

Wyoming Administrative Rules

**Environmental Quality, Dept. of**

Land Quality - Non Coal

Chapter 1: Noncoal Authorities and Definitions

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## CHAPTER 1

### NONCOAL

#### AUTHORITIES AND DEFINITIONS

Section 1. **Authority.** These rules and regulations are adopted by the Environmental Quality Council and the Administrator of the Land Quality Division pursuant to the authority granted the Council and the Administrator by the Wyoming Environmental Quality Act, Sections 35-11-101 through 35-11-1106, Wyoming Statutes, 1977, as amended. These rules and regulations are effective upon filing with the Secretary of State.

Section 2. **Definitions.** The definitions included in the Wyoming Environmental Quality Act, are hereby adopted by this reference. All references to the “Act” herein refer to the Wyoming Environmental Quality Act, as amended.

(a) “Acid drainage” means water with a pH of less than 6.0 and in which total acidity exceeds total alkalinity, discharged from an active or inactive mine or from an area affected by mining and reclamation operations.

(b) “Acid-forming materials” means earth materials that contain sulfide minerals or other minerals which exist in a natural state or if exposed to air, water or weathering processes, will cause acid conditions that may hinder plant establishment or create acid drainage.

(c) “Adjacent areas” means land located outside the permit area upon which air, surface water, groundwater, fish, wildlife, or other resources protected by the Act may reasonably be expected to be adversely impacted by mining or reclamation operations. Unless otherwise specified by the Administrator, this area shall be presumptively limited to lands within one-half mile of the proposed permit area.

(d) “Administrator” means the Administrator of the Division of Land Quality.

(e) “Animal-unit” means one mature beef cow of approximately 1,000 pounds and a calf (up to 6 months old).

(f) “Applicant” means any “person” seeking a permit, permit revision, transfer, or other approval from the Administrator to conduct mining and reclamation operations, or “person” seeking a license to explore, but does not include subsidiaries or parents of the “person,” as “person” is defined in W.S. § 35-11-103(a)(vi).

Ch. 1, Sec. 2(g)

(g) “Aquifer” is a zone, stratum or group of strata that stores and transmits water in sufficient quantities for a specific use.

(h) “Best technology currently available” means equipment, devices, systems, methods, or techniques which, as determined by the Administrator, are currently available and practicable, and will:

(i) Prevent, to the extent possible, additional contributions of suspended solids to streamflow or runoff outside the affected land or permit area. But in no case shall contributions exceed requirements set by applicable State or Federal laws, and

(ii) Minimize, to the extent possible, disturbances and adverse impacts on fish, wildlife and related environmental values, and achieve enhancement of those resources where practicable.

(i) “Bond” means a surety or self-bond instrument by which the permit applicant assures faithful performance of all requirements of the Act, all rules and regulations promulgated thereunder, and the provisions of the permit and license to mine. This term shall also include any Federal insured certificates of deposit, cash, government securities, or irrevocable letters of credit which the operator has deposited with the Department of Environmental Quality in lieu of a Surety Bond or Self-Bond Instrument.

(j) “Combustible material” means organic material that is capable of burning.

(k) “Compaction” means the reduction of pore spaces among particles of soil or rock, generally done by controlled placement and running heavy equipment over the earthen material.

(l) “Comparison area” means a land unit which is representative, in terms of physiography, soils, vegetation and land use history, or a premining plant community from which no or insufficient vegetation data were collected prior to disturbance.

(m) “Complete application” means, for purposes of W.S. § 35- 11-406(m)(i) and to indicate the Administrator’s assessment of completeness and suitability for publication under W.S. § 35-11-406(h) and (j), an application for a permit which contains all information required by the Act and the Land Quality Division regulations that is necessary to make a decision on permit issuance.

(n) “Control area” means a land unit which is representative, in terms of physiography, soils, vegetation and land use history, of a plant community to be affected

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by mining activities as verified by a comparison of its quantitative and qualitative characteristics to similar information from the plant community it typifies and where a mathematical climatic adjustment is made.

(o) “Cover” means vegetation, litter, and rock over the soil which intercept rainfall.

