



ADMINISTRATIVE RULES OF MONTANA



17.40.202 CLASSIFICATION OF SYSTEMS

- (1) For operators certified prior to January 1, 2016, all water supply systems and wastewater systems are classified according to population served or type of treatment as shown below:
 - (a) Water distribution systems:
 - (i) Class 1--serving more than 20,000 people;
 - (ii) Class 2--serving 2,500 to 20,000 people;
 - (iii) Class 3--serving 500 to 2,500 people;
 - (iv) Class 4--serving 100 to 500 people;
 - (v) Class 5--serving fewer than 100 people.
 - (b) Water treatment systems:
 - (i) Class 1--treatment for surface water utilizing chemical coagulation, filtration, and disinfection;
 - (ii) Class 2--treatment for surface water not utilizing chemical coagulation;
 - (iii) Class 3--well water supply serving greater than 2,500 people, with or without disinfection;
 - (iv) Class 4--well water supply serving 100 to 2,500 people, with or without disinfection;
 - (v) Class 5--well water supply serving fewer than 100 people, with or without disinfection.
 - (c) Wastewater treatment systems:
 - (i) Class 1--secondary and advanced (tertiary) treatment provided by conventional activated sludge plants, biological nutrient removal plants, ammonia conversion processes, or other tertiary processes such as effluent filtration and membrane bioreactor systems;
 - (ii) Class 2--secondary treatment provided by extended aeration activated sludge plants such as oxidation ditches and package plants, fixed-growth trickling filter and bio-disc plants, or sequencing batch reactors;
 - (iii) Class 3--secondary treatment provided by aerated lagoons;
 - (iv) Class 4--lagoons not utilizing artificial aeration.
 - (d) Industrial wastewater treatment systems:

- (i) Class 1--physical-chemical or biological treatment facility treating more than 1.0 mgd, including, but not limited to, the following:
 - (A) air flotation;
 - (B) air stripping;
 - (C) reverse osmosis;
 - (D) electrochemical treatment;
 - (E) activated sludge;
 - (F) anaerobic digestion;
 - (G) aerobic digestion;
 - (H) nutrient removal systems;
 - (I) tertiary treatment; or
 - (J) chemical clarification;
- (ii) Class 2--biological treatment facilities treating 1.0 mgd or less, including, but not limited to, the following:
 - (A) clarification;
 - (B) filtration;
 - (C) constructed wetlands;
 - (D) carbon adsorption;
 - (E) ion exchange;
 - (F) disinfection;
 - (G) trickling filters;
 - (H) bio-disc systems;
 - (I) sequencing batch reactors;
 - (J) biological sand filters;
 - (K) membrane filtration; or
 - (L) advanced on-site treatment and disposal systems described under certification class (e)(ii) requirements;
- (iii) Class 3--industrial treatment facilities, including, but not limited to, the following:
 - (A) oil-water separation;
 - (B) grinding or comminators;
 - (C) land surface disposal;
 - (D) neutralization (pH adjustment);
 - (E) aerated lagoons;

- (F) on-site septic tank treatment systems with pressure dosed drainfields;
 - (G) siphon dosed drainfields; or
 - (H) elevated sand mounds;
- (iv) Class 4--industrial treatment facilities, including, but not limited to, the following:
 - (A) detention ponds;
 - (B) sedimentation ponds;
 - (C) stabilization ponds;
 - (D) lagoons without mechanical mixing or aeration;
 - (E) septic systems treating the discharge from drinking water treatment systems; or
 - (F) on-site treatment using standard septic tanks and gravity drainfields.
- (e) On-site systems:
 - (i) No class 1;
 - (ii) Class 2--package biological wastewater treatment systems, which are public sewage systems and are regulated with a MGWPCS discharge permit, including, but not limited to, the following:
 - (A) conventional activated sludge;
 - (B) sequencing batch reactor;
 - (C) fixed film; and
 - (D) extended aeration activated sludge systems;
 - (iii) Class 3--treatment systems, which are public sewage systems and are regulated with a MGWPCS discharge permit, including, but not limited to, the following:
 - (A) recirculating media trickling filters;
 - (B) intermittent sand filters;
 - (C) recirculating sand filters;
 - (D) aerobic wastewater treatment units;
 - (E) chemical nutrient reduction systems;
 - (F) alternate advanced treatment systems; and
 - (G) experimental systems;
 - (iv) Class 4--treatment with soil absorption systems, which are public sewage systems and are regulated with a MGWPCS discharge permit, including, but not limited to:
 - (A) standard absorption trenches;
 - (B) shallow capped absorption trenches;
 - (C) deep absorption trenches;

- (D) sand-lined absorption trenches;
- (E) gravelless trenches and other absorption methods;
- (F) elevated sand mounds;
- (G) evapotranspiration absorption and evapotranspiration systems;
- (H) subsurface drip;
- (I) gray water irrigation systems;
- (J) absorption beds; and
- (K) experimental systems.

(2) For operators certified on or after January 1, 2016, all water supply systems and wastewater systems are classified according to population served or type of treatment as shown below:

(a) Water distribution systems:

- (i) Class 1--serving more than 15,000 people;
- (ii) Class 2--serving 1,501 to 15,000 people;
- (iii) Class 3--serving 500 to 1,500 people;
- (iv) Class 4--serving fewer than 500 people.

