstruction approval by the Department, the Department is the reviewing authority. For those projects allowing for preconstruction approval by others, pursuant to Subsection 504.03.b., the qualified Idaho licensed professional engineer (QLPE) is also the reviewing authority. (7-1-24)

66. Sampling Point. The location in a PWS from which a sample is drawn. (7-1-24)

67. Sensitivity. As the term relates to membrane treatment, it is the maximum log removal value (LRV) for a specific resolution that can be reliably verified by the direct integrity test associated with a given low pressure membrane filtration system. (7-1-24)

68. Service Connection. Each structure, facility, or premises which is connected to a PWS water source, and which is or may be used for domestic purposes. (7-1-24)

69. Sewage. Water-carried human wastes from residences, buildings, and industrial establishments and other places, together with groundwater infiltration and surface water as may be present. (7-1-24)

70. Significant Deficiency. Any defect in a PWS's design, operation, maintenance, or administration, as well as any failure or malfunction of any system component, that the Department or its agent determines to cause, or have potential to cause, the introduction of contamination into the water delivered to consumers. (7-1-24)

71. Simple Water Main Extension. New or replacement water main(s) that require plan and specification review by a qualified licensed professional engineer (QLPE) or by the Department per these rules and that is connected to existing water main facilities and does not require the addition of system components designed to control quantity or pressure, including, but not limited to, booster stations, new sources, pressure reducing valve stations, or reservoirs; and continues to provide the pressure and quantity requirements of Subsection 552.01. (7-1-24)

72. Spring. A source of water which flows from a laterally percolating water table's intersection with the surface or from a geological fault that allows the flow of water from an artesian aquifer. (7-1-24)

73. Standby Storage. Standby storage provides a measure of reliability or safety factor if sources fail or when unusual conditions impose higher than anticipated demands. See also the definition of Components of Finished Water Storage in these rules. (7-1-24)

74. Substantially Modified. The Department considers a PWS to be substantially modified when, as the result of one (1) or more material modifications to the PWS, there is a combined increase of twenty-five percent (25%)in any one or combination of the following: the population served or number of service connections, the total length of transmission and distribution water mains, the total source capacity, or the peak or average water demand for the PWS. Material modifications completed after May 8, 2009, are the only modifications counted towards the twenty-five (25%) increase. Like-kind replacement of components will not be counted toward a combined increase of twenty-five percent (25%) calculation. Removal of existing system components will not be used to reduce the combined increase of twenty-five percent (25%) calculation. (7-1-24)

75. Substitute Responsible Charge Operator. An operator of a PWS who holds a valid license at a class equal to or greater than the drinking water system classification, designated by the PWS owner to replace and to perform the duties of the responsible charge operator when the responsible charge operator is not available or accessible. (7-1-24)

76. Surface Water System. A PWS which is supplied by one (1) or more surface water sources or

groundwater sources under the direct influence of surface water. Also called subpart H systems in applicable sections of 40 CFR Part 141. (7-1-24)

77. Treatment Facility. Any place(s) where a PWS alters the physical or chemical characteristics of the drinking water. Chlorination may be considered as a function of a distribution system. (7-1-24)

78. Turbidity. Measure of the interference of light passage through water, or visual depth restriction from the presence of suspended matter such as clay, silt, nonliving organic particulates, plankton, and other microscopic organisms. Operationally, turbidity measurements are expressions of certain light-scattering and absorbing properties of a water sample. Turbidity is measured by the nephelometric method. (7-1-24)

79. Ultrafiltration (UF). A low pressure membrane filtration process with pore diameter normally in the range of five thousandths to one tenth micrometer (0.005 to 0.1 µm). (7-1-24)

80. UV Transmittance (UVT). A measure of the fraction of incident light transmitted through a material (e.g., water sample or quartz). The UVT is usually reported for a wavelength of two hundred fifty-four (254) nm and a path length of one (1) cm. It is often represented as a percentage. (7-1-24)

81. Unregulated Contaminant. Any substance that may affect the quality of water but for which a maximum contaminant level or treatment technique has not been established. (7-1-24)

82. Use Assessment. For the purpose of obtaining a waiver from certain monitoring requirements, a use assessment is an evaluation as to whether synthetic organic contaminants are being or have been used, manufactured, transported, stored, or disposed of in the watershed for surface water or the zone of influence for groundwater. (7-1-24)

83. Variance. A temporary deferment of compliance with a maximum contaminant level or treatment technique requirement which may be granted only when the PWS demonstrates to the satisfaction of the Department that the raw water characteristics prevent compliance with the MCL or requirement after installation of the best available technology or treatment technique and the determent does not cause an unreasonable risk to public health. (7-1-24)

84. Volatile Organic Chemicals (VOCs). VOCs are lightweight organic compounds that vaporize or evaporate easily. (7-1-24)

85. Vulnerability Assessment. Related to monitoring waiver decisions, a determination of the risk of future contamination of a public drinking water supply. (7-1-24)

86. Waiver. (7-1-24)

a. Except for Sections 500 through 552, "waiver" means the Department approval of a temporary reduction in sampling requirements for a particular contaminant. (7-1-24)

b. For purposes of Sections 500 through 552, "waiver" means the dismissal or modification of any requirement of compliance. (7-1-24)

c. For the purposes of Section ~~010~~004, "waiver" means the deferral of a fee assessment for a PWS. ~~(7-1-24)~~( )

87. Wastewater. Combination of liquid or water and pollutants from activities and processes occurring in dwellings, commercial buildings, industrial plants, institutions and other establishments, together with any groundwater, surface water, and storm water that may be present; liquid or water that is chemically, biologically, physically or rationally identifiable as containing blackwater, gray water or commercial or industrial pollutants; and sewage. (7-1-24)

88. Water Demand. The volume of water requested by PWS users to satisfy their needs. Water demand can be further categorized as: (7-1-24)

a. Average day demand is the volume of water used by a PWS on an average day based on a one (1) year period. (7-1-24)

b. Maximum day demand is the average rate of consumption for the twenty-four (24) hour period in which total consumption is the largest for the design year. (7-1-24)

c. Peak hour demand is the highest hourly flow, excluding fire flow, that a PWS or distribution system pressure zone is likely to experience in the design year. (7-1-24)

89. Water Main. A pipe within a PWS which is under the control of the PWS operator and conveys water to two (2) or more service connections or conveys water to a fire hydrant. The collection of water mains within a given water supply is called the distribution system. (7-1-24)

004. WAIVERS, VARIANCES, AND EXEMPTIONS.
40 CFR 141.4 is incorporated by reference. (7-1-24)

01. Monitoring Waivers. 40 CFR 141.23(b), 141.23(c), 141.24(f), 141.24(h) are incorporated by reference. (7-1-24)

a. Waivers from sampling requirements in ~~Subsections 100.03, 100.04, 200.01,~~ Section 101 and Subsection 503.03.e.v. may be available to all PWSs for all contaminants except nitrate, nitrite, and disinfection byproducts and are based upon a vulnerability assessment, use assessment, the analytical results of previous sampling, or some combination of vulnerability assessment, use assessment, and analytical results. ~~(7-1-24)~~( )

b. If a PWS elects to request a waiver from monitoring, it must do so in writing at least sixty (60) days prior to the required monitoring deadline date. (7-1-24)

c. Waiver determinations are to be made by the Department on a contaminant specific basis and must be in writing. (7-1-24)

d. PWSs which do not receive waivers must sample at the required, monitoring frequencies (7-1-24)

02. Facility, Design Standard, and Operating Criteria Waivers. The Department may waive any requirement of Sections 500 through 552 that is not explicitly imposed by Idaho Statute, if it can be shown to the Department's satisfaction that the requirement is not necessary for the protection of public health, protection from contamination, and satisfactory operation and maintenance of a PWS. (7-1-24)

03. Variances. (7-1-24)

a. A general variance may be granted by the Department if a PWS owner submits a written request and demonstrates to the satisfaction of the Department that the minimum requirements of 42 USC Section 1415(a) (SDWA) are met. (7-1-24)

b. A small system variance for a maximum contaminant level or treatment technique may be granted by the Department if a PWS owner submits a written request and demonstrates to the satisfaction of the Department that the minimum requirements of 42 USC Section 1415(e) (SDWA) are met. (7-1-24)

04. Exemptions. An exemption may be granted by the Department if a PWS owner submits a written request and demonstrates to the satisfaction of the Department that the minimum requirements of 42 USC Section 1416(a) (SDWA) are met. (7-1-24)

05. Conditions. A waiver, exemption, or variance may be granted upon any conditions that the Department, determines are appropriate and in accordance with these rules. Failure by the PWS owner to comply with any condition voids the waiver, variance, or exemption. (7-1-24)

06 Public Hearing. The Department will provide public notice and an opportunity for public hearing

in the area served by the PWS before any exemption or variance under Section ~~005~~004 is granted by the Department. At the conclusion of the hearing, the Department will record the findings and issue a decision approving, denying, modifying, or conditioning the request. ~~(7-1-24)~~( )

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, radiological, or per- and polyfluoroalkyl substances maximum contaminant levels or action levels of these rules; (7-1-25)

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~~007. ~~(7-1-24)~~( )

(BREAK IN CONTINUITY OF SECTIONS)

007. FEE SCHEDULE FOR PUBLIC DRINKING WATER SYSTEMS.
All owners of PWSs must pay an annual drinking water system fee. The fee will be assessed as provided in this section. The Department may waive the requirements of this section at its discretion. (7-1-24)

01. Effective Date. Annual fees will be paid for each fee year. Fee years begin on October 1 of each calendar year. (7-1-24)

02. Fee Schedule. (7-1-24)

a. Owners of community and non-transient non-community PWSs must pay an annual fee according to the following fee schedule:

Number of Connections	Fee
1 to 20	$100
21 to 184	$5 per connection, not to exceed a total of $735 per PWS
185 to 3,663	$4 per connection, not to exceed a total of $10,988 per PWS
3,664 or more	$3 per connection

(7-1-24)

b. The annual fee for transient PWSs is twenty-five dollars ($25). (7-1-24)

c. New PWSs formed after October 1 will not pay a fee until the following October. (7-1-24)

03. Fee Assessment. (7-1-24)

a. An annual fee assessment will be generated for each community and non-transient non-community

