DOCKET NO. 58-0108-0602 – REVISIONS TO PROPOSED RULE

003. DEFINITIONS.
The definitions set forth in 40 CFR 141.2, revised as of July 1, 2002, are herein incorporated by reference except for the definition of the terms "action level," "disinfection," "noncommunity water system," and "person". (5-3-03)

01. Action Level. The concentration of lead or copper in water that determines, in some cases, whether a water system must install corrosion control treatment, monitor source water, replace lead service lines, or undertake a public education program. (12-10-92)

02. Administrator. The Administrator of the United States Environmental Protection Agency. (4-5-00)

03. Annual Samples. Samples that are required once per calendar year. (12-10-92)

04. Annular Opening. As used in well construction, this term refers to the nominal inside diameter of the borehole minus the outside diameter of the casing divided by two (2). ( )

045. 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. (5-3-03)

056. Available. Based on system size, complexity, and source water quality, a properly licensed operator must be on site or able to be contacted as needed to initiate the appropriate action in a timely manner.(4-6-05)

067. Average ~~Daily~~ Day Demand. The volume of water used by a system on an average day based on a one (1) year period. ~~(12-10-92)~~( )

078. Backflow. The reverse from normal flow direction in a plumbing system or water system caused by back pressure or back siphonage. (12-10-92)

089. Board. The Idaho Board of Environmental Quality. (5-3-03)

~~09~~10. Capacity. The capabilities required of a public drinking water system in order to achieve and maintain compliance with these rules and the requirements of the federal Safe Drinking Water Act. It is divided into three (3) main elements: (4-5-00)

a. Technical capacity means the system 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 system personnel to adequately operate and maintain the system and to otherwise implement technical knowledge. Training of operator(s) is required, as appropriate, for the system size and complexity. (4-6-05)

b. Financial capacity means the financial resources of the water system, including an appropriate budget, rate structure, cash reserves sufficient for future needs and emergency situations, and adequate fiscal controls. (4-5-00)

c. Managerial capacity means that the management structure of the water system embodies the aspects of water treatment operations, including, but not limited to; (4-5-00)

i. Short and long range planning; (4-5-00)

ii. Personnel management; (4-5-00)

iii. Fiduciary responsibility; (4-5-00)

iv. Emergency response; (4-5-00)

v. Customer responsiveness; (4-5-00)

vi. Source water protection; (4-5-00)

vii. Administrative functions such as billing and consumer awareness; and (4-5-00)

viii. Ability to meet the intent of the federal Safe Drinking Water Act. (4-5-00)

10~~1~~1. **Community Water System**. A public water system which serves at least fifteen (15) service connections used by year-round residents or regularly serves at least twenty-five (25) year-round residents. (12-10-92)

12. Components of Finished Water Storage. ( )

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

b. Effective Storage. Effective storage is all storage other than dead storage and is made up of the additive components described in paragraphs 003.12.c. through 003.12.f. ( )

c. Operational Storage. Operational storage supplies water when, under normal conditions, the sources are off. This component is the larger of: ( )

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 ( )

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

d. Equalization Storage. Storage of finished water in sufficient quantity to compensate for the difference between a water system's maximum pumping capacity and peak hour demand ~~daily usage~~. ( )

e. Fire Suppression Storage. The water needed to support fire flow in those systems that provide it. ( )

f. Standby Storage. Standby storage provides a measure of reliability or safety factor should sources fail or when unusual conditions impose higher than anticipated demands. ( )

11~~3~~. **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: (4-5-00)

a. Comprehensive Performance Evaluation (CPE). A thorough review and analysis of a treatment plant's performance-based capabilities and associated administrative, operation, and maintenance practices. It is conducted to identify factors that may be adversely impacting a plant's capability to achieve compliance and emphasizes approaches that can be implemented without significant capital improvements. The CPE must consist of at least the following components: assessment of plant performance; evaluation of major unit processes; identification and prioritization of performance limiting factors; assessment of the applicability of comprehensive technical assistance; and preparation of a CPE report. (4-5-00)

b. Comprehensive Technical Assistance (CTA). The implementation phase that is carried out if the CPE results indicate improved performance potential. During the CTA phase, the system 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. (4-5-00)

1~~2~~4. Compositing of Samples. The mixing of up to five (5) samples by the laboratory. (4-5-00)

1~~3~~5. 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. (5-3-03)