(p) “Discoverer” means any person conducting or intending to conduct any exploration by drilling. This includes locater, owner or agent thereof who will drill or has drilled the hole.

(q) “Diversion” means a channel, embankment, device, or other manmade structure constructed for the purpose of diverting water from one area to another.

(i) “Permanent diversion” means a diversion remaining after bond release.

(ii) “Temporary diversion” means a diversion utilized during mining or reclamation operations, which must be removed and reclaimed prior to bond release.

(r) “Drill site” means all areas of land that are or will be disturbed or utilized by exploration drilling. This area includes drill holes or other drilled excavations, drilling pads, areas disturbed by mud pits, and any land over which drilling mud mixtures overflow or may disturb.

(s) “Embankment” means an artificial deposit of material that is raised above the natural surface of the land and used to contain, divert, or store water, support roads or railways, or other similar purposes.

(t) “Ephemeral stream” means a stream which flows only in direct response to precipitation in the immediate watershed or in response to snowmelt, and which has a channel bottom that is always above the prevailing water table.

(u) “Exploration area” means, for bonding purposes, one or more drill sites, comprising an integrated project conducted by a discoverer within one of the three districts presently established by the Land Quality Division of the Department of Environmental Quality.

(v) “Exploration by drilling” means any exploration drilling for the purpose of gathering subsurface geologic, physical or chemical data to determine the location, quantity or quality of the natural mineral deposit of an area, excluding holes drilled for use as water wells.

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(w) “Gel strength” means the minimum shear stress which results in permanent deformation of a gel.

(x) “Groundwater” is subsurface water that fills available openings in rock or soil materials such that they may be considered water-saturated.

(y) “Hard rock surface mining” means surface mining of minerals deposited within or as igneous or metamorphic rocks or surface mining of rocks of sedimentary origin which are extremely well lithified. These include: anorthosite, copper ore, gold ore, uranium, iron ore, dolomite, limestone, marble, serpentinite, phosphate, sandstone, pumice, feldspar, jade, and ballast rock.

(z) “Hazardous materials” means any material or substance which results from or is encountered in a mining operation which could reasonably be expected to cause physical harm if not controlled in an approved manner.

(aa) “Highest previous use” means a sustainable use of the land which has the greatest economic and social values to the people of the area prior to the commencement of the mining operation.

(ab) “Highwall” means the face of exposed overburden or minerals in an open cut of a surface mine or entry to an underground mine.

(ac) “Hydrologic balance” means the relationship between the quality and quantity of inflow to, outflow from, and storage in a hydrologic unit such as a drainage basin, aquifer, soil zone, lake or reservoir. It encompasses the quantity and quality relationships between precipitation, runoff, evaporation, and the change in ground and surface water storage.

(ad) “Hydrologic regime” means the entire state of water movement in a given area. It is a function of the climate and includes the phenomena by which water first occurs as atmospheric water vapor, passes into a liquid or solid form and falls as precipitation, moves thence along or into the ground surface, and returns to the atmosphere as vapor by means of evaporation and transpiration.

(ae) “Important habitat” means areas of especially high value for a diversity of wildlife or areas that provide certain elements essential to the existence of certain groups of wildlife. Examples of important habitat include, but are not limited to, wetlands, riparian areas, rimrocks, areas offering special shelter or protection, reproduction and nursery areas and wintering areas.

Ch. 1, Sec. 2(af)

(af) “Impoundment” means a closed basin formed naturally or artificially built which is dammed or excavated for the retention of water, slurry or other liquid or semi-liquid material. A permanent impoundment is a structure that will remain after final bond release.

(ag) “Intermittent stream” means a stream or part of a stream that is below the local water table for some part of the year, but is not a perennial stream.

(ah) “Irreparable harm to the environment” means, for the purpose of W.S. § 35-11-406(o), any damage to the environment in violation of the Act or regulations, that cannot be corrected by actions of the applicant.

(ai) “Mine facilities” means those structures and areas incidental to the operation of the mine, including mine offices, processing facilities, mineral stockpiles, storage facilities, shipping, loadout and repair facilities, utility corridors, mill facilities, tailings impoundments (excluding uranium mill tailings and mill facilities within the Nuclear Regulatory Commission license area), disposal areas, heap leach facilities, and spent ore disposal areas.