PWS using the number of connections the Department has on record. (7-1-24)

b. Community and non-transient non-community PWSs will be notified each year of the official number of connections listed in SDWIS. PWSs will have at least one (1) month to notify the Department if the number of connections provided are not in agreement with the PWS's records. (7-1-24)

04. Billing. An annual fee statement will be mailed or delivered electronically to all PWS owners on record with the Department by September 1 of each year and will include acceptable payment methods. (7-1-24)

05. Payment. (7-1-24)

a. Annual fee payment will be due on October 1, unless it is a Saturday, a Sunday, or a legal holiday, in which event the payment will be due on the successive business day. (7-1-24)

b. If a PWS consists of two hundred fifty (250) connections or more, the PWS may request to divide its annual fee payment into equal monthly or quarterly installments by submitting a request to the Department. (7-1-24)

i. The Department will notify PWSs of approval or denial of a requested monthly or quarterly installment plan within ten (10) business days of receiving the request. (7-1-24)

ii. If a PWS has been approved to pay monthly installments then each installment will be due by the first day of each month, unless it is a Saturday, a Sunday, or a legal holiday, in which event the installment will be due on the successive business day. (7-1-24)

iii. If a PWS has been approved to pay quarterly installments then each installment will be due by the first day of the month of each quarter (October 1, January 1, April 1, and July 1), unless it is a Saturday, a Sunday, or a legal holiday, in which event the installment will be due on the successive business day. (7-1-24)

06. Delinquent Unpaid Fees. A PWS owner will be delinquent in payment if its annual fee assessment has not been received by November 1; or if having opted to pay monthly or quarterly installments, its monthly or quarterly installment has not been received by the last day of the month in which the monthly or quarterly payment is due. (7-1-24)

07. Suspension of Services and Disapproval Designation. (7-1-24)

a. For any PWS owner delinquent in payment of fee assessed under Subsections 010.02, in excess of ninety (90) days, technical assistance provided by the Department may be suspended except for review and processing of: (7-1-24)

i. Monitoring waivers; (7-1-24)

ii. Engineering reports; and (7-1-24)

iii. Plans and specifications for design and construction as set forth in Sections 500 through 552. (7-1-24)

b. For any PWS owner delinquent in payment of fee assessed under Subsections ~~010~~007.02, in excess of one hundred and eighty (180) days, the Department may disapprove the PWS pursuant to Subsection 007.06 and may suspend all technical assistance provided including review and processing of: ~~(7-1-24)~~( )

i. Engineering reports; (7-1-24)

ii. Plans and specifications for design and construction as set forth in Sections 500 through 552; or (7-1-24)

iii. Monitoring waivers (7-1-24)

08. Reinstatement of Suspended Services and Approval Status. For any PWS owner for which suspension of technical assistance, disapproval, or both has occurred, reinstatement of technical assistance, approval, or both, will occur upon payment of delinquent annual fee assessments. (7-1-24)

09. Responsibility to Comply. Subsection ~~010~~007.07 in no way relieves any PWS from its obligation to comply with these rules. ~~(7-1-24)~~( )

(BREAK IN CONTINUITY OF SECTIONS)

~~**010. CONFIDENTIALITY OF RECORDS.**~~
~~Information obtained by the Department under these rules is subject to public disclosure pursuant to the provisions of Chapter 1, Title 74, Idaho Code. Information submitted under a trade secret claim may be entitled to confidential treatment by the Department as provided in Section 74-107 and IDAPA 58.01.23, "Contested Case Rules and Rules for Protection and Disclosure of Records."~~ ~~(7-1-24)~~

010. DRINKING WATER ADVISORY COMMITTEE.
Ongoing stakeholder involvement will be provided through the existing drinking water advisory committee at the Department. ( )

011. -- 049. (RESERVED)

050. LICENSED OPERATOR REQUIREMENTS.

01. Licensed Operator Required. Owners of all community, non-transient non-community, and surface water or groundwater sources directly influenced by surface water must place the direct supervision of their PWS under the responsible charge of a properly licensed operator at all times. When the responsible operator is not available, the PWS owner must designate a substitute responsible operator. ( )

02. Responsible Charge Operator License Requirement. An operator in responsible charge of a PWS must hold a valid Idaho license equal to or greater than the classification of the PWS where the responsible charge operator is in charge. ( )

03. Water Operator License Requirement. All operating personnel at PWSs subject to these requirements making process control/ system integrity decisions about water quality or quantity that can affect public health must hold a valid Idaho license. ( )

04. Water Operator License Upgrade Allowance. A twelve (12) month period will be provided to meet increased drinking water distribution system operator licensure requirements when a higher licensure level is required based on a population increase if the following requirements are met: ( )

a. The licensure increase is triggered solely by a population increase; and ( )

b. The responsible charge operator of the PWS at the time the distribution licensure requirement increases remains the responsible charge operator throughout the twelve (12) month time frame. ( )

051. CONTRACTING FOR SERVICES.
PWS owners who contract with persons to provide responsible charge operators and substitute responsible charge operators need to submit proof of such contract to the Department prior to the contracted person performing any services at the PWS. ( )

052. CLASSIFICATION OF WATER SYSTEMS.

01. System Classification Required. The Department will classify community, non-transient non-community, and surface water PWSs based on indicators of potential health risks. ( )

02. **Classification Criteria**. PWSs are classified under a system that uses the following criteria: ( )

a. Complexity, size, and type of source water for treatment facilities. ( )

b. Complexity and size of distribution systems. ( )

c. Other criteria deemed necessary to completely classify PWSs. ( )

d. The Department will develop guidelines for applying the criteria set forth in Section 052. ( )

03. **Classification Review**. The Department will review PWS classifications on a minimum five (5) year frequency. ( )

053. – 099. **(RESERVED)**

~~050~~100. MAXIMUM CONTAMINANT LEVELS AND MAXIMUM RESIDUAL DISINFECTANT LEVELS.
40 CFR Part 141, Subparts B and G are incorporated by reference. ( )

~~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.~~ ~~(7-1-25)~~

~~051. – 099.~~ ~~**(RESERVED)**~~

10~~0~~1. MONITORING AND ANALYTICAL REQUIREMENTS.
40 CFR Part 141, Subparts C~~, is~~ and E are 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)~~

0~~8~~1. **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."~~ Chapter 22 [24], Title 56, Idaho Code, Drinking Water Laboratory Certification Program, or performed in laboratories certified by the U.S. Environmental Protection Agency. 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.~~104.03.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~~02. **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.~~ ~~(7-1-25)~~

~~**101. – 149. (RESERVED)**~~

1502. REPORTING, PUBLIC NOTIFICATION, RECORDKEEPING.

01. Reporting and Record Keeping Requirements. 40 CFR Part 141.31, Subpart D 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)~~

083. 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 150102 that may also apply. (7-1-24)( )

094. 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. (7-1-25)~~

103. MAXIMUM CONTAMINANT LEVEL GOALS AND MAXIMUM RESIDUAL DISINFECTION LEVEL GOALS.
40 CFR Part 141, Subpart F is incorporated by reference. ( )

104. FILTRATION AND DISINFECTION.
40 CFR Part 141, Subpart H is incorporated by reference. ( )

01. Filtration. ( )

a. The Department will establish filtration removal credit on a system-by-system basis. Unless otherwise allowed the Department, the maximum log removal credit allowed for filtration is as follows: ( )

Maximum Log Removal

Filtration Type	Giardia lamblia	Viruses	Cryptosporidium
Conventional	2.5	2.0	2.5
Direct	2.0	1.0	2.0
Slow sand	2.0	2.0	2.0
Diatomaceous earth	2.0	1.0	2.0
Microfiltration	3.0	0.5	3.0
Ultrafiltration	3.5	2.0	3.5
Nanofiltration	4.0	3.0	4.0
Reverse Osmosis	4.0	3.0	4.0
Alternate technology	2.0	0	2.0

( )

b. Filtration removal credit will be granted for filtration treatment provided the PWS is: ( )

i. Operated in accordance with the Operations Plan specified in Subsection 552.03.a.; ( )

ii. The PWS is in compliance with the turbidity performance criteria specified under 40 CFR 141.73; ( )

iii. Coagulant chemicals must be added and coagulation and flocculation unit process must be used at all times during which conventional and direct filtration treatment plants are in operation; ( )

iv. Slow sand filters are operated at rates not to exceed one-tenth (0.1) gallons per minute per square foot or as approved by the Department; and ( )

v. Diatomaceous earth filters are operated at a rate not to exceed one point five (1.5) gallons per minute per square foot. ( )

02. Disinfection. ( )

a. Surface water sources or groundwater sources directly influenced by surface water must maintain a minimum of at least two-tenths (0.2) mg/l disinfectant residual in the treated water at peak hour demand before delivery to the first customer. ( )

b. The Department may allow a PWS to utilize automatic shut-off of water to the distribution system whenever total disinfectant residual is less than two-tenths (0.2) mg/l rather than provide redundant disinfection components and auxiliary power as required in 40 CFR 141.72(a)(2). An automatic water shut-off may be used if the PWS demonstrates to the satisfaction of the Department that, at all times, a minimum of twenty (20) psi pressure and adequate fire flow can be maintained in the distribution system when water delivery is shut-off to the distribution system and, at all times, minimum Giardia lamblia and virus inactivation removal rates can be achieved prior to the first customer. ( )

c. Each PWS which is required to provide filtration must provide disinfection treatment such that filtration plus disinfection provide at least 3-Log or ninety-nine and nine tenths percent (99.9%) inactivation/removal of Giardia lamblia cysts and at least 4-Log or ninety-nine and ninety-nine hundredths percent (99.99%) inactivation/removal of viruses as specified in 40 CFR 141.72 and Section 104, and at least 2-Log or ninety-nine percent (99%) removal of Cryptosporidium as required by 40 CFR Part 141, Subpart P or Subpart T. However, in all cases the disinfection portion of the treatment train must be designed to provide not less than five tenths (0.5) log Giardia

lamblia inactivation, irrespective of the Giardia lamblia removal credit awarded to the filtration portion of the treatment train. ( )