1~~4~~6. Confirmation Sample. A sample of water taken from the same point in the system as the original sample and at a time as soon as possible after the original sample was taken. (12-10-92)

1~~5~~7. Connection. Each structure, facility, or single family residence which is connected to a water system, and which is or could be used for domestic purposes, is considered a single connection. Multi-family dwellings and apartment, condominium, and office complexes are considered single connections unless individual units are billed separately for water by the water system, in which case each such unit shall be considered a single connection. (10-1-93)

1~~6~~8. Consumer. Any person served by a public water system. (12-10-92)

1~~7~~9. 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 systems and characterize the risks (if any) from exposure to contaminants detected in the drinking water in an accurate and understandable manner. (4-5-00)

***~~18~~*20. Contaminant**. Any physical, chemical, biological, or radiological substance or matter in water. (12-10-92)

***~~19~~*21. Cross Connection**. Any actual or potential connection or piping arrangement between a public or a consumer's potable water system and any other source or system through which it is possible to introduce into any part of the potable water system used water, water from any source other than an approved public water system, industrial fluid, gas or substance other than the intended potable water with which the system is supplied. Cross connections include bypass arrangements, jumper connections, removable sections, swivel or change-over devices and other temporary or permanent devices which, or because of which "backflow" can or may occur. (10-1-93)

22. Dead End Main. A distribution main of any diameter and length that does not loop back into the distribution system. ( )

2~~0~~3. Department. The Idaho Department of Environmental Quality. (12-10-92)

2~~1~~4. Director. The Director of the Department of Environmental Quality or his designee. (12-10-92)

2~~2~~5. Disinfection. Introduction of chlorine or other agent or process approved by the Department, in sufficient concentration or dosage, and for the time required to kill or inactivate pathogenic and indicator organisms. ~~*(5-3-03)*~~( )

2~~3~~6. Disinfection Profile. A summary of daily Giardia lamblia inactivation through the drinking water treatment plant. The procedure for developing a disinfection profile is contained in 40 CFR 141.172 and 40 CFR 141.530-141.536. (5-3-03)

2~~4~~7. Distribution System. Any combination of pipes, tanks, pumps, and other equipment which delivers water from the source(s) and/or treatment facility(ies) to the consumer. Chlorination may be considered as a function of a distribution system. (3-16-04)

28. Drinking Water. Means "water for human consumption". ( )

2~~5~~9. 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. (12-10-92)

~~26~~30. DWIMS. Idaho Department of Environmental Quality Drinking Water Information Management System. Replaced by SDWISS April 2001. (3-15-02)

~~27~~31. Enhanced Coagulation. The addition of sufficient coagulant for improved removal of disinfection byproduct precursors by conventional filtration treatment. Conventional filtration treatment is defined in 40 CFR 141.2. (5-3-03)

~~28~~32. Enhanced Softening. The improved removal of disinfection byproduct precursors by precipitative softening. (4-5-00)

~~***29. Equalization Storage**. Storage of finished water in sufficient quantity to compensate for the difference between a water system's maximum pumping capacity and peak daily usage. (4-6-05)~~

3~~0~~3. Exemption. A temporary deferment of compliance with a maximum contaminant level or treatment technique requirement which may be granted only if the system demonstrates to the satisfaction of the Department that the system cannot comply due to compelling factors and the deferment does not cause an unreasonable risk to public health. (12-10-92)

34. Facility Plan. The facility plan for a public drinking water system 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. ( )

3~~1~~5. Facility Standards and Design Standards. Facility standards and design standards are described in Sections 5~~49~~00 through 552 of these rules. Facility and design standards found in Sections 5~~49~~00 through 552 of these rules must be followed in the planning, design, construction, and review of public drinking water facilities. ~~*(4-11-06)*~~( )

3~~2~~6. Fee Assessment. A charge assessed on public drinking water systems based on a rate structure calculated by system size. (10-1-93)

3~~3~~7. Filter Profile. A graphical representation of individual filter performance, based on continuous turbidity measurements or total particle counts versus time for an entire filter run, from startup to backwash inclusively, that includes an assessment of filter performance while another filter is being backwashed. (4-5-00)

38. Finished Water. Water that has completed all treatment processes and is ready for delivery to consumers. ( )

39. 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. ( )

3~~4~~40. GAC10. Granular activated carbon filter beds with an empty bed contact time of ten (10) minutes based on average daily flow and a carbon reactivation frequency of every one hundred eighty (180) days. (4-5-00)

3~~5~~41. Groundwater System. A public water system which is supplied exclusively by a groundwater source or sources. (12-10-92)

***~~36~~*42. Groundwater Under the Direct Influence of Surface Water**. Any water beneath the surface of the ground with significant occurrence of insects or other macroorganisms, algae, or large diameter pathogens such as Giardia lamblia or Cryptosporidium, or significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH which closely correlate to climatological or surface water conditions.

