

3745-81-01

Primary drinking water standards definitions.

As used in this chapter:

(A)

- (1) "Action level" is the concentration of lead or copper in water specified in paragraph (C) of rule 3745-81-80 of the Administrative Code.
- (2) "Actual CT" means the CT value or the sum of CT values that is representative of the disinfection as determined in accordance with rule 3745-81-72 of the Administrative Code.
- (3) "Approved effective volume factor" means the ratio of the disinfectant contact time (T) to the theoretical contact time. The theoretical contact time is the lowest daily clearwell operating volume during the peak hourly flow divided by the peak hourly flow.
- (4) "Average household size" for the purposes of determining if a system is a "public water system" as defined in this rule, means 2.44 individuals per service connection in accordance with the 2010 federal census for the state of Ohio.

(B)

- (1) "Bag filters" means pressure-driven separation devices that remove particulate matter larger than one micrometer using an engineered porous filtration media. They are typically constructed of a non-rigid, fabric filtration media housed in a pressure vessel in which the direction of flow is from the inside of the bag to outside.
- (2) "Bank filtration" means a water treatment process that uses a well to recover surface water that has naturally infiltrated into ground water through a river bed or bank. Infiltration is typically enhanced by the hydraulic gradient imposed by a nearby pumping water supply or other well.
- (3) "Best available technology" or "BAT" means the best technology, treatment techniques, or other means which the director may approve, after examination for efficacy under field conditions and taking cost into consideration, for a public water system to use for achieving compliance with a maximum contaminant level. For synthetic organic chemicals, any BAT must be at least as effective as granular activated carbon.

(C)

- (1) "Cartridge filters" means pressure-driven separation devices that remove particulate matter larger than one micrometer using an engineered porous filtration media. They are typically constructed as rigid or semi-rigid, self supporting filter elements housed in pressure vessels in which flow is from the outside of the cartridge to the inside.
- (2) "Chemical Abstracts Service registry number" or "CAS number" means the hyphenated number assigned by the "American Chemical Society's Chemical Abstracts Service" to uniquely designate a chemical substance, regardless of the various names used for this substance.
- (3) "Clean compliance history" means, for the purposes of rules 3745-81-50 to 3745-81-55 of the Administrative Code, a record of no violations or exceedances of any of the following:
 - (a) Maximum contaminant levels under rule ~~3745-81-14~~ or 3745-81-54 of the Administrative Code.
 - (b) Monitoring requirements under rule ~~3745-81-21~~, 3745-81-51 or paragraph (B) of rule 3745-81-52 of the Administrative Code.
 - (c) Treatment technique triggers under rule 3745-81-53 of the Administrative Code.
 - (d) Treatment technique requirements under rule 3745-81-53 of the Administrative Code.
- (4) "Coagulation" means a process using coagulant chemicals and mixing by which colloidal and suspended materials are destabilized and agglomerated into flocs.
- (5) "Coliform bacteria" means any of the enterobacteriaceae group, including all aerobic and facultative anaerobic gram-negative, nonspore-forming bacilli which utilize lactose with or without the formation of gas.
- (6) "Combined distribution system" means an interconnected distribution system consisting of the distribution systems of wholesale systems and of the consecutive systems that receive finished water. Combined distribution systems do not include consecutive systems which receive water from a wholesale system only on an emergency basis or receive only a small percentage and small volume of water from a wholesale system. Combined distribution systems do not include wholesale systems which deliver water to a consecutive system only on an emergency basis or deliver only a small percentage and small volume of water to a consecutive system.

- (7) "Combined population" means the total number of individuals served by the public water system as a prime supplier plus those individuals served through a consecutive water system.
- (8) "Compliance cycle" means the nine-year cycle for monitoring during which public water systems shall monitor. Each compliance cycle consists of three three-year compliance periods.
- (9) "Compliance period" means one of the three periods of three consecutive calendar years within a compliance cycle. Each compliance cycle has three three-year compliance periods.
- (10) "Comprehensive performance evaluation" or "CPE" means a thorough review and analysis of a treatment plant's performance-based capabilities and associated administrative, operation and maintenance practices. A CPE is conducted to identify factors that may be adversely impacting a plant's performance. The comprehensive performance evaluation consists of at least the following components: assessments 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.
- (11) "Confluent growth" means a continuous bacterial growth, covering the entire filtration area of a membrane filter, or a portion thereof, in which bacterial colonies are not discrete.
- (12) "Consecutive water system" means a public water system that receives water from one or more public water systems, excluding emergency interconnections or interconnections where only a small percentage and small volume of water are received. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems.
- (13) "Consumer notice," for the purpose of rules 3745-81-80 to 3745-81-90 of the Administrative Code, means notification of individual tap results from lead tap water monitoring in accordance with rule 3745-81-85 of the Administrative Code.
- (14) "Contact time" or "CT" means the mathematical product of a "residual disinfectant concentration" (C), which is determined before or at the first customer, and the corresponding "disinfectant contact time" (T).
- (15) "Contaminant" means any physical, chemical, biological or radiological substance or matter in water.