03. Analytical and Monitoring Requirements. ( )

a. Total inactivation ratio calculations: 40 CFR 141.74(b)(4)(i) and (ii) are incorporated by reference. ( )

b. Log removal credit for disinfection must be determined by multiplying the total inactivation ratio by three (3). ( )

c. Unfiltered Subpart H systems. 40 CFR 141.857(c) is incorporated by reference. ( )

d. Unfiltered PWSs must monitor as required in 40 CFR 141.74(b) upon notification by the Department that filtration treatment must be installed. ( )

e. During the period prior to filtration treatment installation, the Department may, at its discretion, reduce the turbidity monitoring frequency for any non-community system which demonstrates to the satisfaction of the Department: ( )

i. A free chlorine residual of two-tenths (0.2) part per million is maintained throughout the distribution system; ( )

ii. The water source is well protected; ( )

iii. E. coli MCL is not exceeded or a Level 1 or Level 2 Assessment has not been triggered in accordance with 40 CFR 141.859; and ( )

iv. No significant health risk is present. ( )

04. Reporting and Recordkeeping Requirements. ( )

a. As provided in 40 CFR 141.75(a) and Subsection 104.04, the Department may establish interim reporting requirements for PWSs notified by the Department or U.S. Environmental Protection Agency that filtration treatment must be installed as specified in 40 CFR 141.75(a) and as referred to in Subsection 104.04. Until filtration treatment is installed, PWSs required to install filtration treatment must report as follows: ( )

i. The purveyor will immediately report to the Department via telephone or other equally rapid means, but no later than the end of the next business day, the following information: ( )

(1) The occurrence of a waterborne disease outbreak potentially attributable to that PWS; ( )

(2) Any turbidity measurement which exceeds five (5) NTU; and ( )

(3) Any result indicating that the disinfectant residual concentration entering the distribution system is below two-tenths (0.2) mg/l free chlorine. ( )

ii. The purveyor will report to the Department within ten (10) days after the end of each month the PWS serves water to the public the following monitoring information using a Department-approved form: ( )

(1) Turbidity monitoring information; and ( )

(2) Disinfectant residual concentrations entering the distribution system. ( )

iii. Personnel qualified under Subsection 104.01 will complete and sign the monthly report forms submitted to the Department as required in Subsection 104.04. ( )

b. In addition to the reporting requirements in 40 CFR 141.75(b) pertaining to PWSs with filtration treatment, each PWS which provides filtration treatment must report the level of Giardia lamblia and virus inactivation/removal achieved each day by filtration and disinfection. ( )

05. Recycle Provisions. ( )

a. The Department will evaluate recycling records kept by PWSs pursuant to 40 CFR 141.76 during sanitary surveys, comprehensive performance evaluations, or other inspections. ( )

b. The Department may require a PWS to modify recycling practices if it can be shown that these practices adversely affect the ability of the PWS to meet surface water treatment requirements. ( )

105. CONTROL OF LEAD AND COPPER.
40 CFR 141, Subpart I is incorporated by reference. ( )

106. USE OF NON-CENTRALIZED TREATMENT DEVICES.
40 CFR Part 141, Subpart J is incorporated by reference. ( )

01. Point of Use (POU) Treatment Devices. ( )

a. A PWS owner may use point of use (POU) treatment to comply with certain maximum contaminant levels (MCL) or treatment techniques when the following conditions are met: ( )

i. A program for long-term operation, maintenance, and monitoring of the POU treatment system is approved by the Department, pursuant to Subsection 106.02.c.; ( )

ii. The PWS owner or a vendor of POU treatment devices under contract with the PWS must own, control, and maintain the POU treatment system to ensure proper operation and maintenance and compliance with the MCL or treatment technique; ( )

iii. Each POU treatment device is equipped with a mechanical warning mechanism to ensure customers are automatically notified of operational problems; ( )

iv. Each POU treatment device must be certified by an accredited American National Standards Institute (ANSI) certification body to meet applicable ANSI/National Sanitation Foundation (NSF) Standards; and ( )

v. POU treatment devices will not be used to comply with an MCL or treatment technique requirement for a microbial contaminant or an indicator of a microbial contaminant. Community PWSs may not use POU treatment devices to comply with a nitrate or nitrite MCL. ( )

b. The Department will waive the plan and specification requirements of Section 504 relating to material modifications for the following systems only to the extent that the material modification is limited to the installation or use of a POU treatment device(s): ( )

i. Community PWSs serving two hundred (200) or fewer service connections; ( )

ii. Non-transient non-community PWSs; ( )

iii. Transient non-community PWSs; or ( )

iv. Community PWSs serving more than two hundred (200) service connections if approved by the Department through the waiver process outlined in Subsection 004.02. ( )

c. Prior to installation, the PWS owner must submit the following documentation for approval to the Department. ( )

i. Water system information: ( )

(1) PWS name and identification number; ( )

(2) Total number of service connections; ( )

(3) Demonstration that all POU treatment devices are owned, controlled, and maintained by the PWS owner or by a vendor of POU treatment devices under contract with the PWS owner; ( )

(4) Documentation that a customer at each service connection has agreed to installation and use of a POU treatment device and has granted access for installation, maintenance, and sampling; ( )

(5) A statement of recognition that failure to maintain compliance with the MCL, or the failure to operate and maintain compliance with a POU treatment system as approved by the Department, may necessitate installation of centralized treatment; and ( )

(6) Documentation that the PWS is current with certified operator requirements pursuant to Section 050. ( )

ii. POU device information: ( )

(1) Type of POU treatment device; ( )

(2) Manufacturer, model number, and manufacturer's specifications; ( )

(3) Contaminant to be treated and documentation that the POU is certified and is of sufficient design and capacity for removal of the contaminant; ( )

(4) Documentation that the PWS's water chemistry is compatible with the POU; ( )

(5) Type and function of the mechanical warning (performance indicator); ( )

(6) Certification verification for ANSI/NSF; ( )

(7) Documentation describing how other drinking water dispensing units, such as hot water dispensers and refrigerators, soda machines, water fountains, and other similar units will be provided with treated water and how the water will be transported to that unit with non-reactive piping or tubing. Non-transient non-community and transient non-community PWSs must demonstrate that the POU treatment devices are located in areas adequate to protect public health and in sufficient quantity to serve the system's users; ( )

(8) Installer qualifications; and ( )

(9) Proposed date for completing installation(s). ( )

iii. POU operation, maintenance, and sampling plan that includes documentation on how the PWS owner will: ( )

(1) Address any non-compliance with Subsection 106.02.c.i.(4); ( )

(2) Ensure real estate disclosures for the POU treatment systems; ( )

(3) Deliver ongoing education and outreach to customers, including renters, regarding POU treatment and health effects of the contaminant(s) of concern; ( )

(4) Address and perform on-going maintenance activities, including frequency of treatment media replacements and treatment device replacements, periodic verification that the mechanical warning device is functional, schedule of planned maintenance activities, a plan to address unscheduled maintenance problems, and a

plan and method of waste disposal; and ( )

(5) Collect samples from the location of all service connections and demonstrating that all POU treatment devices will be sampled for compliance with the treated contaminant(s) during every compliance period or other frequency designated by the Department. ( )

d. Within thirty (30) days of installing the approved POU treatment system, the PWS owner must: ( )

i. Notify the Department in writing that the POU treatment system was installed as approved by the Department; and ( )

ii. Submit samples from each POU treatment device to a certified laboratory for the contaminant(s) being treated to demonstrate initial compliance with the MCL. ( )

e. The PWS owner or operator must maintain records for a POU treatment system. Records must be submitted to the Department at a frequency and in a format specified by the Department. Records to maintain include: ( )

i. Requirements of Subsection 106.02.c.; ( )

ii. All sampling performed on the POU treatment devices; ( )

iii. Maintenance logs and schedules; ( )

iv. Log of installed units; and ( )

v. Contracts, lease agreements, or other legal documents with vendors and consumers. ( )

107. TREATMENT TECHNIQUES.
40 CFR 141, Subpart K, is incorporated by reference. ( )

108. DISINFECTION RESIDUALS, DISINFECTION BYPRODUCTS, AND DISINFECTION BYPRODUCT PRECURSORS.
40 CFR Part 141, Subpart L is incorporated by reference. DPD colorimetric test kits may be used to measure residual disinfectant concentrations for chlorine, chloramines, and chlorine dioxide. ( )

109. – 110. (RESERVED)

1~~5~~11. CONSUMER CONFIDENCE REPORTS.
40 CFR Part 141, Subpart O is incorporated by reference. (7-1-24)

112. ENHANCED FILTRATION AND DISINFECTION - SYSTEMS SERVING TEN THOUSAND OR MORE PEOPLE.
40 CFR Part 141, Subpart P is incorporated by reference. ( )

~~152. – 249~~113. (RESERVED)

114. GROUND WATER RULE.
40 CFR 141, Subpart S is incorporated by reference. ( )

01. Discontinuation of Treatment. PWSs that wish to discontinue four (4)-log virus treatment at a groundwater source must meet the following criteria. Groundwater sources on which treatment has been discontinued will be subject to the triggered source water monitoring requirements of 40 CFR 141, Subpart S. ( )

a. Demonstration that any known source of contamination has been removed. ( )

b. Demonstration that structural deficiencies of the well have been rehabilitated and no longer exist. ( )

c. Provide evidence that the well is drawing from a protected or confined aquifer. ( )

d. Submit results of one (1) year of monthly monitoring for a fecal indicator organism during which no positive results occurred. ( )

02. Chlorine Purging Prior to Triggered Source Sampling. 40 CFR 141.402(e) requires that groundwater source samples be collected at a location prior to any treatment. Pursuant to this requirement PWSs that add chlorine to a source, either in the well bore or near enough to the wellhead that chlorinated water may backflow into the well, must ensure that all chlorine residual has been purged prior to taking a triggered source water sample. This must be accomplished by measuring chlorine residual in the source water until a reading of zero (0) is obtained and be recorded in the space provided for chlorine residual on the sample submittal form. ( )

