



ADMINISTRATIVE RULES OF MONTANA



17.30.715 CRITERIA FOR DETERMINING NONSIGNIFICANT CHANGES IN WATER QUALITY

- (1) The following criteria will be used to determine whether certain activities or classes of activities will result in nonsignificant changes in existing water quality due to their low potential to affect human health or the environment. These criteria consider the quantity and strength of the pollutant, the length of time the changes will occur, and the character of the pollutant. Except as provided in (2), changes in existing surface or ground water quality resulting from the activities that meet all the criteria listed below are nonsignificant, and are not required to undergo review under 75-5-303, MCA:
 - (a) activities that would increase or decrease the mean monthly flow of a surface water by less than 15 percent or the seven-day ten-year low flow by less than 10 percent;
 - (b) discharges containing carcinogenic parameters or parameters with a bioconcentration factor greater than 300 at concentrations less than or equal to the concentrations of those parameters in the receiving water;
 - (c) discharges containing toxic parameters, which will not cause changes that equal or exceed the trigger values in Department Circular DEQ-7. Whenever the change exceeds the trigger value, the change is not significant if the resulting concentration outside of a mixing zone designated by the department does not exceed 15 percent of the lowest applicable standard;
 - (d) changes in the concentration of nitrate in ground water which will not cause degradation of surface water if the sum of the predicted concentrations of nitrate at the boundary of any applicable mixing zone will not exceed the following values:
 - (i) 7.5 mg/L for nitrate sources other than domestic sewage;
 - (ii) 5.0 mg/L for domestic sewage effluent discharged from a conventional wastewater treatment system;
 - (iii) 7.5 mg/L for domestic sewage effluent discharged from a wastewater treatment system using level 2, as defined in ARM 17.30.702; or
 - (iv) 7.5 mg/L for domestic sewage effluent discharged from a conventional wastewater treatment system in areas where the ground water nitrate level exceeds 5.0 mg/L primarily from sources other than human waste.

For purposes of this subsection (d), the word "nitrate" means nitrate as nitrogen;

- (e) changes in concentration of total inorganic phosphorus in ground water if water quality protection practices approved by the department have been fully implemented and if an

evaluation of the phosphorus adsorptive capacity of the soils in the area of the activity indicates that phosphorus will be removed for a period of 50 years prior to a discharge to any surface waters;

- (f) changes in the quality of water for any harmful parameter, nutrients listed at ARM 17.30.631, and parameters listed in Department Circular DEQ-12A, except as specified in (1)(g), for which water quality standards have been adopted other than carcinogenic, bioconcentrating, or toxic parameters, in either surface or ground water, if the changes outside of a mixing zone designated by the department are less than ten percent of the applicable standard and the existing water quality level is less than 40 percent of the standard;
 - (g) for nutrients in domestic sewage effluent discharged from a wastewater treatment system that does not require an MPDES or MGWPCS permit, except as specified in (1)(d) and (e), which will not cause changes that equal or exceed the trigger values in Department Circular DEQ-7; and
 - (h) changes in the quality of water for any parameter for which there are only narrative water quality standards if the changes will not have a measurable effect on any existing or anticipated use or cause measurable changes in aquatic life or ecological integrity.
- (2) Notwithstanding compliance with the criteria of (1), the department may determine that the change in water quality resulting from an activity which meets the criteria in (1) is degradation based upon the following:
- (a) cumulative impacts or synergistic effects;
 - (b) secondary byproducts of decomposition or chemical transformation;
 - (c) substantive information derived from public input;
 - (d) changes in flow;
 - (e) changes in the loading of parameters;
 - (f) new information regarding the effects of a parameter; or
 - (g) any other information deemed relevant by the department and that relates to the criteria in (1).
- (3) The department may determine that a change in water quality resulting from an activity or category of activities is nonsignificant based on information submitted by an applicant that demonstrates conformance with the guidance found in 75-5-301(5)(c), MCA. In making a determination under this subsection, the department shall allow for public comment prior to a decision pursuant to the public notice procedures in ARM 17.30.1372.
- (4) The following criteria and the criteria in (1)(g) apply to determine whether subsurface wastewater treatment system discharges that are not subject to ground water permitting requirements will result in nonsignificant changes in existing water quality.
- (a) Except as provided in (b), the criteria in (1)(g) apply in either of the following cases:
 - (i) the ordinary high-water mark of a potentially impacted downgradient state surface water is less than 1/4 mile from any portion of the wastewater absorption system; or