Direct influence must be determined for individual sources in accordance with criteria established by the State. The State determination of direct influence may be based on site-specific measurements of water quality and/or documentation of well construction characteristics and geology with field evaluation. (5-3-03)

~~37~~43. **Haloacetic Acids (Five) (HAA5)**. The sum of the concentrations in milligrams per liter of the haloacetic acid compounds (monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid) rounded to two (2) significant figures after addition. (4-5-00)

~~38~~44. **Health Hazards**. Any condition which creates, or may create, a danger to the consumer's health. Health hazards may consist of, but are not limited to, design, construction, operational, structural, collection, storage, distribution, monitoring, treatment or water quality elements of a public water system. See also the definition of Significant Deficiency, which refers to a health hazard identified during a sanitary survey. (5-3-03)

~~39~~45. **Inorganic**. Generally refers to compounds that do not contain carbon and hydrogen. (12-10-92)

~~40~~6. **Laboratory Certification Reciprocity**. Acceptance of a laboratory certification made by another state. Laboratory reciprocity may be granted to laboratories outside of Idaho after application, proof of home state certification, and EPA performance evaluation results are submitted and reviewed. Reciprocity must be renewed after a time specified by the Idaho Laboratory Certification Officer to remain valid. (4-5-00)

~~41~~7. **License**. A physical document issued by the Idaho Bureau of Occupational Licenses certifying that an individual has met the appropriate qualifications and has been granted the authority to practice in Idaho under the provisions of Chapter 24, Title 54, Idaho Code. (4-6-05)

~~42~~8. **Log**. Logarithm to the base ten (10). (12-10-92)

~~43~~9. **Material Deviation**. A change from the design plans that significantly alters the type or location of facilities, requires engineering judgment to design, or impacts the public safety or welfare. (4-11-06)

~~44~~50. **Material Modification**. For the purpose of plan and specification review requirements as specified in Subsection ~~551.04~~ 504.03, those modifications of an existing public water system that are intended to increase system capacity or alter the methods or processes employed. ~~(4-11-06)~~( )

~~45~~51. **Maximum Contaminant Level (MCL)**. The maximum permissible level of a contaminant in water which is delivered to any user of a public water system. (11-17-05)T

~~46~~52. ***Maximum ~~Daily Consumption Rate~~ Day Demand***. *The average rate of consumption for the twenty-four (24) hour period in which total consumption is the largest ~~on record~~ for the design year.~~(12-10-92)~~( )*

~~47. **Maximum Hourly Demand**. The greatest volume of water used in any hour during a one (1) year period. (12-10-92)~~

~~48~~53. **Maximum Residual Disinfectant Level (MRDL)**. A level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. For chlorine and chloramines, a public water system is in compliance with the MRDL, when the running annual average of monthly averages of samples taken in the distribution system, computed quarterly, is less than or equal to the MRDL. For chlorine dioxide, a public water system is in compliance with the MRDL when daily samples are taken at the entrance to the distribution system and no two (2) consecutive daily samples exceed the MRDL. MRDLs are enforceable in the same manner as maximum contaminant levels under Section 1412 of the Safe Drinking Water Act. There is convincing evidence that addition of a disinfectant is necessary for control of waterborne microbial contaminants. Notwithstanding the MRDLs listed in 40 CFR 141.65, operators may increase residual disinfectant levels of chlorine or chloramines (but not chlorine dioxide) in the distribution system to a level and for a time necessary to protect public health to address specific microbiological contamination problems caused circumstances such as distribution line breaks, storm runoff events, source water contamination, or cross-connections. (4-5-00)

~~49~~54. Maximum Residual Disinfectant Level Goal (MRDLG). The maximum level of a disinfectant added for water treatment at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety. MRDLGs are nonenforceable health goals and do not reflect the benefit of the addition of the chemical for control of waterborne microbial contaminants. (4-5-00)