115. ENHANCED FILTRATION AND DISINFECTION - SYSTEMS SERVING FEWER THAN TEN THOUSAND PEOPLE.
40 CFR 141, Subpart T is incorporated by reference. In accordance with 40 CFR 142.16(g)(1), the Department has authority to require the owner of a PWS to conduct a composite correction program, as defined in Section 003, for the purpose of identifying and correcting deficiencies in water treatment and distribution. Composite correction programs consist of a comprehensive performance evaluation (CPE) and comprehensive technical assistance (CTA). ( )

01. Comprehensive Performance Evaluation (CPE). The CPE is conducted to identify factors that may be adversely impacting a plant's capability to achieve compliance. It must emphasize approaches that can be implemented without significant capital improvements. The CPE assesses plant performance-based capabilities and associated administrative and operation and management practices. ( )

02. Comprehensive Technical Assistance (CTA). The CTA consists of follow-up to the CPE results, implementation of process control priority setting techniques, and long-term involvement to systematically train staff and administrators. ( )

116. INITIAL DISTRIBUTION SYSTEM EVALUATIONS.
40 CFR part 141, Subpart U is incorporated by reference. ( )

117. STAGE 2 DISINFECTION BYPRODUCTS REQUIREMENTS.
40 CFR Part 141, Subpart V is incorporated by reference. ( )

118. ENHANCED TREATMENT FOR CRYPTOSPORIDIUM – LONG TERM 2 ENHANCED SURFACE WATER TREATMENT RULE.
40 CFR Part 141, Subpart W, is incorporated by reference. ( )

01. Cryptosporidium Treatment Credit for Approved Watershed Control Program. The Department will award 0.5 (zero point five) logs cryptosporidium removal credit to systems that have a Department approved Watershed Control Program. Requirements for a watershed control program are set forth in 40 CFR 141, Subpart W. Guidance on how to develop a watershed control program and obtain Department approval is provided in "Implementation Guidance for the Long Term 2 Enhanced Surface Water Treatment Rule," as referenced in Section 002. ( )

02. Assessment of Significant Changes in the Watershed. As part of the sanitary survey process set forth in Section 200, the Department, or an agent approved by the Department, will assess significant changes in the watershed of a surface water system that occurred since the PWS conducted source water monitoring. If changes in the watershed have the potential to significantly increase contamination of the source water with cryptosporidium, the Department will consult with the PWS owner on follow-up actions that may be required under 40 CFR 141, Subpart W, including, but not limited to, source water monitoring or additional treatment requirements. "Implementation Guidance for the Long Term 2 Enhanced Surface Water Treatment Rule," as referenced in Section 002, provides a description of factors that will be considered by the Department when making an assessment of changes in the

watershed. These factors include, but are not limited to the following. ( )

a. New IPDES permits or changes in existing IPDES permits that involve increased loading of contaminants. ( )

b. Changes in land use patterns. ( )

c. Changes in agricultural cropping, chemical application, or irrigation practices. ( )

d. Changes in other non-point discharge source activities (such as grazing, manure application, commercial or residential development). ( )

e. Stream or riverbed modifications. ( )

f. IPDES permit violations at wastewater treatment plants or confined animal feedlot operations. ( )

g. Dramatic natural events such as floods, forest fires, earthquakes, and landslides that may transport or expose contaminants. ( )

h. Prolonged drought conditions that may warrant special preparatory measures to minimize impacts from waste accumulations that are washed into source waters when precipitation returns. ( )

i. Accidental or illegal waste discharges and spills. ( )

119. 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). ( )

01. Level 1 and 2 Assessments. Level 1 and 2 assessments must be conducted consistent with any Department directives that tailor specific assessment elements with respect to the size and type of the PWS and the size, type, and characteristics of the distribution system. ( )

02. Level 2 Assessments. The Department will schedule and conduct Level 2 assessments for an E.coli treatment technique trigger unless the Department approves another party to conduct the assessment as outlined in Subsection 119.03. A second or any additional triggered Level 2 Assessment within a rolling twelve-month period must be conducted by a Department approved third party even if the PWS owner has staff or management approved under Subsection 119.01.c. ( )

03. Approved Parties for Level 2 Assessments. The PWS may conduct a Level 2 assessment if the PWS has staff or management with the certification or qualifications outlined in this Subsection or if the PWS hires parties that meet the qualifications in this Subsection. The following parties are approved by the Department to conduct Level 2 assessments: ( )

a. The Department or persons contracted with the Department who are trained to conduct sanitary surveys; ( )

b. Currently licensed operators in good standing that are licensed through the Idaho Division of Occupational and Professional Licenses with a drinking water classification of Distribution I through IV or Treatment I through IV and that are licensed at least to the classification level of the PWS requiring the Level 2 assessment; or ( )

c. Licensed professional engineers licensed by the state of Idaho and qualified by education and experience in the specific technical fields involved in these rules. ( )

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

121. – 199. (RESERVED)

~~**250. MAXIMUM CONTAMINANT LEVEL GOALS AND MAXIMUM RESIDUAL DISINFECTION LEVEL GOALS.**~~

~~**01. Maximum Contaminant Level Goals for Organic Contaminants**. 40 CFR 141.50 is incorporated by reference. (7-1-24)~~

~~**02. Maximum Contaminant Level Goals for Inorganic Contaminants**. 40 CFR 141.51 is incorporated by reference. (7-1-24)~~

~~**03. Maximum Contaminant Level Goals for Microbiological Contaminants**. 40 CFR 141.52 is incorporated by reference. (7-1-24)~~

~~**04. Maximum Contaminant Level Goals for Disinfection Byproducts**. 40 CFR 141.53 is incorporated by reference. (7-1-24)~~

~~**05. Maximum Residual Disinfectant Level Goals for Disinfectants**. 40 CFR 141.54 is incorporated by reference. (7-1-24)~~

~~**06. Maximum Contaminant Level Goals for Radionuclides**. 40 CFR 141.55 is incorporated by reference. (7-1-24)~~

~~**251. – 299. (RESERVED)**~~

~~**300. FILTRATION AND DISINFECTION.**~~

~~**01. General Requirements**. 40 CFR 141.70 is incorporated by reference. (7-1-24)~~

~~**02. Filtration**. 40 CFR 141.73 is incorporated by reference. (7-1-24)~~

~~**a.** The Department will establish filtration removal credit on a system-by-system basis. Unless otherwise allowed the Department, the maximum log removal credit allowed for filtration is as follows:~~

Maximum Log Removal			
Filtration Type	Giardia lamblia	Viruses	Cryptosporidium
Conventional	2.5	2.0	2.5
Direct	2.0	1.0	2.0
Slow sand	2.0	2.0	2.0
Diatomaceous earth	2.0	1.0	2.0
Microfiltration	3.0	0.5	3.0
Ultrafiltration	3.5	2.0	3.5
Nanofiltration	4.0	3.0	4.0
Reverse Osmosis	4.0	3.0	4.0
Alternate technology	2.0	0	2.0

(7-1-24)

~~**b.** Filtration removal credit will be granted for filtration treatment provided the PWS is:~~ (7-1-24)

i. Operated in accordance with the Operations Plan specified in Subsection 552.03.a.; and (7-1-24)

ii. The PWS is in compliance with the turbidity performance criteria specified under 40 CFR 141.73; and (7-1-24)

iii. Coagulant chemicals must be added and coagulation and flocculation unit process must be used at all times during which conventional and direct filtration treatment plants are in operation; and (7-1-24)

iv. Slow sand filters are operated at rates not to exceed one-tenth (0.1) gallons per minute per square foot or as approved by the Department; and (7-1-24)

v. Diatomaceous earth filters are operated at a rate not to exceed one point five (1.5) gallons per minute per square foot. (7-1-24)

03. Criteria for Avoiding Filtration. 40 CFR 141.71 is incorporated by reference. (7-1-24)

04. Disinfection. 40 CFR 141.72 is incorporated by reference. (7-1-24)

a. Surface water sources or groundwater sources directly influenced by surface water must maintain a minimum of at least two-tenths (0.2) mg/l disinfectant residual in the treated water at peak hour demand before delivery to the first customer. (7-1-24)

b. The Department may allow a PWS to utilize automatic shut-off of water to the distribution system whenever total disinfectant residual is less than two-tenths (0.2) mg/l rather than provide redundant disinfection components and auxiliary power as required in 40 CFR 141.72(a)(2). An automatic water shut-off may be used if the PWS demonstrates to the satisfaction of the Department that, at all times, a minimum of twenty (20) psi pressure and adequate fire flow can be maintained in the distribution system when water delivery is shut-off to the distribution system and, at all times, minimum Giardia lamblia and virus inactivation removal rates can be achieved prior to the first customer. (7-1-24)

c. Each PWS which is required to provide filtration must provide disinfection treatment such that filtration plus disinfection provide at least 3-Log or ninety-nine and nine tenths percent (99.9%) inactivation/removal of Giardia lamblia cysts and at least 4-Log or ninety-nine and ninety-nine hundredths percent (99.99%) inactivation/removal of viruses as specified in 40 CFR 141.72 and Section 300, and at least 2-Log or ninety-nine percent (99%) removal of Cryptosporidium as required by 40 CFR Part 141, Subpart P or Subpart T. However, in all cases the disinfection portion of the treatment train must be designed to provide not less than five tenths (0.5) log Giardia lamblia inactivation, irrespective of the Giardia lamblia removal credit awarded to the filtration portion of the treatment train. (7-1-24)

05. Analytical and Monitoring Requirements. 40 CFR 141.74 is incorporated by reference. (7-1-24)

a. Total inactivation ratio calculations: 40 CFR 141.74(b)(4)(i) and (ii) are incorporated by reference. (7-1-24)

b. Log removal credit for disinfection must be determined by multiplying the total inactivation ratio by three (3). (7-1-24)

c. Unfiltered Subpart H systems. 40 CFR 141.857(c) is incorporated by reference. (7-1-24)

d. Unfiltered PWSs must monitor as required in 40 CFR 141.74(b) upon notification by the Department that filtration treatment must be installed. (7-1-24)

e. During the period prior to filtration treatment installation, the Department may, at its discretion, reduce the turbidity monitoring frequency for any non-community system which demonstrates to the satisfaction of the Department: (7-1-24)

i. A free chlorine residual of two-tenths (0.2) part per million is maintained throughout the distribution system; (7-1-24)

ii. The water source is well protected; (7-1-24)

iii. E. coli MCL is not exceeded or a Level 1 or Level 2 Assessment has not been triggered in accordance with 40 CFR 141.859; and (7-1-24)

iv. No significant health risk is present. (7-1-24)