(aj) “Monitor well” means a well constructed or utilized to measure static water levels or to obtain liquid, solid, or gaseous analytical samples or other physical data that would be used for controlling the operations or to indicate potential circumstances that could affect the environment.

(ak) “Monitoring” means the collection of environmental and hydrological data by either continuous or periodic sampling methods.

(al) “Mulch” means plant residue or other suitable materials placed upon the soil surface to aid in soil stabilization and soil moisture conservation.

(am) “Outslope” means the face of the spoil or embankment sloping downward from the highest elevation to the toe.

(an) “Perennial stream” means a stream or part of a stream that flows continuously during all of the calendar year as a result of groundwater discharge or surface runoff.

(ao) “Permit area” means the area of land and water within the boundaries of the approved permit or permits during the entire life of the operation and includes all affected lands and water.

(ap) “Permit transfer” means a change in ownership or control over the right to conduct mining operations under a permit or license to mine.

#### Ch. 1, Sec. 2(aq)

(aq) “Potentiometric surface” means the surface that coincides with the static level of water in an aquifer. The surface is represented by the levels to which water from a given aquifer will rise under its full head.

(ar) “Precipitation event” means a quantity of water resulting from drizzle, rain, snow, sleet, or hail in a limited period of time. It may be expressed in terms of recurrence interval and duration.

(as) “Public road” means any thoroughfare open to the public which has been and is being used by the public for passage of vehicles, and is maintained by public funds.

(at) “Recharge capacity” means the ability of the soils and underlying materials to allow precipitation and runoff to infiltrate and reach the zone of saturation.

(au) “Reclaimed land surface” means affected land which has been backfilled, graded, contoured, and revegetated in accordance with an approved reclamation plan.

(av) “Reference area” means a land unit which is representative, in terms of physiography, soils, vegetation and land use history, of a plant community to be affected by mining activities as verified by a statistical comparison of absolute values of percent cover and total herbaceous productivity between affected area and reference area data and no mathematical climatic adjustment is made.

(aw) “Revised mining or reclamation operations” means, except for incidental operation changes, mining and/or reclamation operations conducted during the term of a permit which differ from those operations described in the original mine permit application and approved under the original permit.

(ax) “Road(s)” means a surface right-of-way for purposes of travel by land vehicles including the roadbed, shoulders, parking areas, structures, and drainage features. Roads shall be classified to include:

(i) Haul roads: all roads utilized for the transport of the extracted mineral, overburden, or other earthen materials.

(ii) Access roads: all roads, exclusive of haul and light-use roads, utilized for the transportation of personnel, equipment, and small payloads of material within the permit area.

(iii) Light-use roads: those roads established and utilized for exploration, for occasional inspection of monitoring equipment, weather station, test plots, or for other

Ch. 1, Sec. 2(ax)(iii)

purposes necessary to comply with the requirements of these regulations. Light-use roads shall be limited to:

(A) Roads or portions thereof which exist for less than six months and where the road is constructed by grading, cutting, filling or other methods whereby the natural land surface is disturbed; or

(B) Nonconstructed roads where the natural land surface is not physically altered by construction or grading; however, a two-tracked road occurs due to vehicle travel over the same course. Nonconstructed roads may include pioneer construction roads or roads used for transport of spoil and topsoil to stockpile sites which exist for not greater than two weeks and are then stabilized or replaced in accordance with these requirements.

(iv) Exempted roads: roads within the pit and those roads maintained by the county, State or Federal government, or those roads which are existing private roads except:

(A) When the existing road requires extensive regrading and resurfacing in order to render the road usable; or

(B) Upgrading of the road requires cuts, fills, and borrow areas.

(ay) “Safety factor” means the ratio of the available shear strength to the developed shear stress on a potential surface of sliding determined by accepted engineering practice.

(az) “Small operator” means any mining operation for which not more than 10,000 cubic yards of overburden are removed in any one year and the affected land does not exceed ten acres in any one year.