- (ii) the ordinary high-water mark of a potentially impacted downgradient state surface water is between 1/4 mile and 1/2 mile from any portion of the wastewater absorption system and:
 - (A) any of the absorption system soil profiles required by Department Circular DEQ-4 has a limiting layer less than 8 feet below the natural ground surface;
 - (B) the absorption system soil application rate pursuant to Department Circular DEQ-4 is 0.5 gallons per day per square foot (gpd/ft²) or larger; or
 - (C) the absorption system soil application rate pursuant to Department Circular DEQ-4 is less than 0.5 gpd/ft² and the soil classification modifier includes extremely cobbly, extremely stony, or extremely bouldery.
 - (b) The criteria in (1)(g) do not apply to subsurface wastewater treatment systems that are more than 1/2 mile from a state surface water or to wastewater treatment systems in which the absorption trench is lower in elevation than all downgradient state surface water within 1/2 mile of the absorption system.
 - (c) The distances to surface water in (a)(i) and (a)(ii) include the five-degree expansion of the effluent plume as described for ground water mixing zones in ARM 17.30.517(1)(d)(iii)(B). The distance is based on the measured ground water flow direction between the absorption system and the ordinary high-water mark of the potentially impacted downgradient state surface water, or the shortest distance between the absorption system and the ordinary high-water mark of the potentially impacted downgradient state surface water when the ground water flow direction is estimated from topography or other method.
 - (d) The analysis of impacts to state surface water must use the waste load, as described in ARM 17.30.517(1)(d)(vii)(B), discharged from the absorption system, except when:
 - (i) the waste load can be reduced pursuant to ARM 17.30.517(1)(d)(vi); or
 - (ii) a saturated zone solute transport or saturated zone particle tracking model is used to demonstrate that the waste load potentially impacting the state surface water should be reduced. The model must include site-specific data characterizing the necessary hydrogeologic properties of the water-bearing units in the effluent flow path and calibrated to site-specific data.
 - (e) Pursuant to 75-5-301(5)(e), MCA, the requirements of (2) do not apply to subsurface wastewater treatment system discharges that are not subject to ground water permitting requirements under 75-5-401, MCA.
- (5) If a court of competent jurisdiction declares 75-5-313, MCA, or any portion of that statute invalid, or if the United States Environmental Protection Agency disapproves 75-5-313, MCA, or any portion of that statute under 30 CFR 131.21, or if rules adopted pursuant to 75-5-313(6) or (7), MCA, expire and general variances are not available, then the significance criteria contained in (1)(g) are the significance criteria for total nitrogen and total phosphorus in surface water.

Authorizing statute(s): 75-5-301, 75-5-303, MCA

Implementing statute(s): 75-5-303, MCA

History: NEW, 1994 MAR p. 2136, Eff. 8/12/94; AMD, 1995 MAR p. 1040, Eff. 6/16/95; AMD, 1995 MAR p. 2256, Eff. 10/27/95; TRANS, from DHES, 1996 MAR p. 1499; AMD, 2002 MAR p. 387, Eff. 2/15/02; AMD, 2003 MAR p. 217, Eff. 2/14/03; AMD, 2004 MAR p. 725, Eff. 4/9/04; AMD, 2006 MAR p. 528, Eff. 2/24/06; AMD, 2014 MAR p. 1815, Eff. 8/8/14; AMD, 2017 MAR p. 602, Eff. 5/13/17; AMD, 2024 MAR p. 1581, Eff. 7/6/24.