~~50~~5. Method Detection Limit (MDL). The lowest concentration which can be determined to be greater than zero with ninety-nine percent (99%) confidence, for a particular analytical method. (12-10-92)

~~51~~6. New System. Any water system that meets, for the first time, the definition of a public water system provided in Section 1401 of the federal Safe Drinking Water Act (42 U.S.C. Section 300f). This includes systems that are entirely new construction and previously unregulated systems that are expanding. (4-5-00)

~~52~~7. Noncommunity Water System. A public water system that is not a community water system. A non-community water system is either a transient noncommunity water system or a non-transient noncommunity water system. (4-5-00)

~~53~~8. Non-Potable Mains. The pipelines that collect and convey non-potable discharges from or to multiple service connections. (4-11-06)

~~54~~9. Non-Potable Services. The pipelines that convey non-potable discharges from individual facilities to a connection with the non-potable main. This term also refers to pipelines that convey non-potable water from a pressurized irrigation system, reclaimed wastewater system, and other non-potable systems to individual consumers. (4-11-06)

~~55~~60. Nontransient Noncommunity Water System. A public water system 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. (12-10-92)

~~56~~61. Nuclear Facility. Factories, processing plants or other installations in which fissionable material is processed, nuclear reactors are operated, or spent (used) fuel material is processed, or stored. (12-10-92)

~~57~~62. Operating Shift. That period of time during which water system operator decisions that affect public health are necessary for proper operation of the system. (4-5-00)

~~58~~63. Owner/Purveyor of Water/Supplier of Water. The person, company, corporation, association, or other organizational entity which holds legal title to the public water system, who provides, or intends to provide, drinking water to the customers and/or is ultimately responsible for the public water system operation. (4-6-05)

~~59~~64. Peak Hour~~ly Flow~~ Demand. The highest hourly flow ~~during any day~~, excluding fire flow, that a water system or distribution system pressure zone is likely to experience in the design year. ~~This includes fire flow where fire flow is provided.~~ ~~(12-10-92)~~( )

~~60~~5. Person. A human being, municipality, or other governmental or political subdivision or other public agency, or public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent or other legal representative of the foregoing or other legal entity. (12-10-92)

~~61~~6. Pesticides. Substances which meet the criteria for regulation pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, and any regulations adopted pursuant to FIFRA. For example, pesticides include, but are not limited to insecticides, fungicides, rodenticides, herbicides, and algaecides. (12-10-92)

67. Plant. A physical facility where drinking water or wastewater is treated or processed. ( )

~~62~~8. Point of Use (POU) Treatment Device. A treatment device applied to a single tap used for the purpose of reducing contaminants in drinking water at that one tap. (11-17-05)T

6~~3~~9. Point of Use (POU) Treatment System. A collection of POU treatment devices. (11-17-05)T

6~~4~~70. Potable ~~*Water*~~ Mains. Pipelines that deliver potable water to multiple service connections. ~~*(4-11-06)*~~( )

6~~5~~71. Potable ~~*Water*~~ Services. Pipelines that convey potable water from a connection to the potable water main to individual consumers. ~~*(4-11-06)*~~( )

72. Preliminary Engineering Report. The preliminary engineering report for a public drinking water system facility is a report that addresses specific portions of the system or facility for which modifications are being designed. Modifications may include, but are not limited to, significant changes to existing processes or facilities, system 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. However, the preliminary engineering report shall describe modifications to the facility plan that may be required as a result of the proposed project. ( )

~~6~~6~~6~~73. Public Notice. The notification of public water system consumers of information pertaining to that water system including information regarding water quality or compliance status of the water system. (12-10-92)

~~6~~74. Public Drinking Water System. 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 "noncommunity water system".

(4-6-05)

~~6~~8~~7~~75. Public Water System/Water System/System. Means "public drinking water system". (4-5-00)

76. Pump House. An above-grade structure containing important water system components, such as a well, hydropneumatic 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. ( )

~~6~~9~~7~~77. 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. (4-11-06)

78. Regulated Public Utility. For the purpose of these rules, any public water system that falls under the jurisdiction of the Idaho Public Utilities Commission and is subject to the rules thereof. ( )

7~~0~~9. Repeat Compliance Period. Any subsequent compliance period after the initial compliance period. (12-10-92)

~~7~~~~1~~80. Responsible Charge (RC). Responsible Charge means, active, daily on-site and/or on-call responsibility for the performance of operations or active, on-going, on-site and on-call direction of employees and assistants. (4-5-00)