(b) Water treatment systems:

- (i) Class 1--treatment for surface water utilizing chemical coagulation, filtration, and disinfection;
- (ii) Class 2--treatment for surface water not utilizing chemical coagulation;
- (iii) Class 3--ground water supply serving at least 500 people with or without disinfection;
- (iv) Class 4--ground water supply serving fewer than 500 people with or without disinfection.

(c) Wastewater treatment systems:

- (i) Class 1--secondary and advanced (tertiary) treatment provided by:
 - (A) conventional activated sludge plants;
 - (B) biological nutrient removal plants;
 - (C) ammonia conversion processes;
 - (D) extended aeration activated sludge plants, such as oxidation ditches and package plants, fixed-growth trickling filter, and bio-disc plants;
 - (E) sequencing batch reactors; and
 - (F) other tertiary processes, such as effluent filtration and membrane bioreactor systems;
- (ii) Class 2--no class 2;

- (iii) Class 3--secondary treatment provided by aerated lagoons or lagoons not utilizing artificial aeration;
- (iv) Class 4--no class 4.
- (d) Industrial wastewater treatment systems:
 - (i) Class 1--physical-chemical or biological treatment facility treating more than 1.0 mgd, including, but not limited to, the following:
 - (A) air flotation;
 - (B) air stripping;
 - (C) reverse osmosis;
 - (D) electrochemical treatment;
 - (E) activated sludge;
 - (F) anaerobic digestion;
 - (G) aerobic digestion;
 - (H) nutrient removal systems;
 - (I) tertiary treatment; or
 - (J) chemical clarification;
 - (ii) Class 2--biological treatment facilities treating 1.0 mgd or less, including, but not limited to, the following:
 - (A) clarification;
 - (B) filtration;
 - (C) constructed wetlands;
 - (D) carbon adsorption;
 - (E) ion exchange;
 - (F) disinfection;
 - (G) trickling filters;
 - (H) bio-disc systems;
 - (I) sequencing batch reactors;
 - (J) biological sand filters;
 - (K) membrane filtration; or
 - (L) advanced on-site treatment and disposal systems described under certification class (e)(ii) requirements;
 - (iii) Class 3--industrial treatment facilities, including, but not limited to, the following:
 - (A) oil-water separation;

- (B) grinding or comminutors;
- (C) land surface disposal;
- (D) neutralization (pH adjustment);
- (E) aerated lagoons;
- (F) on-site septic tank treatment systems with pressure-dosed drainfields;
- (G) siphon-dosed drainfields; or
- (H) elevated sand mounds;
- (iv) Class 4--industrial treatment facilities, including, but not limited to, the following:
 - (A) detention ponds;
 - (B) sedimentation ponds;
 - (C) stabilization ponds;
 - (D) lagoons without mechanical mixing or aeration;
 - (E) septic systems treating the discharge from drinking water treatment systems; or
 - (F) on-site treatment using standard septic tanks and gravity drainfields.
- (e) On-site systems:
 - (i) no class 1;
 - (ii) Class 2--package biological wastewater treatment systems, which are public sewage systems and are regulated with a MGWPCS discharge permit, including, but not limited to, the following:
 - (A) conventional activated sludge;
 - (B) sequencing batch reactor;
 - (C) fixed film; and
 - (D) extended aeration activated sludge systems;
 - (iii) Class 3--treatment systems, which are public sewage systems and are regulated with a MGWPCS discharge permit, including, but not limited to, the following:
 - (A) recirculating media trickling filters;
 - (B) intermittent sand filters;
 - (C) recirculating sand filters;
 - (D) aerobic wastewater treatment units;
 - (E) chemical nutrient reduction systems;
 - (F) alternate advanced treatment systems; and
 - (G) experimental systems;

- (iv) Class 4--treatment with soil absorption systems, which are public sewage systems and are regulated with a MGWPCS discharge permit, including, but not limited to:
 - (A) standard absorption trenches;
 - (B) shallow capped absorption trenches;
 - (C) deep absorption trenches;
 - (D) sand-lined absorption trenches;
 - (E) gravelless trenches and other absorption methods;
 - (F) elevated sand mounds;
 - (G) evapotranspiration absorption and evapotranspiration systems;
 - (H) subsurface drip;
 - (I) gray water irrigation systems;
 - (J) absorption beds; and
 - (K) experimental systems.
- (3) In order to calculate the class of a particular water supply system pursuant to (1)(a) or (b) when an accurate population census is not available, the population served may be determined by multiplying the number of service connections by 2.5.
- (4) For the purposes of this subchapter, a system classified with a lower number is considered more complex than a system classified with a higher number, i.e., a Class 1 system is more complex than a Class 2 system.

Authorizing statute(s): 37-42-202, MCA

Implementing statute(s): 37-42-104, 37-42-304, 37-42-306, MCA

History: NEW, Eff. 12/5/75; AMD, 1981 MAR p. 1787, Eff. 12/18/81; TRANS, from DHES, 1996 MAR p. 1499; AMD, 1997 MAR p. 545, Eff. 3/25/97; AMD, 1998 MAR p. 2966, Eff. 11/6/98; AMD, 2003 MAR p. 10, Eff. 11/15/02; AMD, 2012 MAR p. 886, Eff. 4/27/12; AMD, 2015 MAR p. 2144, Eff. 12/11/15.