- (16) "Conventional filtration treatment" means a series of processes including coagulation, flocculation, sedimentation and filtration resulting in substantial removal of particles.
- (17) "Corrosion inhibitor" means a substance capable of reducing the corrosivity of water toward metal plumbing materials, especially lead and copper, by forming a protective film on the interior surface of those materials.

(D)

(1) "Depressurized seasonal system," means a seasonal system where all of the waterlines are drained during the off-season.

~~(2)~~(2) "Direct filtration" means a series of processes, including coagulation and filtration but excluding sedimentation, resulting in substantial removal of particles from water.

~~(2)~~(3) "Director of environmental protection" or "director" means the director of the Ohio environmental protection agency and includes an authorized representative of the director.

~~(3)~~(4) "Disinfectant" means any oxidant, including but not limited to chlorine, chlorine dioxide, chloramines and ozone added to water in any part of the treatment or distribution process, that is intended to kill or inactivate pathogenic microorganisms.

~~(4)~~(5) "Disinfectant contact time" ("T" in CT calculations) means the time in minutes that it takes for water to move from the point of disinfectant application or the previous point of disinfectant residual measurement to a point before or at the point where residual disinfectant concentration (C) is measured.

~~(5)~~(6) "Disinfection" means a process which inactivates pathogenic organisms in water by the addition of chemical oxidants or equivalent agents.

~~(6)~~(7) "Disinfection profile" means a summary of Giardia lamblia inactivation through the treatment plant.

~~(7)~~(8) "District office" means the office of the Ohio environmental protection agency located in the district within which the subject water system is located.

~~(8)~~(9) "Dose equivalent" means the product of the absorbed dose from ionizing radiation and such other factors as account for differences in biological effectiveness due to the type of radiation and its distribution in the body

as specified by the "International Commission of Radiological Units and Measurements (ICRU)."

~~(9)~~(10) "Dual sample set" means a set of two samples collected at the same time and same location, with one sample analyzed for TTHM and the other sample analyzed for HAA5. Dual sample sets are collected in accordance with rule 3745-81-24 of the Administrative Code.

(E)

- (1) "Effective corrosion inhibitor residual," for the purpose of rules 3745-81-80 to 3745-81-90 of the Administrative Code, means a concentration sufficient to form a passivating film on the interior walls of a pipe.
- (2) "Enhanced coagulation" means the addition of sufficient coagulant for improved removal of disinfection byproduct precursors by conventional filtration treatment.
- (3) "Enhanced softening" means the improved removal of disinfection byproduct precursors by precipitative softening.

(F)

- (1) "Filter profile" means 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.
- (2) "Filtration" means a process for removing particles from water by passage through porous media.
- (3) "Finished water" means water that is introduced into the distribution system of a public water system and is intended for distribution and consumption without further treatment, except as necessary to maintain water quality in the distribution system (e.g., booster disinfection, addition of corrosion control chemicals).
- (4) "Finished water storage facility" means a tank, reservoir, or other facility used to store water that will undergo no further treatment except residual disinfection, aeration or recirculation.
- ~~(4)~~(5) "First-draw sample" means a one-liter sample of tap water, collected in accordance with rule 3745-81-86 of the Administrative Code, that has been

standing in plumbing pipes at least six hours and is collected without flushing the tap.

~~(5)~~(6) "Flocculation" means a process which enhances agglomeration of particles into larger, more easily settleable particles through gentle stirring.

~~(6)~~(7) "Flowing stream" means a course of running water flowing in a definite channel.