~~72~~**81.** **Responsible Charge Operator**. An operator of a public drinking water system, designated by the system owner, who holds a valid license at a class equal to or greater than the drinking water system classification, who is in responsible charge of the public drinking water system. (4-6-05)

~~73~~**82.** **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 ~~*551.04.a.*~~ 504.03.b. of these rules, the qualified Idaho licensed professional engineer is also the reviewing authority. ~~*(4-11-06)*~~( )

~~74~~**83.** **Sampling Point**. The location in a public water system from which a sample is drawn. (12-10-92)

~~75~~**84.** **Sanitary Defects**. Any faulty structural condition which may allow the water supply to become contaminated. (12-10-92)

~~76~~**85.** **Sanitary Survey**. An onsite review of the water source, facilities, equipment, operation and maintenance of a public water system for the purpose of evaluating the adequacy of such source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water. The sanitary survey will include, but is not limited to the following elements: (4-5-00)

a. Source; (4-5-00)

b. Treatment; (4-5-00)

c. Distribution system; (4-5-00)

d. Finished water storage; (4-5-00)

e. Pumps, pump facilities, and controls; (4-5-00)

f. Monitoring and reporting and data verification; (4-5-00)

g. System management and operation; and (4-5-00)

h. Operator compliance with state requirements. (4-5-00)

~~77~~**86.** **SDWIS-State**. An acronym that stands for "Safe Drinking Water Information System-State Version". It is a software package developed under contract to the U.S. Environmental Protection Agency and used by a majority of U.S. states to collect, maintain, and report data about regulated public water systems. See also the definition of DWIMS. (5-3-03)

87. **Sewage**. The water-carried human or animal waste from residences, buildings, industrial establishments or other places, together with such ground water infiltration and surface water as may be present. ( )

~~78~~**88.** **Significant Deficiency**. As identified during a sanitary survey, any defect in a system'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, risk to health or safety, or that could affect the reliable delivery of safe drinking water. See also the definition of Health Hazards. (5-3-03)

~~79~~**89.** **Special Irrigation District**. An irrigation district in existence prior to May 18, 1994 that provides primarily agricultural service through a piped water system with only incidental residential or similar use where the system or the residential or similar users of the system comply with the exclusion provisions in Section 1401(4)(B)(i)(II) or (III) of the Safe Drinking Water Act. (4-6-05)

~~80~~**90.** **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. (12-10-92)

~~81~~91. Substitute Responsible Charge Operator. An operator of a public drinking water system who holds a valid license at a class equal to or greater than the drinking water system classification, designated by the system owner to replace and to perform the duties of the responsible charge operator when the responsible charge operator is not available or accessible. (4-6-05)

~~82~~92. Surface Water System. A public water system 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. (4-5-00)

~~83~~93. SUVA (Specific Ultraviolet Absorption) ~~(SUVA)~~. SUVA means Specific Ultraviolet Absorption at two hundred fifty-four (254) nanometers (nm), an indicator of the humic content of water. It is a calculated parameter obtained by dividing a sample's ultraviolet absorption at a wave length of two hundred fifty-four (254) nm (UV254) (in m=1) by its concentration of dissolved organic carbon (DOC) (in mg/l). ~~(4-5-00)~~( )

~~84~~94. Total Organic Carbon (TOC). Total organic carbon in mg/l measured using heat, oxygen, ultraviolet irradiation, chemical oxidants, or combinations of these oxidants that convert organic carbon to carbon dioxide, rounded to two (2) significant figures. (4-5-00)

~~85~~95. Transient Noncommunity Public Water System. A noncommunity water system which does not regularly serve at least twenty-five (25) of the same persons over six (6) months per year. ~~(10-1-93)~~( )

~~86~~96. Treatment Facility. Any place(s) where a public drinking water system or nontransient noncommunity water system alters the physical or chemical characteristics of the drinking water. Chlorination may be considered as a function of a distribution system. (4-5-00)

~~87~~97. Turbidity. A measure of the interference of light passage through water, or visual depth restriction due to 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. (12-10-92)

~~88~~98. Uncovered Finished Water Storage Facility. An uncovered tank, reservoir, or other facility that is used to store water that will undergo no further treatment except residual disinfection. (5-3-03)

~~89~~99. 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. (12-10-92)

~~90~~100. Variance. A temporary deferment of compliance with a maximum contaminant level or treatment technique requirement which may be granted only when the system 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. (12-10-92)

