

405 KAR 20:001. Definitions for 405 KAR Chapter 20.

RELATES TO: KRS Chapter 350, 7 C.F.R. Part 657, 30 C.F.R. Parts 700.5, 701.5, 707.5, 730-733, 735, 761.5, 762.5, 773.5, 800.5, 843.5, 917, 30 U.S.C. 1253, 1255, 1291

STATUTORY AUTHORITY: KRS 350.028, 350.465, 30 C.F.R. Parts 700.5, 701.5, 707.5, 730-733, 735, 761.5, 762.5, 773.5, 800.5, 843.5, 917, 30 U.S.C. 1253, 1255, 1291

NECESSITY, FUNCTION, AND CONFORMITY: KRS Chapter 350 requires the cabinet to promulgate administrative regulations pertaining to surface coal mining and reclamation operations pursuant to the permanent regulatory program. This administrative regulation establishes definitions for terms used in 405 KAR Chapter 20.

Section 1. Definitions.

- (1) "Acid drainage" means water with a pH of less than six and zero-tenths (6.0) and in which total acidity exceeds total alkalinity, discharged from an active, inactive, or abandoned surface coal mine and reclamation operation or from an area affected by surface coal mining and reclamation operations.
- (2) "Acid-forming materials" means earth materials that contain sulfide minerals or other materials that, if exposed to air, water, or weathering processes, form acids that could create acid drainage.
- (3) "Adjacent area" means land located outside the affected area or permit area, depending on the context in which "adjacent area" is used, where air, surface or groundwater, fish, wildlife, vegetation or other resources protected by KRS Chapter 350 could be adversely impacted by surface coal mining and reclamation operations.
- (4) "Affected area" means any land or water area that is used to facilitate, or is physically altered by, surface coal mining and reclamation operations. The affected area includes:
 - (a) The disturbed area;
 - (b) Any area upon which surface coal mining and reclamation operations are conducted;
 - (c) Any adjacent lands the use of which is incidental to surface coal mining and reclamation operations;
 - (d) All areas covered by new or existing roads used to gain access to, or for hauling coal to or from, surface coal mining and reclamation operations, except as established in this definition;
 - (e) Any area covered by surface excavations, workings, impoundments, dams, ventilation shafts, entryways, refuse banks, dumps, stockpiles, overburden piles, spoil banks, culm banks, tailings, holes or depressions, repair areas, storage areas, or shipping areas;
 - (f) Any areas upon which are sited structures, facilities, or other property or material on the surface resulting from, or incident to, surface coal mining and reclamation operations;
 - (g) The area located above underground workings associated with underground mining activities;
 - (h) Auger mining or in situ mining; and
 - (i) Every road used for the purposes of access to, or for hauling coal to or from, surface coal mining and reclamation operations, unless the road:
 1. Was designated as a public road pursuant to the laws of the jurisdiction in which it is located;
 2. Is maintained with public funds and constructed in a manner similar to other public roads of the same classification within the jurisdiction; and
 3. There is substantial (more than incidental) public use.
- (5) "Agricultural use" means the use of any tract of land for the production of animal or vegetable life. The uses include activities such as the pasturing, grazing, and watering of

livestock, and the cropping, cultivation, and harvesting of plants.

(6) "Applicant" means any person seeking a permit, permit revision, permit amendment, permit renewal, or transfer, assignment, or sale of permit rights from the cabinet to conduct surface coal mining and reclamation operations or approval to conduct coal exploration operations pursuant to KRS Chapter 350 and all applicable administrative regulations.

(7) "Application" means the documents and other information filed with the cabinet seeking issuance of permits, revisions, amendments, renewals, and transfer, assignment, or sale of permit rights for surface coal mining and reclamation operations or, if required, seeking approval for coal exploration.

(8) "Approximate original contour" is defined by KRS 350.010.

(9) "Aquifer" means a zone, stratum, or group of strata that can store and transmit water in sufficient quantities for domestic, agricultural, industrial, or other beneficial use.

(10) "Auger mining" means a method of mining coal at a cliff or highwall by drilling holes into an exposed coal seam from the highwall and transporting the coal along an auger bit to the surface and includes all other methods of mining in which coal is extracted from beneath the overburden by mechanical devices located at the face of the cliff or highwall and extending laterally into the coal seam, such as extended depth and secondary recovery systems.

(11) "Bond pool" or "Kentucky Bond Pool" means the voluntary alternative bonding program established at KRS 350.700 through 350.755.

(12) "Cabinet" is defined by KRS 350.010.

(13) "C.F.R." means Code of Federal Regulations.

(14) "Coal" means combustible carbonaceous rock, classified as anthracite, bituminous, subbituminous, or lignite by ASTM Standard D 388-77.

(15) "Coal exploration" means the field gathering of:

(a) Surface or subsurface geologic, physical, or chemical data by mapping, trenching, drilling, geophysical, or other techniques necessary to determine the quality and quantity of overburden and coal of an area; or

(b) Environmental data to establish the conditions of an area before beginning surface coal mining and reclamation operations pursuant to the requirements of 405 KAR Chapters 7 through 24 if the activity could cause any disturbance of the land surface or any appreciable effect upon land, air, water, or other environmental resources.