(8) "Fully pressurized year-round seasonal system" means a system where none of the waterlines are drained during the off-season, and no one has access to the water for more than ninety consecutive days during the year.

(G)

(1) "GAC10" means granular activated carbon filter beds with an empty-bed contact time of ten minutes based on average daily flow and a carbon reactivation frequency of every one hundred eighty days, except that the reactivation frequency for GAC10 used as a best available technology for compliance with rule 3745-81-12 of the Administrative Code shall be one hundred twenty days.

(2) "GAC20" means granular activated carbon filter beds with an empty-bed contact time of twenty minutes based on average daily flow and a carbon reactivation frequency of every two hundred forty days.

(3) "Grab sample" means a single, physical sample of water collected at a particular time and place which represents the composition of the water only at the time and place.

(4) "Gross alpha particle activity" means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

(5) "Gross beta particle activity" means the total radioactivity due to beta particle emission as inferred from measurements on a dry sample.

(6) "Ground water" means any water below the surface of the earth in a zone of saturation which is not directly influenced by surface water, which is obtained through a well constructed in accordance with plans approved by the director under section 6109.07 of the Revised Code and Chapter 3745-9 of the Administrative Code.

(7) "Ground water source," for the purpose of rules 3745-81-41 to 3745-81-45 of the Administrative Code, means a well.

- (8) "Ground water system" means any public water system that uses ground water except for those that combine all of their ground water with surface water prior to treatment under rule 3745-81-71 of the Administrative Code. A ground water system also includes consecutive systems receiving finished ground water.

(H)

- (1) "Haloacetic acids (five)" or "HAA5" means 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 significant figures after addition.
- (2) "Halogen" means one of the following chemical elements: chlorine, bromine or iodine.
- (3) "High background count" or "HBC" means that the total number of bacterial colonies exceeds two hundred on a forty-seven-millimeter diameter membrane filter used for coliform detection.
- (4) "Human consumption" means the ingestion or absorption of water or water vapor as the result of drinking, cooking, dishwashing, hand washing, bathing, showering or oral hygiene.
- (5) "Hydrogeologic barriers" means physical, biologic or chemical factors, singularly or in combination, that prevent the movement of viable pathogens from a contamination source to a water supply well.
- (6) "Hydrogeologic sensitivity assessment" or "HSA" means an evaluation of a ground water source's susceptibility to pathogen contamination at a specific site, using all available data. All available data may include well construction, hydrogeologic, geologic and water quality data, which is evaluated in conjunction with the local distribution of pathogen sources.

(I) [Reserved.]

(J) [Reserved.]

(K) [Reserved.]

(L)

- (1) "Lake/reservoir" means a natural or man-made basin or hollow on the Earth's surface in which water collects or is stored that may or may not have a current or single direction of flow.

- (2) "Large water system," for the purpose of rules 3745-81-80 to 3745-81-90 of the Administrative Code, means a public water system that serves more than fifty thousand persons.
- (3) "Lead service line" means a service line made of lead which connects a water main to a building inlet and any lead pigtail, gooseneck, or other fitting which is connected to such a lead line.
- (4) "Lead threshold level" means the concentration of lead in an individual tap water sample as specified in rule 3745-81-80 of the Administrative Code.
- (5) "Legionella" means a genus of bacteria, some species of which may cause Legionnaires' disease.
- (6) "Level one assessment" means an evaluation to identify the possible presence of significant deficiencies, deficiencies in distribution system coliform monitoring practices and, when possible, the likely reason that the public water system triggered the assessment. A level one assessment is conducted by the public water system operator or owner. The system shall conduct the assessment consistent with any instructions from the director that tailor specific assessment elements with respect to the size and type of the system and the size, type and characteristics of the distribution system. Minimum elements of a level one assessment include all of the following:
 - (a) Review and identification of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired.
 - (b) Changes in distribution system maintenance and operation that could affect distributed water quality, including water storage.
 - (c) Source and treatment considerations that could affect distributed water quality, where appropriate (e.g., whether a ground water system is disinfected).
 - (d) Existing water quality monitoring data.
 - (e) Inadequacies in sample sites, sampling protocol and sample processing.
- (7) "Level two assessment" means an evaluation to identify the possible presence of significant deficiencies, deficiencies in distribution system coliform monitoring practices and, when possible, the likely reason that the public water system triggered the assessment. A level two assessment provides a more detailed examination of the public water system (including the public water system's monitoring and operational practices) than does a level one assessment,

through the use of a more comprehensive investigation and review of available information, additional internal and external resources, and other relevant practices. A level two assessment is conducted by an individual approved by the director. The public water system shall comply with any expedited actions or additional actions required by the director in the case of an *Escherichia coli* maximum contaminant level violation. Minimum elements of a level two assessment are the same as those for a level one assessment, which include all of the following:

- (a) Review and identification of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired.
 - (b) Changes in distribution system maintenance and operation that could affect distributed water quality, including water storage.
 - (c) Source and treatment considerations that could affect distributed water quality, where appropriate (e.g., whether a ground water system is disinfected).
 - (d) Existing water quality monitoring data.
 - (e) Inadequacies in sample sites, sampling protocol and sample processing.
- (8) "Limited scope site visit" or "LSSV" means an onsite review, which may include aspects of a sanitary survey as defined in this rule. The onsite review may be triggered when determined by the agency that a portion of the public water system is to be evaluated, when the system is in need of technical assistance, or for any other purpose identified by the agency to review compliance with rule requirements.
- (9) "Locational running annual average" or "LRAA" means the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

(M)

- (1) "Man-made beta particle and photon emitters" means all radionuclides emitting beta particles or photons listed in the maximum permissible body burdens and maximum permissible concentrations of radionuclides in air and water for occupational exposures, "NBS Handbook 69," except the daughter products of thorium-232, uranium-235 and uranium-238.

- (2) "Maximum contaminant level" or "MCL" means the maximum permissible level of a contaminant in water which is delivered to any user of a public water system.
- (3) "Maximum contaminant level goal" or "MCLG" means the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- (4) "Maximum residual disinfectant level" or "MRDL" means the highest level of disinfectant allowed under conditions specified in rule 3745-81-10 of the Administrative Code.
- (5) "Medium water system," for the purpose of rules 3745-81-80 to 3745-81-90 of the Administrative Code, means a public water system that serves greater than three thousand three hundred and less than or equal to fifty thousand persons.
- (6) "Membrane filtration" means a pressure or vacuum driven separation process in which particulate matter larger than one micrometer is rejected by an engineered barrier, primarily through a size-exclusion mechanism, and which has a measurable removal efficiency of a target organism that can be verified through the application of a direct integrity test. This definition includes the common membrane technologies of microfiltration, ultrafiltration, and reverse osmosis.
- (7) "Method detection limit" or "MDL" is the minimum concentration of a substance that can be measured and reported with ninety-nine per cent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.
- (8) "Minimal treatment," for the purpose of rule 3745-81-42 of the Administrative Code, means either no treatment, treatment consisting of only cartridge filtration or cation exchange, or a combination of only cartridge filtration and cation exchange.
- (9) "Monitor" means the sampling of public drinking water, the submittal of samples to a laboratory certified for the appropriate analysis, and the analysis for the contaminants or characteristics of the water.

(N)

- (1) "New source" means any of the following:
 - (a) A well that is located in a new well field.

- (b) A new well that is located in an existing well field for which the results of source water analysis conducted in accordance with rule 3745-9-09 or 3745-91-06 of the Administrative Code indicate the presence of any primary inorganic or radiological contaminant above eighty per cent of the MCL standard or any organic contaminant (except trihalomethanes) at detectable concentrations.
 - (c) An intake that is located in a surface water body not previously used.
 - (d) A new intake that is located in a previously used surface water body for which the results of source water analysis conducted in accordance with rule 3745-91-06 of the Administrative Code indicate the presence of any primary inorganic or radiological contaminant above eighty per cent of the MCL standard or any organic contaminant (except trihalomethanes) at detectable concentrations.
- (2) "Normal operating conditions" means the operational and treatment processes routinely used by a public water system which are representative of the practices under which water is typically delivered to consumers. Public water systems required to collect samples during normal operating conditions shall not deliberately change distribution or treatment processes, or operating practices during or just prior to sample collection for the sole purpose of influencing sample results collected for compliance purposes. Practices not considered normal operating conditions include but are not limited to the following examples for the collection of disinfection byproduct or total organic carbon samples: deliberately flushing the distribution system just prior to the collection of samples; temporarily performing enhanced coagulation or softening just prior to the collection of samples; deliberately reducing chlorine dosage just prior to the collection of samples; deliberately turning off pre-chlorination just prior to the collection of samples. For systems that do not have an approved disinfection treatment system, practices not considered normal operating conditions also include adding disinfectant to any part of the water system prior to collecting a total coliform compliance sample or having a chlorine residual in the distribution system at the time of collecting a total coliform compliance sample.

