



ADMINISTRATIVE RULES OF MONTANA



17.38.225 CONTROL TESTS

- (1) To determine compliance with treatment requirements of this subchapter, to judge variations in water quality, to identify objectionable water characteristics, and to detect the presence of foreign substances which may adversely affect the quality of the water, control tests must be performed, recorded, and reported by water suppliers in accordance with procedures and reporting formats approved by the department.
- (2) Disinfectant residual tests must be conducted daily by:
 - (a) surface water systems and consecutive systems to a surface water system in accordance with the requirements in 40 CFR 141.72 and with the other requirements in this subchapter for disinfectant residual monitoring for surface water supplies. At least two disinfectant residual tests must be conducted daily, one at each entry point to the distribution system and one in the distribution system;
 - (b) ground water systems in accordance with 40 CFR Par 141, subpart S. Disinfectant residual tests must be conducted daily at each entry point to the distribution system to prove compliance with the four-log virus inactivation or removal requirement; and
 - (c) ground water systems required by the department under ARM 17.38.229 to maintain a residual, and by consecutive systems connected to those systems, at each entry point to the distribution system and, if required to maintain a residual in the distribution system, one in the distribution system. For consecutive systems, the entry point is the point at which the purchased water enters the distribution system of the consecutive system.
- (3) The department may waive, on a case-by-case basis, disinfection residual testing at the entry point, in the distribution system, or both for ground water and consecutive systems.
- (4) A test for chlorine residual in the distribution system must be made at selected points consistent with the department-approved microbiological sample siting plan and changed regularly so as to cover the system completely at least each week.
- (5) Only the following analytical methods or other methods approved by the department may be used to demonstrate compliance with the requirements of this rule:
 - (a) Turbidity measurements must be taken as set forth in 40 CFR 141.74. Secondary turbidity standards may be used for daily calibration of turbidimeters if those standards are calibrated against an EPA-approved primary at least quarterly. Documentation of the date, analyst performing the procedure, procedures used, and results of the quarterly calibration checks must be maintained by the water system and reported to the department within ten days following the end of the month during which this procedure took place.

- (b) Residual disinfectant concentrations must be measured as set forth in 40 CFR 141.74. Residual disinfectant concentrations for free chlorine and combined chlorine may also be measured by using DPD colorimetric test kits if approved by the department.
 - (c) Temperature measurements must be taken as set forth in 40 CFR 141.23(k)(1).
 - (d) Measurements for pH must be taken as set forth in 40 CFR 141.23(k)(1).
- (6) All control test measurements, except for bacteriological samples, for community and nontransient noncommunity water supply systems must be conducted by a person certified under the provisions of Title 37, chapter 42, MCA, or by a person who has been properly trained to conduct these measurements by the operator in responsible charge or by the department. Bacteriological samples for community and nontransient noncommunity water supply systems must be collected by a person approved by the department or certified under the provisions of Title 37, chapter 42, MCA. Measurements for total coliform bacteria, fecal coliform bacteria, and heterotrophic plate count must be conducted by an approved laboratory.
- (7) The department adopts and incorporates by reference the following:
- (a) 40 CFR 141.22, which sets forth turbidity sampling and analytical requirements, except for the second and third sentences in 141.22(a).
 - (b) 40 CFR 141.74, which sets forth analytical and monitoring requirements, except for the following changes:
 - (i) "1 NTU" means 1.0 nephelometric turbidity unit for the purposes of this subchapter;
 - (ii) The first sentence in 40 CFR 141.74(b)(4)(i)(B)(ii) is replaced with the following: "If the system uses more than one point of disinfectant application before or at the first customer, the system must determine the CT value of each disinfection sequence immediately prior to the next point of disinfectant application during peak hourly flow, except that contact time achieved prior to filtration is not included in this calculation.";
 - (iii) The following phrase is inserted after the phrase "system's filtered water" in the first sentence in 40 CFR 141.74(c)(1): "and individual filter effluent";
 - (iv) The last sentence in 40 CFR 141.74(c)(1) is not adopted; and
 - (v) 40 CFR 141.74(b)(5) and 141.74(c)(2) are modified to read: "The residual disinfectant concentration of the water entering the distribution system must be monitored continuously, and the lowest value must be recorded each day, except that if there is a failure in the continuous monitoring equipment, grab sampling every four hours may be conducted in lieu of continuous monitoring, but for no more than five working days following the failure of the equipment."
 - (c) 40 CFR 141.172, which sets forth disinfection profiling and benchmarking requirements;
 - (d) 40 CFR 141.174, which sets forth filtration sampling requirements;
 - (e) 40 CFR 141.530, 141.531, 141.532, 141.533, 141.534, 141.535, 141.536, 141.540, 141.541, 141.542, 141.543 and 141.544, which set forth requirements for disinfection profiling and benchmarking for public water suppliers using surface water or GWUDISW and that serve fewer than 10,000 people;

- (f) 40 CFR 141.553, which describes turbidity monitoring provisions for systems that utilize lime softening;
 - (g) 40 CFR 141.560, which describes individual filter monitoring requirements for public water suppliers that utilize direct or conventional filtration treatment;
 - (h) 40 CFR 141.561, which describes monitoring requirements for public water suppliers when continuous turbidity monitoring equipment fails;
 - (i) 40 CFR 141.562, which describes turbidity monitoring requirements for public water suppliers that utilize two or fewer filters; and
 - (j) Title 37, chapter 42, MCA, which sets forth requirements for water treatment plant operators.
- (8) Copies of Title 37, chapter 42, MCA, may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.

Authorizing statute(s): 75-6-104, MCA

Implementing statute(s): 75-6-104, MCA

History: NEW, 1977 MAR p. 1187, Eff. 12/24/77; AMD, 1982 MAR p. 594, Eff. 3/26/82; AMD, 1991 MAR p. 1492, Eff. 8/16/91; AMD, 1994 MAR p. 2131, Eff. 8/12/94; TRANS, from DHES, 1996 MAR p. 1499; AMD, 2000 MAR p. 3400, Eff. 12/8/00; AMD, 2004 MAR p. 3016, Eff. 1/1/05; AMD, 2008 MAR p. 2625, Eff. 12/25/08; AMD, 2009 MAR p. 1794, Eff. 10/16/09; AMD, 2012 MAR p. 1141, Eff. 6/8/12; AMD, 2017 MAR p. 220, Eff. 2/18/17; AMD, 2024 MAR p. 253, Eff. 2/10/24.