~~91~~101. Very Small Public Drinking Water System. A Community or Nontransient Noncommunity Public Water System that serves five hundred (500) persons or less and has no treatment other than disinfection or has only treatment which does not require any chemical treatment, process adjustment, backwashing or media regeneration by an operator (e.g. calcium carbonate filters, granular activated carbon filters, cartridge filters, ion exchangers). (4-5-00)

~~92~~102. Volatile Organic Chemicals (VOCs). VOCs are lightweight organic compounds that vaporize or evaporate easily. (10-1-93)

~~93~~103. Vulnerability Assessment. A determination of the risk of future contamination of a public drinking water supply. (12-10-92)

~~94~~104. Waiver. (12-10-92)

a. For the purposes of these rules, except Sections 5~~5~~00 through 552, "waiver" means the Department approval of a temporary reduction in sampling requirements for a particular contaminant.~~*(10-1-93)*~~( )

b. For purposes of Sections 5~~5~~00 through 552, "waiver" means a dismissal of any requirement of compliance. ~~*(12-10-92)*~~( )

c. For the purposes of Section 010, "waiver" means the deferral of a fee assessment for a public drinking water system. (10-1-93)

105. Wastewater. Unless otherwise specified, sewage, industrial waste, agricultural waste, and associated solids or combinations of these, whether treated or untreated, together with such water as is present. ( )

~~*95*~~**106. Water for Human Consumption**. Water that is used by humans for drinking, bathing for purposes of personal hygiene (including hand-washing), showering, cooking, dishwashing, and maintaining oral hygiene. In common usage, the terms "culinary water", "drinking water," and "potable water" are frequently used as synonyms.

(5-3-03)

~~*96*~~**107. Water Main**. A pipe within a public water system which is under the control of the system operator and conveys water to two (2) or more service connections. The collection of water mains within a given water supply is called the distribution system. (5-3-03)

~~*97*~~**108. Water Main Extension**. As used in Subsection ~~*551.04*~~ 504.03, an extension of the distribution system of an existing public water system that does not require a booster pumping station and is intended to increase the service area of the water system. ~~*(4-11-06)*~~( )

109. Watershed. The land area from which water flows into a stream or other body of water which drains the area. ( )

~~***98. Well House**. A structure containing important water system components, such as a well, hydropneumatic tank, booster pump, pump controls, flow meter, distribution line, or a treatment unit. Well houses are often called pump 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. (4-6-05)*~~

(BREAK IN CONTINUITY OF SECTIONS)

005. GENERAL PROVISIONS FOR WAIVERS, VARIANCES, AND EXEMPTIONS.

40 CFR 141.4, revised as of July 1, 2004, is herein incorporated by reference. (4-6-05)

01. Waivers. (12-10-92)

a. The Department may waive any requirement of Sections ~~550~~500 through 552 that is not explicitly imposed by Idaho Statute, if it can be shown to the satisfaction of the Department that the requirement is not necessary for the protection of public health, protection from contamination, and satisfactory operation and maintenance of a public water system. ~~(5-3-03)~~( )

(BREAK IN CONTINUITY OF SECTIONS)

008. HEALTH HAZARDS.

03. Standards. Design and construction revisions necessary to correct a health hazard or conditions which prevent, or may prevent, the detection of a health hazard, must be reviewed and approved by the Department, and comply with Sections ~~550 and 551~~501 through 552, unless otherwise specified by the Department.~~(10-1-93)~~( )

(BREAK IN CONTINUITY OF SECTIONS)

010. FEE SCHEDULE FOR PUBLIC DRINKING WATER SYSTEMS.
All regulated public drinking water systems shall pay an annual drinking water system fee. The fee shall be assessed to regulated public drinking water systems as provided in this section. (10-1-93)

07. Suspension of Services and Disapproval Designation. (7-1-97)

a. For any system delinquent in payment of fee assessed under Subsections 010.02 and 010.06, in excess of ninety (90) days, technical services provided by the Department may be suspended except for the following: (7-1-97)

i. Issuance of monitoring waivers; (7-1-97)

ii. Review and processing of engineering reports; and (7-1-97)

iii. Review of plans and specifications for design and construction as set forth in Sections ~~550 and 551~~501 through 552.
~~(7-1-97)~~( )

b. For any system delinquent in payment of fee assessed under Subsections 010.02 and 010.06, in excess of one hundred and eighty (180) days, the Department may suspend all technical services provided by the Department including any of the following: (7-1-97)

i. Review and processing of engineering reports; (7-1-97)

ii. Review of plans and specifications for design and construction as set forth in Sections ~~550 and 551~~501 through 552;
~~(7-1-97)~~( )

iii. Renewal of monitoring waivers; or (7-1-97)

iv. Granting of new monitoring waivers. (7-1-97)