(ba) “Soft rock surface mining” means surface mining of materials deposited within or as sedimentary rock formations which include: uranium, sand and gravel, jade, bentonite, hot springs deposit, placer mining, clay, gypsum, oil shale, and scoria.

(bb) “Soil survey” means a field and other investigation which results in a map showing the geographic distribution of different kinds of soils based on taxonomic characteristics and includes a report that describes, classifies and interprets such soils for use in reclamation.

(bc) “Species composition” means number, kinds, amount, and quality of species.

Ch. 1, Sec. 2(bd)

(bd) “Species diversity” means number of species per unit area.

(be) “Spoil” means overburden removed during the mining operation to expose the mineral and does not include the marketable mineral, subsoil or topsoil.

(bf) “Stabilize” means to control movement of spoil, spoil piles, or areas of disturbed earth by modifying the geometry of the mass, adding control structures, or by otherwise modifying physical or chemical properties.

(bg) “Stagnant water” means naturally or artificially impounded water which, because of its poor quality or shallow depth, is unusable for livestock or wildlife watering, wildlife habitat, or recreational uses.

(bh) “Subsidence” means the measurable lowering of a portion of the earth’s surface or substrata.

(bi) “Subsoil” means the B and C Horizons excluding consolidated bedrock material.

(bj) “Substantially affect” means to conduct activity which, in the determination of the Administrator will significantly impact land, air or water resources so as to disturb the natural land surface.

(bk) “Surface water” means water, either flowing or standing, on the surface of the earth.

(bl) “Suspended solids” means organic or inorganic material carried or held in suspension in water which are retained by a standard glass fiber filter in the procedure outlined by the Environmental Protection Agency’s regulations for wastewater analyses (40 CFR 136).

(bm) “Topsoil” means the A and E Horizons or any combination thereof.

(bn) “Toxic materials” means earthen materials or refuse which, if acted upon by air, water, weather, or microbiological processes, are likely to produce chemical or physical conditions in soils or water that are detrimental to biota or would restrict the common uses of water.

(bo) “Underground development waste” means earthen materials excavated, moved, and disposed of from underground workings in connection with mining activities.



(bp) “Underground mining activities” means underground operations necessary for the extraction of solid minerals by manmade excavations underneath the surface of the earth.

(bq) “Upland areas” means those geomorphic features located outside the area of unconsolidated streamlaid deposits and may include isolated higher terraces, alluvial fans, pediment surfaces, landslide deposits, and surfaces covered with residuum, mud flows or debris flows, as well as highland areas underlain by bedrock and covered by residual weathered material or debris deposited by sheetwash, rillwash, or windblown material.

(br) “Vegetation type” means a recognizable group of species growing together due to similar requirements and tolerances.

(bs) “Water table” means the upper surface of a zone of saturation, where the body of groundwater is not confined by an overlying impermeable zone.

### Section 3. **Applicability.**

(a) All mining operations or operations by which solid minerals are intended to be extracted from the earth, which are commenced or conducted after the effective date of these rules and regulations, shall comply with the requirements hereof, except as specific exemptions are allowed by the Act.

(b) The discretionary exemptions shall be limited as follows:

(i) For the purpose of extraction of minerals pursuant to W.S. § 35-11-401(e)(ii), cooperative agreements between the individual counties and the Division may be entered into by the County Commissioners, the Director and the Administrator in order to facilitate the reclamation activities of those areas affected by the county.

(A) The County Commissioners of each county shall designate a person to coordinate the mining and reclamation activities of the individual county with the Division.

(B) The Division will assist each county in determining the best possible methods of reclamation and prevention of pollution and erosion arising from their mining operations.

(C) The county shall make an annual report to the Administrator detailing past year’s activity of the county in mining and reclamation.

(c) Uranium mill tailings and uranium mill tailings impoundments permitted prior to March 13, 1987 may remain in or be removed from the permit area at the option of the permittee. Those tailings and impoundments remaining in the permit area will be regulated according to the

conditions in the permit. Permit conditions relating to the uranium mill tailings and uranium mill tailing impoundments shall be amended as requested by the permittee. Removal of tailings areas and impoundment areas from the permit area shall be approved by the Administrator at the request of the permittee and may be accomplished either through a permit revision or through the annual report.