(16) "Coal mine waste" means coal processing waste and underground development waste.

(17) "Coal processing plant" means a facility where coal is subjected to chemical or physical processing or cleaning, concentrating, crushing, sizing, screening, or other processing or preparation including all associated support facilities including loading facilities; storage and stockpile facilities; sheds, shops, and other buildings; water treatment and water storage facilities; settling basins and impoundments; and coal processing and other waste disposal areas.

(18) "Coal processing waste" means materials that are separated from the product coal during the cleaning, concentrating, or other processing or preparation of coal.

(19) "Collateral bond" means an indemnity agreement in a sum certain payable to the cabinet executed by the permittee and that is supported by the deposit with the cabinet of cash, negotiable certificates of deposit, or an irrevocable letter of credit of any bank organized and authorized to transact business in the United States.

(20) "Compaction" means increasing the density of a material by reducing the voids between the particles by mechanical effort.

(21) "Cropland" means land used for the production of adapted crops for harvest, alone or in a rotation with grasses and legumes, and includes row crops, small grain crops, hay crops, nursery crops, orchard crops, and other similar specialty crops.

- (22) "Day" means calendar day unless otherwise specified to be a working day.
- (23) "Department" means the Department for Natural Resources.
- (24) "Disturbed area" means an area where vegetation, topsoil, or overburden is removed or upon which topsoil, spoil, coal processing waste, underground development waste, or noncoal waste is placed by surface coal mining operations. Those areas are classified as "disturbed" until reclamation is complete and the performance bond or other assurance of performance required by 405 KAR Chapter 10 is released.
- (25) "Diversion" means a channel, embankment, or other manmade structure constructed to divert water from one (1) area to another.
- (26) "Downslope" means the land surface below the projected outcrop of the lowest coalbed being mined along each highwall.
- (27) "Embankment" means a manmade deposit of material that is raised above the natural surface of the land and used to contain, divert, or store water; to support roads or railways; or for other similar purposes.
- (28) "Ephemeral stream" means a stream that flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice, and that has a channel bottom that is always above the local water table.
- (29) "Excess spoil":
- (a) Means spoil disposed of in a location other than the coal extraction area; and
 - (b) Does not spoil material used to achieve the approximate original contour.
- (30) "Groundwater" means subsurface water that fills available openings in rock or soil materials to the extent that they are considered water saturated.
- (31) "Head-of-hollow fill" means a fill structure consisting of any material, other than coal processing waste and organic material, placed in the uppermost reaches of a hollow near the approximate elevation of the ridgeline, where there is no significant natural drainage area above the fill, and where the side slopes of the existing hollow measured at the steepest point are greater than twenty (20) degrees or the average slope of the profile of the hollow from the toe of the fill to the top of the fill is greater than ten (10) degrees.
- (32) "Highwall" means the face of exposed overburden and coal in an open cut of a surface mining activity or for entry to underground mining activities.
- (33) "Historically used for cropland."
- (a) "Historically used for cropland" means that lands have been used for cropland for any five (5) years or more out of the ten (10) years immediately preceding:
 - 1. The application; or
 - 2. The acquisition of the land for the purpose of conducting surface coal mining and reclamation operations.
 - (b) Lands meeting either paragraph (a)1 or 2 of this subsection are considered "historically used for cropland".
 - (c) In addition to the lands covered by paragraph (a) of this subsection, other lands shall be considered "historically used for cropland", including:
 - 1. Lands that would likely have been used as cropland for any five (5) out of the last ten (10) years immediately preceding the acquisition or the application but for some fact of ownership or control of the land unrelated to the productivity of the land; and
 - 2. Lands that the cabinet determines, on the basis of additional cropland history of the surrounding lands and the lands under consideration, are clearly cropland but fall outside the specific five (5) years in ten (10) criterion.
 - (d) Acquisition includes purchase, lease, or option of the land for the purpose of conducting or allowing through resale, lease or option, the conduct of surface coal mining and reclamation operations.
- (34) "Hydrologic balance" means the relationship between the quality and quantity of water inflow to, water outflow from, and water storage in a hydrologic unit such as a drainage basin, aquifer, soil zone, lake, or reservoir. It encompasses the dynamic

relationship between precipitation, runoff, evaporation, and changes in ground and surface water storage.

(35) "Impoundment" means a closed basin, naturally formed or artificially built, which is dammed or excavated for the retention of water, sediment, or waste.

(36) "Industrial/commercial lands" means lands used for:

(a) Extraction or transformation of materials for fabrication of products, wholesaling of products, or long-term storage of products, and heavy and light manufacturing facilities; or

(b) Retail or trade of goods or services, including hotels, motels, stores, restaurants, and other commercial establishments.