(BREAK IN CONTINUITY OF SECTIONS)

~~55~~01. FACILITY AND DESIGN STANDARDS -- GENERAL DESIGN ~~*STANDARDS*~~ REQUIREMENTS FOR PUBLIC DRINKING WATER SYSTEMS.

07. Reliability and Emergency Operation. New community water systems constructed after April 15, 2007 are required to have sufficient dedicated on-site standby power, with automatic switch-over capability, and/or storage so that water may be treated and supplied to pressurize the entire distribution system during power outages. During a power outage, the water system shall be able to meet the operating pressure requirements of Subsection 552.01.b. for a minimum of eight (8) hours at average ~~daily~~ day demand plus fire flow where provided. Standby power provided in a public drinking water system shall be coordinated with the standby power that is provided in the wastewater collection and treatment system. ( )

17. Redundant Fire Flow Capacity. ( )

a. Public water systems that provide fire flow shall be designed to provide maximum day demand plus fire flow instead of peak hour demand plus fire flow. This allowance is made because distribution pressures can be expected to fall during a fire event and overall demand would be less than peak hour. Pumping systems supporting fire flow capacity must be designed so that fire flow may be provided with the largest pump out of service. ( )

b. The requirement for redundant pumping capacity specified in Subsection 501.17.a. may be reduced to the extent that storage is provided in sufficient quantity to meet some or all of fire flow demands. Where storage is not provided, the requirement for fire flow pumping redundancy may be reduced or eliminated if the following conditions are met: ( )

i. The local fire authority states in writing that the fire flow capacity of the system is acceptable and is compatible with the water demand of existing and planned fire fighting equipment and fire fighting practices in the area served by the system. ( )

ii. In a manner appropriate to the system type and situation, positive notification is provided to customers that describes the design of the system's fire fighting capability and explains how it differs from the requirements of Subsection 501.17.a. The notice shall indicate that the local fire authority has provided written acceptance of the system's fire flow capacity. ( )

502. FACILITY AND DESIGN STANDARDS - FACILITY PLANS.

See the definition of Facility Plan in Section 003. ( )

04. Engineer's Seal Required. Facility plans ~~shall be~~ submitted to the Department ~~by an Idaho licensed professional engineer and~~ shall bear the imprint of ~~the~~ an Idaho licensed professional engineer's seal that is both signed and dated by the engineer. ( )

503. FACILITY AND DESIGN STANDARDS - PRELIMINARY ENGINEERING REPORTS.

See the definition of Preliminary Engineering Report in Section 003. For all new water systems or material modifications to existing water systems, a preliminary engineering report shall be submitted to the Department for review and approval, or other reviewing authority in the case of water main extensions, prior to the submittal of plans and specifications as required in Subsection 504.03. Preliminary engineering reports are not required for minor or routine distribution system projects designed under a facility plan. This report shall provide the following: ( )

01. Engineer's Seal. Preliminary engineering reports ~~shall be~~ submitted to the Department ~~by an Idaho licensed professional engineer and~~ shall bear the imprint of ~~the~~ an Idaho licensed professional engineer's seal that is both signed and dated by the engineer. ( )

04. Water Quantity. Design data for domestic, irrigation, fire fighting, commercial and industrial water uses, including peak hourly, peak daily, and average ~~daily~~ day demands. ( )

504. FACILITY AND DESIGN STANDARDS - REVIEW OF PLANS AND SPECIFICATIONS.

The facility and design standards set forth in these rules shall be applied in the review of plans and specifications for public water system facilities. If design issues are not addressed by the facility and design standards set out in these rules, then guidance documents, some of which are listed in Subsection 002.02., shall be used as guidance in the design and review of plans and specifications for public drinking water facilities. See also Section 013. ( )

