



ADMINISTRATIVE RULES OF MONTANA



17.24.313 RECLAMATION PLAN

- (1) Each reclamation plan must contain a description of the reclamation operations proposed, including the following information:
 - (a) the proposed postmining land use pursuant to ARM 17.24.762;
 - (b) a detailed timetable for the estimated completion of each major step in the reclamation plan;
 - (c) a detailed estimate of the cost of reclamation of the proposed operations that will be covered by a performance bond with supporting calculations for the estimate;
 - (d) a plan for backfilling, stabilization, compacting, and grading of the proposed permit area. The plan for backfilling must contain:
 - (i) a description of the final location of all overburden and parting materials in the fill. Diagrams must be included, as necessary;
 - (ii) a narrative and cross-sections, or other means as approved by the department, showing the plan of highwall backfilling, reduction, or an alternative thereof, including the limits of buffer zone consistent with the performance standards of ARM 17.24.501 and 17.24.515;
 - (iii) a narrative description of the derivation of the bulking factor (swell) used by the applicant in calculation of spoil volumes and generation of postmining contour maps. Calculations used in the derivation must be included;
 - (iv) a map showing the postmining topography that the applicant proposes to meet at the time of final bond release. This map must be prepared to reflect the performance standards; and
 - (v) a demonstration that the proposed postmining topography can be achieved. This demonstration must include a cross-section or set of cross-sections, or other method as approved by the department, to depict the removal of overburden and mineral and the replacement of the swelled spoil;
 - (e) a description of postmining drainage basin reclamation that ensures protection of the hydrologic balance, achievement of postmining land use performance standards, and prevention of material damage to the hydrologic balance in adjacent areas, including:
 - (i) a comparison of premining and postmining drainage basin size, drainage density, and drainage profiles as necessary to identify characteristics not distinguishable on the premining and postmining topographic maps;

- (ii) a discussion of how, within drainage basins:
 - (A) the plan meets each performance standard in ARM 17.24.634;
 - (B) the requirements of 82-4-231(10)(k), MCA, and ARM 17.24.314 will be met where the postmining topography differs from the premining as allowed by ARM 17.24.301(13)(c);
- (f) drainage channel designs appropriate for preventing material damage to the hydrologic balance in the adjacent area and to meet the performance standards of ARM 17.24.634, including:
 - (i) detailed drainage designs for channels that contain critical hydrologic, ecologic or land use functions not already addressed in this rule such as alluvial valley floors, wetlands, steep erosive upland drainages, drainages named on USGS topographic maps, or intermittent or perennial streams. Detailed drainage designs include fluvial and geomorphic characteristics pertinent to the specific drainages being addressed; and
 - (ii) for all other channels, typical designs and discussions of general fluvial and geomorphic habit, pattern, and other relevant functional characteristics;
- (g) plans for removal, storage, and redistribution of soil, overburden, spoils, and other material in accordance with ARM 17.24.501, 17.24.502, 17.24.503, 17.24.504, 17.24.505, 17.24.507, 17.24.510, 17.24.515, 17.24.516, 17.24.517, 17.24.518, 17.24.519, 17.24.520, 17.24.521, and 17.24.522, and 17.24.701 through 17.24.703;
 - (i) These plans must include or reference other narratives in the application documenting how the information on the characteristics of the overburden and coal (ARM 17.24.304(1)(g)) and soils (ARM 17.24.304(1)(k)) was utilized in developing the plans.
 - (ii) Using the soil survey information (see ARM 17.24.304 (1)(k)), the applicant shall propose estimated salvage depths for each lift of each soil component (series or phase) of each soil mapping unit.
 - (iii) The application must also include figures with supporting calculations showing:
 - (A) total acreages and volumes of salvageable soil of each lift from each soil component of each soil mapping unit; and
 - (B) the anticipated thickness(es) of soil redistribution for each lift, and in total, on the area of land affected after regrading;
 - (iv) The applicant must submit plans for any necessary monitoring of soils, overburden, spoils, or other materials;
- (h) a narrative of the method for revegetation including, but not limited to, a discussion of:
 - (i) revegetation types, including acreage of each;
 - (ii) the schedule of revegetation;
 - (iii) species and amounts per acre of seeds and seedlings to be used, calculated as pure live seed;

- (iv) introduced species to be used, if any, and documentation of the desirability and necessity of using the introduced species to achieve the approved postmining land use;
 - (v) methods to be used in planting and seeding;
 - (vi) approximate, normal, annual seeding and planting dates;
 - (vii) the use of nurse or cover crop and mulching techniques;
 - (viii) soil tillage, amendments or other management techniques to assist in vegetative establishment;
 - (ix) vegetation monitoring to be implemented to identify conditions during the period of liability;
 - (x) measures to be used to determine the success of revegetation, including the use of reference areas and/or technical standards in relation to the revegetation types pursuant to ARM 17.24.724 and 17.24.726;
 - (xi) plans for determining quality, fertility, and thickness of redistributed soil and for determining quality of regraded spoil. The purpose of these plans is to evaluate the results of the handling of soils, overburden, wastes, and other materials and to evaluate reclamation procedures related to revegetation; and
 - (xii) the types of major equipment to be used in the above operations.
- (i) a description, including appropriate cross-sections and maps, of the measures to be used to seal or manage mine openings, and to plug, case, or manage prospecting holes, other bore holes, wells, and other openings within the proposed permit area in accordance with subchapter 9 and ARM 17.24.1005; and
 - (j) a narrative explaining reclamation of facilities and sites identified under ARM 17.24.308(1)(b).

Authorizing statute(s): 82-4-205, MCA

Implementing statute(s): 82-4-222, 82-4-231, 82-4-232, 82-4-233, 82-4-234, MCA

History: NEW, 1980 MAR p. 725, Eff. 4/1/80; AMD, 1989 MAR p. 30, Eff. 1/13/89; AMD, 1990 MAR p. 936, Eff. 5/18/90; TRANS, from DSL, 1996 MAR p. 3042; AMD, 1999 MAR p. 811, Eff. 4/23/99; AMD, 2004 MAR p. 2548, Eff. 10/22/04; AMD, 2012 MAR p. 737, Eff. 4/13/12; AMD, 2024 MAR p. 255, Eff. 2/10/24; AMD, 2025 MAR, 17-451, Eff. 3/29/25.