06. Reporting and Recordkeeping Requirements. 40 CFR 141.75 is incorporated by reference. (7-1-24)

a. As provided in 40 CFR 141.75(a) and Section 300, the Department may establish interim reporting requirements for PWSs notified by the Department or U.S. Environmental Protection Agency that filtration treatment must be installed as specified in 40 CFR 141.75(a) and as referred to in Subsection 300.06. Until filtration treatment is installed, PWSs required to install filtration treatment must report as follows: (7-1-24)

i. The purveyor will immediately report to the Department via telephone or other equally rapid means, but no later than the end of the next business day, the following information: (7-1-24)

(1) The occurrence of a waterborne disease outbreak potentially attributable to that PWS; (7-1-24)

(2) Any turbidity measurement which exceeds five (5) NTU; and (7-1-24)

(3) Any result indicating that the disinfectant residual concentration entering the distribution system is below two-tenths (0.2) mg/l free chlorine. (7-1-24)

ii. The purveyor will report to the Department within ten (10) days after the end of each month the PWS serves water to the public the following monitoring information using a Department-approved form: (7-1-24)

(1) Turbidity monitoring information; and (7-1-24)

(2) Disinfectant residual concentrations entering the distribution system. (7-1-24)

iii. Personnel qualified under Subsection 300.01 will complete and sign the monthly report forms submitted to the Department as required in Subsection 300.06. (7-1-24)

b. In addition to the reporting requirements in 40 CFR 141.75(b) pertaining to PWSs with filtration treatment, each PWS which provides filtration treatment must report the level of Giardia lamblia and virus inactivation/removal achieved each day by filtration and disinfection. (7-1-24)

07. Recycle Provisions. 40 CFR 141.76 is incorporated by reference. (7-1-24)

a. The Department will evaluate recycling records kept by PWSs pursuant to 40 CFR 141.76 during sanitary surveys, comprehensive performance evaluations, or other inspections. (7-1-24)

b. The Department may require a PWS to modify recycling practices if it can be shown that these practices adversely affect the ability of the PWS to meet surface water treatment requirements. (7-1-24)

301. ENHANCED FILTRATION AND DISINFECTION – SYSTEMS SERVING TEN THOUSAND OR MORE PEOPLE.

This Section incorporates, 40 CFR Part 141, Subpart P, known as the Interim Enhanced Surface Water Treatment Rule. (7-1-24)

01. General Requirements. 40 CFR 141.170 is incorporated by reference. (7-1-24)

~~**02. Criteria for Avoiding Filtration**. 40 CFR 141.171 is incorporated by reference.~~ ~~(7-1-24)~~

~~**03. Disinfection Profiling and Benchmarking**. 40 CFR 141.172 is incorporated by reference.~~ ~~(7-1-24)~~

~~**04. Filtration**. 40 CFR 141.173 is incorporated by reference.~~ ~~(7-1-24)~~

~~**05. Filtration Sampling Requirements**. 40 CFR 141.174 is incorporated by reference.~~ ~~(7-1-24)~~

~~30~~2~~00~~. SANITARY SURVEYS.

The Department will conduct a sanitary survey of all PWSs. Sanitary surveys will include, but are not limited to, the following elements: source; treatment; distribution system; finished water storage; pump, pump facilities, and controls; monitoring and reporting and data verification; PWS management and operation; and operator compliance with state requirements. For those PWSs using groundwater, 40 CFR Part 141, Subpart S, is incorporated by reference. ~~(7-1-24)~~( )

01. Frequency. For non-community PWSs, a sanitary survey must be conducted every five (5) years. For community PWSs, a sanitary survey will be conducted every three (3) years, except as provided below. (7-1-24)

a. Community systems using surface water or groundwater under the direct influence of surface water that have been determined to have outstanding performance, according to criteria established by the Department, may have a sanitary survey conducted every five (5) years. (7-1-24)

b. Community systems using groundwater may have a sanitary survey conducted every five (5) years if the PWS provides at least a four (4)-log treatment of viruses (using inactivation, removal, or a Department-approved combination of 4-log inactivation and removal) before or at the first customer for all of its groundwater sources. (7-1-24)

c. Community systems using groundwater may have a sanitary survey conducted every five (5) years if they have an outstanding performance record, as determined by the Department and documented in previous sanitary surveys, and have no history of Revised Total Coliform Rule MCL or monitoring violations under ~~Subsection 100.01~~ Section 101 since the last sanitary survey. ~~(7-1-24)~~( )

02. Report. The Department will provided a report describing the results of the sanitary survey to the PWS. As part of the sanitary survey report or as an independent action, the Department will provide written notice to the PWS describing any significant deficiency within thirty (30) days after the Department identifies the significant deficiency. The notice may specify corrective actions and deadlines for completion of corrective actions. (7-1-24)

03. Significant Deficiencies. For each of the eight (8) elements of a sanitary survey of a groundwater system, the Department will consider the following deficiencies significant in all cases for the purposes of the notice required in Subsection ~~303~~200.02. Decisions about the significance of other deficiencies identified during the sanitary survey will be at the Department's discretion, as indicated in the Department's sanitary survey protocol. ~~(7-1-24)~~( )

a. Source: Lack of or improper sanitary well cap as specified in Subsection 511.06.b. (7-1-24)

b. Treatment: (7-1-24)

i. Chemical addition lacks emergency shut-off as specified in Subsection 531.02.b.ii. (7-1-24)

ii. Chemical addition is not flow proportioned where the rate of flow or chemical demand is not reasonably constant, as specified in Subsection 531.02.b.ii. (7-1-24)

c. Distribution system: A minimum system pressure of twenty (20) psi is not maintained throughout the distribution system as specified in Subsection 552.01.b. (7-1-24)

d. Finished water storage: Roof leaking, as specified in Subsections 544.09 and 544.09.c. (7-1-24)

e. Pumps, pump facilities, and controls: A pump house must be protected from contamination and unauthorized entry, as specified in Subsection 541.01. (7-1-24)

f. Monitoring, reporting, and data verification: Repeated failure to collect the required number and type of Revised Total Coliform Rule samples during the most recent two (2) year period, as specified in ~~Subsection 100.01~~ Section 119. ~~(7-1-24)~~( )

g. PWS management and operation: History of frequent depressurization in the distribution system in violation of Subsection 552.01. (7-1-24)

h. Operator compliance with state licensing requirements: The PWS does not have a properly licensed responsible charge operator as required in Subsection ~~554~~050.02. ~~(7-1-24)~~( )

04. Response Required. After notification from the Department of significant deficiencies, the owner of a PWS must respond in writing, describing how and on what schedule the PWS will address all significant deficiencies, not later than forty-five (45) days for PWSs using surface water or groundwater under the direct influence of surface water or thirty (30) days for PWSs only using groundwater. (7-1-24)

05. Consultation with the Department. PWS owners must consult with the Department prior to taking specific corrective actions in response to significant deficiencies identified during a sanitary survey, unless such corrective actions are specified in detail by the Department in its written notification under Subsection ~~302~~200.02. ~~(7-1-24)~~( )

06. Violation. Failure to address significant deficiencies identified in a sanitary survey is a violation of these rules. (7-1-24)

~~303~~201. – 499. (RESERVED)

~~**304. COMPOSITE CORRECTION PROGRAM (CCP).**~~
~~40 CFR 141.563 is incorporated by reference. In accordance with 40 CFR 142.16(g)(1), the Department has authority to require the owner of a PWC to conduct a composite correction program, as defined in Section 003, for the purpose of identifying and correcting deficiencies in water treatment and distribution. Composite Correction Programs consist of a Comprehensive Performance Evaluation (CPE) and Comprehensive Technical Assistance (CTA).~~ ~~(7-1-24)~~

~~**01. Comprehensive Performance Evaluation (CPE)**. The CPE is conducted to identify factors that may be adversely impacting a plant's capability to achieve compliance. It must emphasize approaches that can be implemented without significant capital improvements. The CPE assesses plant performance based capabilities and associated administrative and operation and management practices.~~ ~~(7-1-24)~~

~~**02. Comprehensive Technical Assistance (CTA)**. The CTA consists of follow up to the CPE results, implementation of process control priority setting techniques, and long-term involvement to systematically train staff and administrators.~~ ~~(7-1-24)~~

~~**305. COLIFORM TREATMENT TECHNIQUE TRIGGERS AND ASSESSMENT REQUIREMENTS FOR PROTECTION AGAINST POTENTIAL FECAL CONTAMINATION.**~~
~~40 CFR 141.859, excluding 40 CFR 141.859(a)(2)(iii), is incorporated by reference.~~ ~~(7-1-24)~~

~~**01. Requirements For Assessments**. 40 CFR 141.859(b) is incorporated by reference.~~ ~~(7-1-24)~~

~~**a.** Level 1 and 2 assessments must be conducted consistent with any Department directives that tailor specific assessment elements with respect to the size and type of the PWS and the size, type, and characteristics of the distribution system.~~ ~~(7-1-24)~~

~~**b.** Level 1 Assessment. 40 CFR 141.859(b)(3) is incorporated by reference.~~ ~~(7-1-24)~~

~~**c.** Level 2 Assessment. 40 CFR 141.859(b)(4) is incorporated by reference.~~ ~~(7-1-24)~~

i. The Department will schedule and conduct Level 2 assessments for an E.coli treatment technique trigger in unless the Department approves another party to conduct the assessment as outlined in Subsection 305.02. (7-1-24)

ii. A second or any additional triggered Level 2 Assessment within a rolling twelve-month period must be conducted by a Department approved third party even if the PWS owner has staff or management approved under Subsection 305.02. (7-1-24)

02. Approved Parties for Level 2 Assessments. The PWS may conduct a Level 2 assessment if the PWS has staff or management with the certification or qualifications outlined in this Subsection or if the PWS hires parties that meet the qualifications in this Subsection. The following parties are approved by the Department to conduct Level 2 assessments: (7-1-24)

a. The Department or persons contracted with the Department who are trained to conduct sanitary surveys; (7-1-24)

b. Currently licensed operators in good standing that are licensed through the Idaho Division of Occupational and Professional Licenses with a drinking water classification of Distribution I through IV or Treatment I through IV and that are licensed at least to the classification level of the PWS requiring the Level 2 assessment; or (7-1-24)

c. Licensed professional engineers licensed by the state of Idaho and qualified by education and experience in the specific technical fields involved in these rules. (7-1-24)