06. Engineer's Seal Required. Plans and specifications ~~shall be~~ submitted to the Department ~~by an Idaho licensed professional engineer and~~ shall bear the imprint of ~~the~~ an Idaho licensed professional engineer's seal; except that the Department will accept the seal of an Idaho licensed professional geologist on the following: ( )

a. Well source, spring source, or infiltration gallery site evaluation reports, as specified in Subsections 510 and 514. ( )

b. Plans and specifications for well construction and results of field inspection and testing, as specified in Section 510. ( )

(BREAK IN CONTINUITY OF SECTIONS)

510. FACILITY AND DESIGN STANDARDS - SITING AND CONSTRUCTION OF WELLS.

~~b~~**02. Location**. Each well shall be staked by the design engineer or licensed professional geologist prior to drilling, be located a minimum of fifty (50) feet from ~~*any potential source of contamination*~~ the nearest property line, and be no closer to specified sources of contamination than set forth in Subsection 900.01~~;~~. In vulnerable settings, the Department may require engineering or hydrologic analysis to determine if the required setback distance is adequate to prevent contamination~~;~~. ~~*(5-3-03)*~~( )

(BREAK IN CONTINUITY OF SECTIONS)

513. FACILITY AND DESIGN STANDARDS - NUMBER OF GROUND WATER SOURCES REQUIRED.

New community water systems served by ground water and constructed after July 1, 1985, or existing community water systems served by ground water that are substantially modified after July, 2002, shall have a minimum of two (2) sources if they are intended to serve more than twenty-five (25) homes or equivalent. Under normal operating conditions, with any source out of service, the remaining source or sources shall be capable of providing either the peak hour demand of the system or ~~peak daily pumping~~ maximum day demand plus equalization storage. See Subsection 501.17 for general design requirements concerning fire flow capacity. For the purpose of Section 513 only, the Department shall consider a system to be "substantially modified" when there is a combined increase of twenty-five percent (25%) or more above the system's existing configuration in the following factors: ( )

01. Population Served or Number of Service Connections. ( )

02. Length of Water Mains. ( )

03. Peak or Average Water Demand Per Connection. ( )

(BREAK IN CONTINUITY OF SECTIONS)

541. FACILITY AND DESIGN STANDARDS - PUMPING FACILITIES.

Pumping facilities shall be designed to maintain the sanitary quality of pumped water. ( )

02. Pumping Units. At least two (2) pumping units shall be provided for raw water and surface source pumps. Pumps using seals containing mercury shall not be used in public drinking water system facilities. With any pump out of service, the remaining pump or pumps shall be capable of providing the peak ~~pumping~~ hour demand of the system or maximum day demand plus equalization storage. See Subsection 501.17 for general design requirements concerning fire flow capacity. The pumping units shall meet the following requirements: ( )

04. Booster Pumps. In addition to other applicable requirements in Section 541, booster pumps must comply with the following: ( )

a. In-line booster pumps shall maintain an operating pressure that is consistent with the requirements specified in Subsection 552.01, and shall be supplied with an automatic cutoff when intake pressure is less than or equal to five (5) psi. ( )

b. Booster pumps with a suction line directly connected to any storage reservoirs shall be protected by an automatic cutoff to prevent pump damage and avoid excessive reservoir drawdown. ( )

c. Each booster pumping station shall contain not less than two (2) pumps with capacities such that peak hour demand, or maximum day demand plus equalization storage, can be satisfied with the largest pump out of service. See Subsection 501.17 for general design requirements concerning fire flow capacity. ( )

(BREAK IN CONTINUITY OF SECTIONS)

544. FACILITY AND DESIGN STANDARDS - GENERAL DESIGN OF FINISHED WATER STORAGE.

The materials and designs used for finished water storage structures shall provide stability and durability as well as protect the quality of the stored water. Steel structures such as steel tanks, standpipes, reservoirs, and elevated tanks shall be designed and constructed in accordance with applicable AWWA Standards, incorporated by reference into these rules at Subsection 002.01. Other materials of construction are acceptable when properly designed to meet the requirements of Section 544. ( )

01. Sizing. Storage facilities shall have sufficient capacity, as determined from engineering studies~~, to meet peak daily domestic demands and fire flow demands where provided. The minimum storage capacity shall be determined from engineering analysis of peak day water demand characteristics and be no less than the average daily demand plus dead storage and operational storage,~~ that consider peak flows, fire flow capacity, and analysis of the need for various components of finished storage as defined under the term "Components of Finished Water Storage" in Section 003. ~~This~~ The requirement for storage may be reduced when the source and treatment facilities have sufficient capacity with standby power to supply peak demands of the system. ( )