(O)

- (1) "Off season," means the time during the year when a depressurized seasonal system drains all of its waterlines, when a partially depressurized seasonal system drains some of its lines, or when a fully pressurized year-round seasonal system does not have public access to the water.

(2) "Operating season," means the time during the year when the public water system is fully pressurized and the public has access to the water.

~~(2)~~(3) "Optimal corrosion control treatment," for the purpose of rules 3745-81-80 to 3745-81-90 of the Administrative Code, means the corrosion control treatment that minimizes the lead and copper concentrations at users' taps while ensuring that the treatment does not cause the water system to violate any national primary drinking water regulations.

(P)

(1) "Partially depressurized seasonal system," means a seasonal system where some of the waterlines are drained during the off-season.

~~(1)~~(2) "Person" means an individual, corporation, company, association, partnership, the state, any political subdivision, agency, institution, or instrumentality thereof or federal agency.

~~(2)~~(3) "Picocurie" or "pCi" means that quantity of radioactive material producing two and twenty-two hundredths nuclear transformations per minute.

~~(3)~~(4) "Plant intake" means the works or structures at the head of a conduit through which water is diverted from a source (e.g., river or lake) into the treatment plant.

~~(4)~~(5) "Point of disinfectant application" means a location where disinfectant is added to a water system, and water downstream of this location is protected from recontamination.

~~(5)~~(6) "Point-of-entry treatment device" is a treatment device applied to the drinking water entering a house or building for the purpose of reducing the contaminants in the drinking water distributed through all, or a portion of, the house or building.

~~(6)~~(7) "Point-of-use treatment device" is a treatment device applied to a single tap used for the purpose of reducing contaminants in drinking water at that one tap.

~~(7)~~(8) "Potable water" means water that is intended for human consumption.

~~(8)~~(9) "Presedimentation" means a preliminary treatment process used to remove gravel, sand and other particulate material from the source water through settling before the water enters the primary clarification and filtration processes in a treatment plant.

~~(9)~~(10) "Public education" for the purpose of rules 3745-81-80 to 3745-81-90 of the Administrative Code, means delivery of educational materials, in accordance with rule 3745-81-85 of the Administrative Code, when an action level is exceeded.

~~(10)~~(11) "Public notification" means notification to persons served by a public water system of violations or other situations in accordance with rule 3745-81-32 of the Administrative Code.

~~(11)~~(12) "Public water system" or "PWS" means a system which provides water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least sixty days out of the year. Such term includes any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system, and any water supply system serving an agriculture labor camp, as defined in section 3733.41 of the Revised Code. Such term does not include any "special irrigation district," as defined in 40 CFR 141.2. A public water system is either a "community water system" or a "noncommunity water system." An existing public water system is prohibited from splitting the distribution system or adding additional sources to avoid regulation by Chapter 6109. of the Revised Code.

(a) "Community water system" or "CWS" means a public water system which serves at least fifteen service connections available for use by year-round residents or regularly serves at least twenty-five year-round residents. For the purposes of determining regulation under Chapter 6109. of the Revised Code, the population calculations and defaults in this rule will be used unless documentation proving otherwise is presented and is acceptable to the director.

The population of a CWS shall be determined by an actual count of residents or by multiplying the number of service connections by the average household size.

In the case of a prison cell, nursing home bed, or an otherwise occupied or intended to be occupied living space that is or may be occupied on a day-to-day basis by an individual, the population shall be determined by an actual count of beds available.

- (b) "Noncommunity water system" or "NCWS" means a public water system that is not a community water system. A noncommunity water system is either a "nontransient noncommunity water system" or a "transient noncommunity water system." For the purposes of determining regulation under Chapter 6109. of the Revised Code, the population calculations and defaults in this rule will be used unless documentation proving otherwise is presented and is acceptable to the director.

When the average number of individuals regularly served by a noncommunity water system cannot be readily determined, the director shall determine the population served on a case by case basis. In making this determination, the director may consider an actual daily count of individuals, sales receipts, seating capacity or the issued certificate or certificates of occupancy as in the case of a building as defined by section 3781.06 of the Revised Code, or any other information deemed reliable regarding the potential population served.