306. – 309. (RESERVED)

310. ENHANCED FILTRATION AND DISINFECTION – SYSTEMS SERVING FEWER THAN TEN THOUSAND PEOPLE.
40 CFR 141, Subpart T, is incorporated by reference. (7-1-24)

311. ENHANCED TREATMENT FOR CRYPTOSPORIDIUM – LONG TERM 2 ENHANCED SURFACE WATER TREATMENT RULE.
40 CFR Part 141, Subpart W, is incorporated by reference. (7-1-24)

01. Cryptosporidium Treatment Credit for Approved Watershed Control Program. The Department will award 0.5 (zero point five) logs cryptosporidium removal credit to systems that have a Department approved Watershed Control Program. Requirements for a watershed control program are set forth in 40 CFR 141, Subpart W. Guidance on how to develop a watershed control program and obtain Department approval is provided in "Implementation Guidance for the Long Term 2 Enhanced Surface Water Treatment Rule," as referenced in Section 002. (7-1-24)

02. Assessment of Significant Changes in the Watershed. As part of the sanitary survey process set forth in Section 302, the Department, or an agent approved by the Department, will assess significant changes in the watershed of a surface water system that occurred since the PWS conducted source water monitoring. If changes in the watershed have the potential to significantly increase contamination of the source water with cryptosporidium, the Department will consult with the PWS owner on follow-up actions that may be required under 40 CFR 141, Subpart W, including, but not limited to, source water monitoring or additional treatment requirements. "Implementation Guidance for the Long Term 2 Enhanced Surface Water Treatment Rule," as referenced in Section 002, provides a description of factors that will be considered by the Department when making an assessment of changes in the watershed. These factors include, but are not limited to the following: (7-1-24)

a. New IPDES permits or changes in existing IPDES permits that involve increased loading of contaminants. (7-1-24)

b. Changes in land use patterns. (7-1-24)

~~**c.** Changes in agricultural cropping, chemical application, or irrigation practices. (7-1-24)~~

~~**d.** Changes in other non-point discharge source activities (such as grazing, manure application, commercial or residential development). (7-1-24)~~

~~**e.** Stream or riverbed modifications. (7-1-24)~~

~~**f.** IPDES permit violations at wastewater treatment plants or confined animal feedlot operations. (7-1-24)~~

~~**g.** Dramatic natural events such as floods, forest fires, earthquakes, and landslides that may transport or expose contaminants. (7-1-24)~~

~~**h.** Prolonged drought conditions that may warrant special preparatory measures to minimize impacts from waste accumulations that are washed into source waters when precipitation returns. (7-1-24)~~

~~**i.** Accidental or illegal waste discharges and spills. (7-1-24)~~

~~**312. – 319. (RESERVED)**~~

~~**320. DISINFECTANT RESIDUALS, DISINFECTION BYPRODUCTS, AND DISINFECTION BYPRODUCT PRECURSORS.**~~
~~This Section incorporates 40 CFR Part 141, Subpart L, of the National Primary Drinking Water Regulations, known as the Disinfectants and Disinfection Byproducts Rule. (7-1-24)~~

~~**01. General Requirements**. 40 CFR 141.130 is incorporated by reference. (7-1-24)~~

~~**02. Analytical Requirements**. 40 CFR 141.131 is incorporated by reference. DPD colorimetric test kits may be used to measure residual disinfectant concentrations for chlorine, chloramines, and chlorine dioxide. (7-1-24)~~

~~**03. Monitoring Requirements**. 40 CFR 141.132 is incorporated by reference. (7-1-24)~~

~~**04. Compliance Requirements**. 40 CFR 141.133 is incorporated by reference. (7-1-24)~~

~~**05. Treatment Techniques for Control of Disinfection Byproduct (DBP) Precursors**. 40 CFR 141.135 is incorporated by reference. (7-1-24)~~

~~**321. INITIAL DISTRIBUTION SYSTEM EVALUATIONS.**~~
~~40 CFR Part 141, Subpart U, is incorporated by reference. "Implementation Guidance for the Stage 2 Disinfectants and Disinfection Byproducts Rule," as referenced in Section 002, provides assistance to PWS owners and operators in understanding and achieving compliance with the requirements of 40 CFR 141, Subpart U. (7-1-24)~~

~~**322. STAGE 2 DISINFECTION BYPRODUCTS REQUIREMENTS.**~~
~~40 CFR Part 141, Subpart V, is incorporated by reference. "Implementation Guidance for the Stage 2 Disinfectants and Disinfection Byproducts Rule," as referenced in Section 002, provides assistance to public water system owners and operators in understanding and achieving compliance with the requirements of 40 CFR Part 141, Subpart V. (7-1-24)~~

~~**323. GROUND WATER RULE.**~~
~~40 CFR 141, Subpart S is incorporated by reference. "Implementation Guidance for the Drinking Water Program – Ground Water Rule," as referenced in Section 002, provides assistance to PWS owners and operators in understanding and achieving compliance with the requirements of 40 CFR 141, Subpart S. (7-1-24)~~

~~**01. Discontinuation of Treatment**. PWSs that wish to discontinue four (4)-log virus treatment at a groundwater source must meet the following criteria. Groundwater sources on which treatment has been discontinued will be subject to the triggered source water monitoring requirements of 40 CFR 141, Subpart S. (7-1-24)~~

~~**a.** Demonstration that any known source of contamination has been removed.~~ ~~(7-1-24)~~

~~**b.** Demonstration that structural deficiencies of the well have been rehabilitated and no longer exist.~~ ~~(7-1-24)~~

~~**c.** Provide evidence that the well is drawing from a protected or confined aquifer.~~ ~~(7-1-24)~~

~~**d.** Submit results of one (1) year of monthly monitoring for a fecal indicator organism during which no positive results occurred.~~ ~~(7-1-24)~~

~~**02. Chlorine Purging Prior to Triggered Source Sampling**. 40 CFR 141.402(e) requires that groundwater source samples be collected at a location prior to any treatment. Pursuant to this requirement PWSs that add chlorine to a source, either in the well bore or near enough to the wellhead that chlorinated water may backflow into the well, must ensure that all chlorine residual has been purged prior to taking a triggered source water sample. This must be accomplished by measuring chlorine residual in the source water until a reading of zero is obtained and be recorded in the space provided for chlorine residual on the sample submittal form.~~ ~~(7-1-24)~~

~~**324. – 349. (RESERVED)**~~

~~**350. CONTROL OF LEAD AND COPPER.**~~
~~40 CFR 141 Subpart I is incorporated by reference.~~ ~~(7-1-24)~~

~~**351. CONTROL OF PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS).**~~
~~40 CFR 141 Subpart Z is incorporated by reference.~~ ~~(7-1-25)~~

~~**352. – 399. (RESERVED)**~~

~~**400. SECONDARY MCLS.**~~
~~40 CFR 143, Subpart A, is incorporated by reference.~~ ~~(7-1-24)~~

~~**401. – 449. (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:

Minimum Distances from a Public Water System Well	
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
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:

STEEL PIPE					
	DIAMETER (inches)		THICKNESS (inches)	WEIGHT PER FOOT (pounds)	
SIZE	External	Internal		Plain Ends (calculated)	With Threads and Couplings (nominal)
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	
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 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. (7-1-25)

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 must not contain weighting agents to increase solids content 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. (7-1-25)

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 and organic chemical contaminants, 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, 100.06, and 100.14,~~ Sections 100 and 101 unless analysis is waived pursuant to ~~Subsection 100.07~~ Section 101. ~~(7-1-25)~~( )

ii. Non-transient Non-community systems must submit results of analysis for total coliform, 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~~ Sections 100 and 101 unless analysis is waived pursuant to ~~Subsection 100.07~~ Section 101. ~~(7-1-25)~~( )

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~~ Sections 100 and 101. ~~(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 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; (7-1-25)

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)

(BREAK IN CONTINUITY OF SECTIONS)

518. ADDITIONAL DESIGN CRITERIA FOR SURFACE SOURCES.
Performance criteria for surface water treatment facilities are set forth in Sections ~~300~~104, ~~301~~112, and ~~310~~115. Surface water treatment systems must comply with applicable general design requirements in Section 503. In addition, the following design requirements apply specifically to surface water treatment facilities: ~~(7-1-24)~~( )

01. Engineering Design Requirements. The PWS must ensure that filtration and disinfection facilities for surface water or groundwater under the direct influence of surface water are designed, constructed and operated in accordance with all applicable engineering practices designated by the Department. The design of the water treatment plant must consider the worst raw water quality conditions that are likely to occur during the life of the facility. (7-1-24)

02. Removal of Pathogens. Filtration facilities (excluding disinfection) must be designed, constructed and operated to achieve at least two (2) log removal of Giardia lamblia cysts, two (2) log removal of Cryptosporidium oocysts, and one (1) log removal of viruses, except as allowed under Subsection 518.09.b. (7-1-24)

03. Disinfection. Disinfection facilities must be designed, constructed and operated so as to achieve at least point five zero (0.50) log inactivation of Giardia lamblia cysts; and (7-1-24)

a. Two (2) log inactivation of viruses if using conventional and slow sand filtration technology; or (7-1-24)

b. Three (3) log inactivation of viruses if using direct and diatomaceous earth filtration technology; or (7-1-24)

c. Four (4) log inactivation of viruses if using alternate filtration technology. (7-1-24)

d. Four (4) log inactivation of viruses if filtration treatment is not used. (7-1-24)

04. Enhanced Disinfection. Higher levels of disinfection than specified under Subsection 518.03 may be required by the Department to provide adequate protection against Giardia lamblia and viruses. (7-1-24)

05. Filter to Waste. For plants constructed after December 31, 1992, each filter unit must be capable of filter to waste. For plants constructed prior to December 31, 1992, each filter unit must be capable of filter to waste

unless the PWS demonstrates through continuous turbidity monitoring or other means acceptable to the Department that water quality is not adversely affected following filter backwashing, cleaning or media replacement. (7-1-24)

