



ADMINISTRATIVE RULES OF MONTANA



17.24.187 SMALL MINER METAL LEACHING SOLVENT OR REAGENT OPERATING PLANS

- (1) An application for a small miner cyanide or other metal leaching solvent or reagent processing facility permit must include the following information for construction and operation of the facility:
 - (a) appropriate maps showing the location of the mine and support facilities, cyanide or other metal leaching solvent or reagent-processing facilities, permit boundaries, and perennial streams;
 - (b) the average and maximum tonnage/day and per year of ore to be processed and the amount of tailings to be generated;
 - (c) a narrative description of the precious metal recovery process;
 - (d) number, size and location of any proposed leach pads and ponds, and ore and tailings piles associated with processing;
 - (e) leach pad, pond, and waste facility designs;
 - (f) a plan for a leak detection system, including a program and schedule of monitoring for possible leakage which monitors pH, electrical conductivity (EC) , cyanide as weak acid dissociable (WAD) , other metal leaching solvents or reagents as appropriate, and other constituent levels, for those constituents appropriate to the type of processing proposed;
 - (g) a remedial action plan for controlling and mitigating discharges to surface waters;
 - (h) a description of the amount of make-up water required to operate the plant for ore processing;
 - (i) a plan for disposal of debris generated by clearing, grubbing and logging ensuring that the debris does not impact water quality or water flow;
 - (j) sediment and erosion controls for surface disturbances related to cyanide processing facilities;
 - (k) a road design and construction plan that provides controlled drainage, including location and number of culverts, waterbars, and slash filters;
 - (l) design for and map of adequate berms for placement around diversion ditches and live streams to prevent water quality degeneration and erosion of disturbed areas;
 - (m) a plan for stabilization of disturbed stream banks to assure that they will not be left in an erosive condition;

- (n) a plan to salvage and stockpile soil from all areas to be disturbed by cyanide processing facilities, including stockpiles and wastepiles;
- (o) design and construction plans for diversions and sediment impoundments to pass the ten-year, 24-hour precipitation event. A diversion must be constructed with drop structures, or energy dissipators if necessary to prevent erosion. Diversion ditch berms must be sloped to account for site-specific conditions, including soils, climate, height of structure, and existing natural slopes and must be revegetated, riprapped, or otherwise stabilized to prevent stream sedimentation;
- (p) a plan for disposal of liquid and solid wastes which includes identification and application areas and the necessary discharge permits;
- (q) end-of-season procedures for shutdown of the cyanide processing facility;
- (r) a plan for prevention of damage to or for documentation of any significant historic, cultural, archeological and paleontologic feature within the permit areas on state and federal lands;
- (s) identification and preliminary evaluation of reasonably feasible alternative facility sites;
- (t) a commitment to comply with the operational requirements of this rule;
- (u) a map of monitoring site locations which also identifies well depth;
- (v) well logs for those wells identified in (u) above; and
- (w) a commitment to avoid perennial streams wherever possible; and
- (x) for facilities that are exposed to precipitation flows and that carry cyanidated or other metal leaching solvent or reagent solution, a plan that provides for adequate passage of a 50-year 24-hour storm even flow; and
- (y) a plan for preventing wildlife access to facilities with cyanidated or other metal leaching solvent or reagent solutions.

Authorizing statute(s): 82-4-321, MCA

Implementing statute(s): 82-4-305(7), 82-4-335(2), MCA

History: NEW, 1991 MAR p. 445, Eff. 4/12/91; TRANS, from DSL, 1996 MAR p. 2852; AMD, 2000 MAR p. 473, Eff. 2/11/00.