- (i) "Nontransient noncommunity water system" or "NTNCWS" means a public water system that regularly serves at least twenty-five of the same persons over six months per year and is not a CWS.
- (ii) "Transient noncommunity water system" or "TNCWS" means a noncommunity public water system that does not regularly serve at least twenty-five of the same persons over six months per year and is not a CWS or a NTNCWS. Examples of TNCWS may include, but are not limited to, systems serving gas stations, taverns, motels, restaurants, churches, campgrounds and parks.

(Q) [Reserved.]

(R)

- (1) "Radiation equivalent man" or "rem" means the unit of dose equivalent from ionizing radiation to the total body or any internal organ or organ system. A "millirem (mrem)" is one one-thousandth of a rem.
- (2) "Raw water" means source water before any treatment.
- (3) "Representative distribution sample" means a sample or set of samples that are collected at a location or set of locations in the distribution system of a public water system such that the results of the sample or set of samples accurately reflect the physical and chemical conditions throughout the water system's entire distribution system.

~~(3)~~(4) "Required CT" means the CT value that is considered sufficient disinfection treatment to consistently and reliably achieve at least 99.9 per cent (3 log) inactivation or removal of *Giardia lamblia* cysts and at least 99.99 per cent (4 log) inactivation or removal of viruses as determined in accordance with rule 3745-81-72 of the Administrative Code.

~~(4)~~(5) "Residual disinfectant concentration" ("C" in CT calculations) means the concentration of disinfectant measured in milligrams per liter in a representative sample of water.

(S)

(1) "Safe Drinking Water Act" or "SDWA" means the Safe Drinking Water Act, 88 Stat. 1660 (1974), 42 U.S.C. 300(f) and regulations adopted thereunder.

(2) "Sampling point" means the following:

(a) For groundwater systems, each entry point to the distribution system which is representative of each well after treatment.

(b) For surface water systems, each entry point to the distribution system after any application of treatment or in the distribution system at points representative of each source.

(3) "Sanitary survey" means an onsite review to evaluate the adequacy of the water source, treatment, distribution system, finished water storage, pumps, pump facilities and controls, monitoring, reporting and data verification, system management and operation, and to review operator compliance with state requirements.

(4) "Seasonal system" means a noncommunity water system that has distinct seasonal fluctuations in its operations and population served during the course of a year such that all or ~~most~~some of the system is not operated on a year-round basis.

(5) "Sedimentation" means a process for removal of solids before filtration.

(6) "Service connection," for the purposes of this chapter, is the active or inactive pipe, gooseneck, pigtail and any other fitting that connects or has the potential to connect each individual house, apartment unit, condominium, mobile home or any structure with human consumption available to the public water system regardless of whether the water usage is metered.

- (7) "Service line sample" means a one-liter sample of water, collected in accordance with paragraph (B)(3) of rule 3745-81-86 of the Administrative Code, that has been standing for at least six hours in a service line.
- (8) "Significant deficiency," means a defect in design, operation, maintenance, administration, or a failure or malfunction in a system component, including sources, treatment, storage or distribution system that does any of the following:
- (a) May provide a pathway of entry for microbial or other contamination into the distribution system or that is indicative of a failure in a barrier that is already in place.
 - (b) Causes, or has the potential to cause, an unacceptable risk to health or that could affect the reliable delivery of safe drinking water, as determined by the director.
- (9) "Single family structure," for the purpose of rules 3745-81-80 to 3745-81-90 of the Administrative Code, means a building constructed as a single-family residence that is currently used as either a residence or a place of business.
- (10) "Slow sand filtration" means a process of passing raw water through a porous granular medium, at a rate of less than one hundred fifty gallons per day per square foot of sand area, with substantial removal of particles by physical and biological mechanisms.
- (11) "Small water system," for the purpose of rules 3745-81-80 to 3745-81-90 of the Administrative Code, means a public water system that serves three thousand three hundred persons or fewer.
- (12) "Source" means the site or area from which water is obtained for the purpose of supplying water to a public water system. Sources include, but are not limited to, aquifers, wells, lakes, rivers, streams and reservoirs.
- (13) "Source water at the entry point to the distribution system," for the purpose of rules 3745-81-80 to 3745-81-90 of the Administrative Code, means finished water (as defined in this rule) or water that is introduced into the distribution system of a public water system and is intended for distribution and consumption without further treatment, except as necessary to maintain water quality in the distribution system (e.g., booster disinfection, addition of corrosion control chemicals).
- (14) "Split sample" means a single grab sample that is separated into at least two parts such that each part is a representative of the original sample.