06. Continuous Turbidity Monitoring. For conventional, direct, membrane, and diatomaceous earth filtration technology, equipment must be provided to continuously measure the turbidity of each filter unit. (7-1-24)

07. Continuous Monitoring of Disinfectant. Equipment must be provided and operated for continuous measurement of disinfectant residual prior to entry to the distribution system, unless the PWS serves fewer than three thousand three hundred (3,300) people. (7-1-24)

08. Continuous Operation Required. Diatomaceous earth filtration facilities must include an alternate power source with automatic startup and alarm, or be designed in a manner to ensure continuous operation. (7-1-24)

09. Acceptable Technology. The purveyor must select a filtration technology acceptable to the Department. (7-1-24)

a. Conventional, direct, slow sand, diatomaceous earth, and membrane filtration technologies are generally acceptable to the Department on a case-by-case basis. (7-1-24)

b. Alternate filtration technologies may be acceptable if the purveyor demonstrates all of the following to the satisfaction of the Department: (7-1-24)

i. That the filtration technology: (7-1-24)

(1) Is certified and listed by the National Sanitation Foundation (NSF) under Standard 53, Drinking Water Treatment Units - Health Effects, as achieving the NSF criteria for cyst reduction; or (7-1-24)

(2) Removes at least ninety-nine percent (99%) (two (2) logs) of Cryptosporidium oocysts or surrogate particles and removes or inactivates at least ninety-nine percent (99%) (two (2) logs) of Giardia lamblia cysts or Giardia lamblia cyst surrogate particles in a challenge study acceptable to the Department. (7-1-24)

ii. Based on field studies or other means acceptable to the Department, it must be demonstrated that the filtration technology has the following capabilities: (7-1-24)

(1) In combination with disinfection treatment, consistently achieves at least ninety-nine percent (99%) (two (2) logs) removal of Cryptosporidium oocysts or surrogate particles and at least ninety-nine and nine tenths percent (99.9%) (three (3) logs) removal or inactivation of Giardia lamblia cysts and ninety-nine and ninety-nine hundredths percent (99.99%) (four (4) logs) removal or inactivation of viruses; and (7-1-24)

(2) Meets the turbidity performance requirements of 40 CFR 141.73 (b). (7-1-24)

10. Pilot Studies. The PWS must conduct pilot studies in accordance with the following requirements and in accordance with Subsection 501.19 for all proposed filtration facilities and structural modifications to existing filtration facilities, unless the Department modifies the requirements in writing: (7-1-24)

a. The PWS must obtain the Department's approval of the pilot study plan before the pilot filter is constructed and before the pilot study is undertaken. (7-1-24)

b. The design and operation of the pilot study must be overseen by an Idaho licensed professional engineer. (7-1-24)

c. The PWS’s pilot study plan must identify at a minimum: (7-1-24)

i. The objectives of the pilot study; (7-1-24)

ii. Pilot filter design; (7-1-24)

iii. Water quality and operational parameters to monitor; (7-1-24)

iv. Amount of data to collect; and (7-1-24)

v. Qualifications of the pilot plant operator. (7-1-24)

d. The PWS must ensure that the pilot study is: (7-1-24)

i. Conducted to simulate conditions of the proposed full-scale design; (7-1-24)

ii. Conducted for at least twelve (12) consecutive months or for a shorter period upon approval by the Department; (7-1-24)

iii. Conducted to evaluate the reliability of the treatment system to achieve applicable water quality treatment criteria specified for filtration systems in 40 CFR 141.72 and 40 CFR 141.73; and (7-1-24)

iv. Designed and operated in accordance with good engineering practices documented in references acceptable to the Department. (7-1-24)

11. Redundant Disinfection. Surface water systems constructed after July 1, 1985, are required to install redundant disinfection components or maintain a backup unit on site as required to maintain constant application of disinfectant whenever water is being delivered to the distribution system. (7-1-24)

(BREAK IN CONTINUITY OF SECTIONS)

552. OPERATING CRITERIA FOR PUBLIC WATER SYSTEMS.

01. Quantity and Pressure Requirements. Design requirements regarding pressure analysis are found in Subsection 542.13. (7-1-24)

a. The minimum capacity of a PWS must be at least eight hundred (800) gallons per day per residence. (7-1-24)

i. The minimum capacity of eight hundred (800) gallons per day is the design maximum day demand rate exclusive of irrigation and fire flow requirements. (7-1-24)

ii. The minimum capacity of eight hundred (800) gallons per day is only acceptable if the PWS has equalization storage of finished water in sufficient quantity to compensate for the difference between a PWS's maximum pumping capacity and peak hour demand. (7-1-24)

iii. The design capacity of a PWS for material modifications may be less than eight hundred (800) gallons per day if the PWS owner provides information that demonstrates to the Department's satisfaction the maximum day demand for the PWS, exclusive of irrigation and fire flows, is less than eight hundred (800) gallons per day per residence. (7-1-24)

b. All PWS owners must meet the following pressure requirements: (7-1-24)

i. Be capable of providing sufficient water during maximum day demand conditions, including fire flow where provided, to maintain a minimum pressure of twenty (20) psi throughout the distribution system, at ground level, as measured at the service connection or along the property line adjacent to the consumer's premises. (7-1-24)

ii. If an initial investigation by the water supplier fails to discover the causes of inadequate or excessive pressure, the Department may require the water supplier to conduct a local pressure monitoring study to

diagnose and correct pressure problems. Compliance with these requirements by PWSs that do not have a meter vault or other point of access at the service connection or along the property line adjacent to the consumer's premises where pressure in the distribution system can be reliably measured must be determined by measurements within the consumer's premises, or at another representative location acceptable to the Department. (7-1-24)

iii. Copies of pressure monitoring study reports required under Subsection 552.01.b.iii. detailing study results and any resulting corrective actions planned or performed by the PWS owner must be submitted to the Department in accordance with these rules. (7-1-24)

iv. The following PWSs or service areas of PWSs must maintain a minimum pressure of forty (40) psi throughout the distribution system, during peak hour demand conditions, excluding fire flow, measured at the service connection or along the property line adjacent to the consumer's premises. (7-1-24)

(1) Any PWS constructed or substantially modified after July 1, 1985. (7-1-24)

(2) Any new service areas. (7-1-24)

(3) Any PWS that is undergoing material modification where it is feasible to meet the pressure requirements as part of the material modification. (7-1-24)

v. Any newly constructed PWSs, or portions of existing systems that are materially modified after July 1, 2024, must keep static pressure within the distribution system below eighty (80) psi. Pressures above eighty (80) psi must be controlled by pressure reducing valve stations installed in the distribution main. In areas where failure of installed pressure reducing valve stations result in extremely high pressure, pressure relief valves may be required. The Department may approve the use of pressure reducing devices at individual service connections on a case-by-case basis, if it can be demonstrated that higher pressures in portions of the distribution system are required for efficient PWS operation. If PWS modification will cause pressure to routinely exceed eighty (80) psi, or if a check valve or an individual pressure reducing device is added to the service line, the PWS owner must notify affected customers. Notification may include reasons for the elevated pressure, problems or damage that elevated pressure can inflict on appliances or plumbing systems, and suggested procedures or mitigation efforts affected property owners may initiate to minimize problems or damage. (7-1-24)

vi. The Department may allow the installation of booster pump systems at individual service connections on a case-by-case basis. However, such an installation may only occur with the full knowledge and agreement of the PWS owner, including assurance by the PWS that the individual booster pump will cause no adverse effects on PWS operation. (7-1-24)

vii. For elevated storage tanks, pressure calculations during peak hour demand are based on the lowest water level after both operational storage and equalization storage have been exhausted. Pressure calculations during fire flow demands are based on the lowest water level after operational storage, equalization storage, and fire suppression storage have been exhausted. (7-1-24)

viii. For hydropneumatic tanks, pressure calculations are based on the lowest pressure of the pressure cycle and this requirement must be noted in the operation and maintenance manual. (7-1-24)

c. Any PWS designed to provide fire flows must ensure that such flows are compatible with the water demand of existing and planned fire-fighting equipment and fire fighting practices in the area served by the PWS. (7-1-24)

d. Irrigation Flows. (7-1-24)

i. Any PWS constructed after November 1, 1977, must be capable of providing water for uncontrolled, simultaneous foreseeable irrigation demand, which includes all acreage that the PWS is designed to irrigate. (7-1-24)

(1) The Department must concur with assumptions regarding the acreage to be irrigated. In general, an assumption that no outside watering will occur is considered unsound and is unlikely to be approved. (7-1-24)

(2) An assumption of minimal outside watering, as in recreational subdivisions, may be acceptable if design flows are adequate for maintenance of "green zones" for protection against wildland fire. (7-1-24)

ii. The Department may modify the requirement of Subsection 552.01.d.i. if: (7-1-24)

(1) A separate irrigation system is provided; or (7-1-24)

(2) The supplier of water can regulate the rate of irrigation through its police powers, and the PWS is designed to accommodate a regulated rate of irrigation flow. The Department may require the PWS to submit a legal opinion addressing the enforceability of such police powers. (7-1-24)

iii. If a separate non-potable irrigation system is provided for the consumers, all mains, hydrants and appurtenances must be easily identified as non-potable. The Department must concur with a plan to ensure that each new potable water service is not cross-connected with the irrigation system. (7-1-24)

02. Groundwater. (7-1-24)

a. PWSs supplied by groundwater, must treat water within the PWS by disinfection if the groundwater source is not protected from contamination. (7-1-24)

b. The Department may require disinfection for any existing PWS supplied by groundwater if the PWS has repeated E.coli MCL exceedances, and if the PWS does not appear adequately protected from contamination. Adequate protection will be determined based upon at least the following factors: (7-1-24)

i. Location of possible sources of contamination; (7-1-24)

ii. Size of the well lot; (7-1-24)

iii. Depth of the source of water; (7-1-24)

iv. Bacteriological quality of the aquifer; (7-1-24)

v. Geological characteristics of the area; and (7-1-24)

vi. Adequacy of development of the source. (7-1-24)

