

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. 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)

05. 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)

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

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

- 08. Board.** The Idaho Board of Environmental Quality. (5-3-03)
- 09. 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. 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)
- 11. 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)

- 12. Compositing of Samples.** The mixing of up to five (5) samples by the laboratory. (4-5-00)
- 13. 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)
- 14. 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)
- 15. 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)
- 16. Consumer.** Any person served by a public water system. (12-10-92)
- 17. 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. Contaminant.** Any physical, chemical, biological, or radiological substance or matter in water. (12-10-92)
- 19. 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)
- 20. Department.** The Idaho Department of Environmental Quality. (12-10-92)
- 21. Director.** The Director of the Department of Environmental Quality or his designee. (12-10-92)
- 22. Disinfection.** Introduction of chlorine or other agent or process approved by the Department, in sufficient concentration and for the time required to kill or inactivate pathogenic and indicator organisms. (5-3-03)
- 23. 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)
- 24. 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)
- 25. 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. DWIMS.** Idaho Department of Environmental Quality Drinking Water Information Management System. Replaced by SDWISS April 2001. (3-15-02)
- 27. 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. 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)
- 30. 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)
- 31. Fee Assessment.** A charge assessed on public drinking water systems based on a rate structure calculated by system size. (10-1-93)
- 32. 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)
- 33. 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)
- 34. Groundwater System.** A public water system which is supplied exclusively by a groundwater source or sources. (12-10-92)
- 35. 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)
- 36. 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)
- 37. 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)
- 38. Inorganic.** Generally refers to compounds that do not contain carbon and hydrogen. (12-10-92)
- 39. 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)
- 40. 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)
- 41. Log.** Logarithm to the base ten (10). (12-10-92)
- 42. Maximum Daily Consumption Rate.** The average rate of consumption for the twenty-four (24) hour period in which total consumption is the largest on record. (12-10-92)

- 43. Maximum Hourly Demand.** The greatest volume of water used in any hour during a one (1) year period. (12-10-92)
- 44. 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)
- 45. 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)
- 46. 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)
- 47. 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)
- 48. 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)
- 49. 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)
- 50. 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)
- 51. 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)
- 52. 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)
- 53. Peak Hourly Flow.** The highest hourly flow during any day. (12-10-92)
- 54. 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)
- 55. 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 algacides. (12-10-92)

56. 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)

57. 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)

58. Public Water System/Water System/System. Means "public drinking water system". (4-5-00)

59. Repeat Compliance Period. Any subsequent compliance period after the initial compliance period. (12-10-92)

60. 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)

61. 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)

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

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

64. 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)

65. 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)

66. 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)

67. 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)

68. 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)

69. 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)

70. 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)

71. 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)

72. 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)

73. Transient Noncommunity 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)

74. 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)

75. 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)

76. 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)

77. 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)

78. 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 deferment does not cause an unreasonable risk to public health. (12-10-92)

79. 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)

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

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

82. Waiver. (12-10-92)

a. For the purposes of these rules, except Sections 550 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 550 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)

83. 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)

84. 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)

85. 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)

553. **CLASSIFICATION OF WATER SYSTEMS.**

01. System Classification Required. The Department shall classify community, nontransient noncommunity, and surface water systems based on indicators of potential health risks. (4-6-05)

a. The owner or designee of every community and nontransient noncommunity public water system shall submit proof of the current conditions related to the classification of the system every five (5) years or more frequently if required by the Department. (4-6-05)

b. The owner or designee of all surface water systems shall submit proof of the current conditions related to the classification of the system every five (5) years or more frequently if required by the Department. (4-6-05)

02. Classification Criteria. Systems shall be classified under a system that uses the following criteria: (4-6-05)

a. Complexity, size, and type of source water for treatment facilities. (3-16-04)

b. Complexity and size of distribution systems. (4-5-00)

c. Other criteria deemed necessary to completely classify systems. (4-5-00)

d. The Department shall develop guidelines for applying the criteria set forth in Section 553. (3-16-04)

554. **LICENSE REQUIREMENTS.**

01. Licensed Operator Required. (4-6-05)

a. Owners of all community and nontransient noncommunity public drinking water systems must place the direct supervision of their drinking water system, including each treatment facility and/or distribution system, under the responsible charge of a properly licensed operator. (4-6-05)

b. Owners of all surface water systems must place the direct supervision of their public drinking water system under the responsible charge of a properly licensed operator. (4-6-05)

02. Responsible Charge Operator License Requirement. An operator in responsible charge of a public drinking water system must hold a valid license equal to or greater than the classification of the public water system where the responsible charge operator is in responsible charge. (4-6-05)

03. Substitute Responsible Charge Operator License Requirement. At such times as the responsible charge operator is not available, a substitute responsible charge operator shall be designated to replace the responsible charge operator. A substitute responsible charge operator of a public water system must hold a valid license equal to or greater than the classification of the public water system where the substitute responsible charge operator is in responsible charge. (4-6-05)

04. Shift Operator Requirement. Any public drinking water system subject to these requirements with multiple operating shifts must have a designated properly licensed operator available for each operating shift. An on-duty designated shift operator does not replace the requirements in Subsections 554.01 and 554.03 for responsible charge operator coverage during all operating shifts. (4-6-05)

05. Water Operator License Requirement. All operating personnel at public drinking water systems subject to these requirements making process control/ system integrity decisions about water quality or quantity that affect public health must hold a valid and current license. (4-6-05)

555. -- 559.(RESERVED).

560.CONTRACTING FOR SERVICES. Public water systems may contract with persons to provide responsible charge operators and substitute responsible charge operators. Proof of such contract shall be submitted to the Department prior to the contracted person performing any services at the public water system. (4-6-05)