(15) "Stabilization" means adjusting the pH, hardness, and alkalinity of treated water so that the water is in equilibrium, neither dissolving nor depositing precipitates.

~~(14)~~(16) "State primary drinking water rules" means rules of Chapter 3745-81 of the Administrative Code.

~~(15)~~(17) "Supplier of water" means any person who owns or operates a public water system.

~~(16)~~(18) "Surface water" means either of the following:

(a) All water which is open to the atmosphere and subject to surface runoff.

(b) A source which has been designated by the director as surface water in accordance with rule 3745-81-76 of the Administrative Code.

~~(17)~~(19) "Surface water system" means a public water system which uses surface water, in whole or in part, as its source of water.

~~(18)~~(20) "SUVA" means specific ultraviolet absorption at two hundred fifty-four nanometers. It is calculated by dividing a sample's ultraviolet absorption at a wavelength of two hundred fifty-four nanometers (UV_{254}) [in reciprocal meters (M^{-1})] by its concentration of dissolved organic carbon (DOC) [in milligrams per liter (mg/L)].

~~(19)~~(21) "System with a single service connection" means a public water system which supplies drinking water to consumers via a single service line.

(T)

(1) "Third party" means a team of persons conducting a comprehensive performance evaluation who are not employees of the public water system owner and who are independent of the public water system.

(2) "Total trihalomethanes" or "TTHM" means the sum of the concentrations in milligrams per liter of the trihalomethane compounds trichloromethane (chloroform), dibromochloromethane, bromodichloromethane and tribromomethane (bromoform), rounded to two significant figures after addition.

(3) "Treatment technique" means a method for treating water to achieve acceptable levels of the contaminants in lieu of establishing a maximum contaminant level.

- (4) "Treatment technique requirement" means a requirement of the state primary drinking water rules which specifies for a contaminant a specific treatment technique or techniques known to the director which leads to a reduction in the level of such a contaminant sufficient to comply with the requirements of this chapter.
- (5) "Trihalomethane" or "THM" means one of the family of organic compounds, named as derivatives of methane, wherein three of the four hydrogen atoms in methane are each substituted by a halogen atom in the molecular structure.
- (6) "Total organic carbon" or "TOC" means total organic carbon in milligrams per liter (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 significant figures.
- (7) "Two-stage lime softening" means a process in which chemical addition and hardness precipitation occur in each of two distinct unit clarification processes in series prior to filtration.

(U) [Reserved.]

(V)

- (1) "Virus" means a virus which is infectious to humans by waterborne transmission.
- (2) "Volatile organic chemicals" or "VOCs" are the chemicals identified in paragraph (D) of rule 3745-81-12 of the Administrative Code.

(W)

- (1) "Waterborne disease outbreak" means the significant occurrence of acute or chronic infectious illness, epidemiologically associated with the ingestion of water from a public water system.
- (2) "Wholesale system" means a public water system that treats source water as necessary to produce finished water and then delivers some or all of that finished water to another public water system. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems.

(X) [Reserved.]

(Y) [Reserved.]

(Z) [Reserved.]

[Comment: The 40 CFR 141.2 refers to the "Code of Federal Regulations" published on July 1, 2017. A copy of this code may be obtained from the "U.S. Government Bookstore" toll-free at (866) 512-1800 or <https://www.gpo.gov/fdsys>, or from "Ohio EPA, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, OH, 43215," (614) 644-2752. The code is available for review at "Ohio EPA, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, OH, 43215."]

[Comment: "Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure," NBS (National Bureau of Standards) Handbook 69 as amended August 1963, U.S. department of commerce. Copies of this document are available from the national technical information service, NTIS ADA 280 282, U.S. department of commerce, 5285 Port Royal road, Springfield, Virginia 22161. Copies may be inspected at EPA's "Drinking Water Docket," 401 M street, SW., Washington, DC 20460; or at the national archives and records administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.]

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