03. Operating Criteria. The operating criteria for PWSs that provide filtration are as follows: (7-1-24)

a. A project specific operation and maintenance manual must be provided as required in Subsection 501.12. See definition of Operation and Maintenance Manual in Section 003 for the typical contents of an operation and maintenance manual and the included operations plan. For the operations plan in the operation and maintenance manual, additional guidance for several types of filtration systems can be found in the Department's SWTR Compliance Guidance referenced in Subsection 002.02. (7-1-24)

b. The PWS must conduct monitoring specified by the Department before serving water to the public in order to protect the health of consumers served by the PWS. (7-1-24)

c. New treatment facilities must be operated in accordance with Subsection 552.03.a., and the PWS must conduct monitoring specified by the Department for a trial period specified by the Department before serving water to the public in order to protect the health of consumers served by the PWS. (7-1-24)

04. Disinfection. PWSs that regularly disinfect their water using chlorine are subject to the provisions of Section ~~320~~108. PWSs using surface water or groundwater under the direct influence of surface water, are subject to the disinfection requirements of Sections ~~300~~104 and 518. PWSs using chlorine, ozone, chlorine dioxide, or other disinfecting agents for the purposes of disinfection must meet the facility and design standards of Sections 530 and 531. PWSs using ultraviolet light for the purposes of disinfection must meet the facility and design standards of

Section 529. ~~(7-1-24)~~( )

a. PWSs using only ground water that add a disinfectant for the purpose of disinfection, as defined in Section 003, are subject to the following requirements: (7-1-24)

i. The PWS must demonstrate that it is routinely achieving four (4) logs (ninety-nine point ninety-nine percent) (99.99%)) inactivation/removal of viruses. The required effective contact time must be approved by the Department. This condition must be attainable even when the design capacity coincides with anticipated maximum disinfectant demands. (7-1-24)

ii. A detectable disinfectant residual must be maintained throughout the distribution system. PWSs disinfecting through ultraviolet light will need to maintain a supplemental disinfectant capable of maintaining a detectable disinfectant residual. (7-1-24)

iii. Analysis for disinfectant residual must be conducted at a location at or prior to the first service connection at least daily and records of these analyses are to be kept by the supplier of water for at least one (1) year. A report of all daily chlorine residual measurements for each calendar month must be submitted to the Department no later than the tenth day of the following month. The frequency of measuring disinfectant residuals must be sufficient to detect variations in demand or changes in water flow. (7-1-24)

iv. The Department may, in its discretion, require a treatment rate higher than that specified in Subsection 552.04.a.i. (7-1-24)

b. PWSs using only groundwater that add disinfectant for the purpose of maintaining a disinfectant residual in the distribution system, when the source(s) is not at risk of microbial contamination, are subject to analysis for disinfectant residual made at a frequency that is sufficient to detect variations in demand or changes in water flow. (7-1-24)

c. PWSs using only groundwater that add chlorine for other purposes, such as oxidation of metals or taste and odor control, when the source(s) is known to be free of microbial contamination, must ensure that chlorine residual entering the distribution system after treatment is less than four (4.0) mg/L. The requirements in Subsection 552.04.b.ii. also apply if the PWS maintains a chlorine residual in the distribution system. (7-1-24)

05. Fluoridation. (7-1-24)

a. Commercial sodium fluoride, sodium silico fluoride and hydrofluosilicic acid which conform to the applicable American Water Works Association (AWWA) Standards, incorporated by reference into these rules at Subsection 002.01, are acceptable. Use of other chemicals must be specifically approved by the Department.(7-1-24)

b. Fluoride compounds are to be stored in covered or unopened shipping containers. (7-1-24)

c. Provisions must be made to minimize the quantity of fluoride dust. Empty bags, drums, or barrels are to be disposed of in a manner that will minimize exposure to fluoride dusts. (7-1-24)

d. Daily records of flow and amounts of fluoride added must be kept. An analysis for fluoride in finished water must be made at least weekly. Records of these analyses are to be kept by the supplier of water for five (5) years. (7-1-24)

06. Cross Connection Control Program - Community Water Systems. The water purveyor is responsible through its cross connection control program to take reasonable and prudent measures to protect the PWS against contamination and pollution from cross connections through premises isolation, internal or in-plant isolation, fixture protection, or some combination of premises isolation, internal isolation, and fixture protection. Pursuant to Section 543, all suppliers of water for community PWSs must implement a cross connection control program to prevent the entrance to the PWS of materials known to be toxic or hazardous. The water purveyor is responsible to enforce the PWS's cross connection control program. The program will at a minimum include: (7-1-24)

a. An inspection program to locate cross connections and determine required suitable protection. For

new connections, PWS owners must verify suitable protection was installed prior to providing water service. (7-1-24)

b. Required installation and operation of adequate backflow prevention assemblies. Appropriate and adequate backflow prevention assembly types for various facilities, fixtures, equipment, and uses of water must be selected from the Uniform Plumbing Code, the AWWA Recommended Practice for Backflow Prevention and Cross Connection Control (M14), the USC Foundation Manual of Cross Connection Control, or other sources deemed acceptable by the Department. The assemblies must meet the requirements of Section 543 and comply with local ordinances. (7-1-24)

c. Annual inspections and testing of all installed backflow prevention assemblies by a tester licensed by a licensing authority recognized by the Department. Testing must be done in accordance with the test procedures published by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research. See the USC Foundation Manual of Cross-Connection Control referenced in Subsection 002.02. (7-1-24)

d. Discontinuance of service to any structure, facility, or premises where suitable backflow protection has not been provided for a cross connection. (7-1-24)

e. Assemblies that cannot pass annual tests or those found to be defective are to be repaired, replaced, or isolated within ten (10) business days. If the failed assembly cannot be repaired, replaced, or isolated within ten (10) business days, water service to the failed assembly must be discontinued. (7-1-24)

07. Cross Connection Control - Non-Community Water Systems. All suppliers of water for non-community water systems must ensure that cross connections do not exist or are isolated from the potable water system by an approved backflow prevention assembly. Backflow prevention assemblies must be inspected and tested annually for functionality by an Idaho licensed tester, as specified in Subsections 552.06.c. and 552.06.e. (7-1-24)

08. Start-up Procedures for Seasonal Systems ~~Subject To Subsections 100.01.a., c., and d~~. ~~(7-1-24)~~( )

a. All seasonal PWS owners must demonstrate completion of a Department approved start-up procedure, including start-up sampling, prior to serving water to the public. The PWS owner must submit information on a Department provided or approved form that includes a statement certifying that the PWS owner or operator followed proper start-up procedures. The form must be submitted to the Department within 30 (thirty) days following the PWS's start-up date. Start-up sampling must include total coliform samples submitted to a certified laboratory demonstrating the absence of total coliform within thirty (30) days prior to serving water to the public. (7-1-24)

b. The Department may exempt any seasonal PWS from Subsection 552.08.a. if the entire distribution system remains pressurized during the entire period that the PWS is not operating, except that the PWSs that monitor less frequently than monthly must still monitor during the vulnerable period designated by the Department. The Department may exempt a seasonal PWS from Subsection 552.08.a. if the owner or operator of the PWS meets all of the following conditions: (7-1-24)

i. Requests an exemption in writing to the Department for approval; (7-1-24)

ii. Demonstrates a clean compliance history as defined in Section 003 for a minimum of five (5) years; (7-1-24)

iii. Has no uncorrected significant deficiencies from the most recent sanitary survey; and (7-1-24)

iv. Total coliform samples submitted to a certified laboratory within 30 (thirty) days prior to serving water to the public demonstrate the absence of total coliform. (7-1-24)

~~553. CLASSIFICATION OF WATER SYSTEMS.~~

~~**01. System Classification Required**. The Department will classify community, non-transient non-community, and surface water PWSs based on indicators of potential health risks.~~ ~~(7-1-24)~~

~~**02. Classification Criteria**. PWSs are classified under a system that uses the following criteria: (7-1-24)~~

~~**a.** Complexity, size, and type of source water for treatment facilities. (7-1-24)~~

~~**b.** Complexity and size of distribution systems. (7-1-24)~~

~~**c.** Other criteria deemed necessary to completely classify PWSs. (7-1-24)~~

~~**d.** The Department will develop guidelines for applying the criteria set forth in Section 553. (7-1-24)~~

~~**03. Classification Review.** The Department will review PWS classifications on a minimum five (5) year frequency. (7-1-24)~~

~~**554. LICENSED OPERATOR REQUIREMENTS.**~~

~~**01. Licensed Operator Required**. Owners of all community, non-transient non-community, and surface water or groundwater sources directly influenced by surface water must place the direct supervision of their PWS under the responsible charge of a properly licensed operator at all times. When the responsible operator is not available, the PWS owner must designate a substitute responsible operator. (7-1-24)~~

~~**02. Responsible Charge Operator License Requirement**. An operator in responsible charge of a PWS must hold a valid Idaho license equal to or greater than the classification of the PWS where the responsible charge operator is in charge as defined in Section 003. (7-1-24)~~

~~**03. Water Operator License Requirement**. All operating personnel at PWSs subject to these requirements making process control/ system integrity decisions about water quality or quantity that can affect public health must hold a valid Idaho license. (7-1-24)~~

~~**04. Water Operator License Upgrade Allowance**. A twelve (12) month period will be provided to meet increased drinking water distribution system operator licensure requirements when a higher licensure level is required based on a population increase if the following requirements are met: (7-1-24)~~

~~**a.** The licensure increase is triggered solely by a population increase; and (7-1-24)~~

~~**b.** The responsible charge operator of the PWS at the time the distribution licensure requirement increases remains the responsible charge operator throughout the twelve (12) month time frame. (7-1-24)~~

~~**555. -- 559. (RESERVED)**~~

~~**560. CONTRACTING FOR SERVICES.**~~
~~PWS owners who contract with persons to provide responsible charge operators and substitute responsible charge operators need to submit proof of such contract to the Department prior to the contracted person performing any services at the PWS. (7-1-24)~~

~~**561. -- 562. (RESERVED)**~~

~~**563. ADVISORY GROUP.**~~
~~Ongoing stakeholder involvement will be provided through the existing drinking water advisory committee at the Department. (7-1-24)~~

5~~64~~53. -- 999. (RESERVED)