(37) "In situ processes" means activities conducted on the surface or underground in connection with in-place distillation, retorting, leaching, or other chemical or physical processing of coal. The term includes in situ gasification, in situ leaching, slurry mining, solution mining, borehole mining, and fluid recovery mining.

(38) "Intermittent stream" means:

(a) A stream or reach of stream that drains a watershed of one (1) square mile or more but does not flow continuously during the calendar year; or

(b) A stream or reach of a stream that is below the local water table for at least some part of the year, and obtains its flow from both surface runoff and groundwater discharge.

(39) "KAR" means Kentucky administrative regulations.

(40) "KRS" means Kentucky Revised Statutes.

(41) "Land use" means specific functions, uses, or management-related activities of an area, and could be identified in combination when joint or seasonal uses occur and could include land used for support facilities that are an integral part of the use. In some instances, a specific use can be identified without active management.

(42) "Monitoring" means the collection of environmental data by either continuous or periodic sampling methods.

(43) "Mulch" means vegetation residues or other suitable materials that aid in soil stabilization and soil moisture conservation, thus providing micro-climatic conditions suitable for germination and growth.

(44) "Operations" is defined by KRS 350.010.

(45) "Operator" is defined by KRS 350.010.

(46) "OSM" means Office of Surface Mining Reclamation and Enforcement, United States Department of the Interior.

(47) "Outslope" means the face of the spoil or embankment sloping downward from the highest elevation to the toe.

(48) "Overburden" is defined by KRS 350.010.

(49) "Perennial stream":

(a) Means a stream or that part of a stream that flows continuously during all of the calendar year as a result of groundwater discharge or surface runoff; and

(b) Does not mean "intermittent stream" or "ephemeral stream".

(50) "Performance bond" means a surety bond, a collateral bond, or a combination thereof, or bonds filed pursuant to the provisions of the Kentucky Bond Pool Program (405 KAR 10:200, KRS 350.595, and KRS 350.700 through 350.755), by which a permittee assures faithful performance of all the requirements of KRS Chapter 350, 405 KAR Chapters 7 through 24, and the requirements of the permit and reclamation plan.

(51) "Permit" means written approval issued by the cabinet to conduct surface coal mining and reclamation operations.

(52) "Permit area" means the area of land, indicated on the approved map submitted by the permittee with an application, required to be covered by the permittee's performance bond pursuant to 405 KAR Chapter 10 and that includes the area of land upon which the

permittee proposes to conduct surface coal mining and reclamation operations pursuant to the permit, including all disturbed areas. Areas adequately bonded under another valid permit, pursuant to 405 KAR Chapter 10, could be excluded from the permit area.

(53) "Permittee" means an operator or a person holding or required by KRS Chapter 350 or 405 KAR Chapters 7 through 24 to hold a permit to conduct surface coal mining and reclamation operations during the permit term and until all reclamation obligations imposed by KRS Chapter 350 and 405 KAR Chapters 7 through 24 are satisfied.

(54) "Person" is defined by KRS 350.010.

(55) "Precipitation event" means a quantity of water resulting from drizzle, rain, snowmelt, sleet, or hail in a specified period of time.

(56) "Prime farmland" means those lands defined by the Secretary of Agriculture in 7 C.F.R. 657 and that have been "historically used for cropland" as that phrase is defined in this section.

(57) "Public road" means any publicly owned thoroughfare for the passage of vehicles.

(58) "RAM" means Reclamation Advisory Memorandum.

(59) "Reclamation" is defined by KRS 350.010.

(60) "Recreation land" means land used for public or private leisure-time use, including developed recreation facilities such as parks, camps, and amusement areas, as well as areas for less intensive uses such as hiking, canoeing, and other undeveloped recreational uses.

(61) "Residential land" means tracts employed for single and multiple-family housing, mobile home parks, and other residential lodgings.

(62) "Road":

(a) Means a surface right-of-way for purposes of travel by land vehicles used in coal exploration or surface coal mining and reclamation operations. A road consists of the entire area within the right-of-way, including the roadbed, shoulders, parking and side area, approaches, structures, ditches, surface, and contiguous appendages necessary for the total structure. The term includes access and haul roads constructed, used, reconstructed, improved, or maintained for use in coal exploration or surface coal mining and reclamation operations, including use by coal hauling vehicles leading to transfer, processing, or storage areas; and

(b) Does not mean pioneer or construction roadways used for part of the road construction procedure and promptly replaced by a road pursuant to 405 KAR Chapters 16 and 18 located in the identical right-of-way as the pioneer or construction roadway. The term also excludes any roadway within the immediate mining pit area.

(63) "Safety factor" means the ratio of the available shear strength to the developed shear stress, or the ratio of the sum of the resisting forces to the sum of the loading or driving forces, as determined by accepted engineering practices.

(64) "SCS" means Soil Conservation Service.

(65) "Sedimentation pond":

(a) Means a primary sediment control structure designed, constructed, and maintained in accordance with 405 KAR 16:090 or 405 KAR 18:090 and that can include a barrier, dam, or excavated depression which slows down water runoff to allow suspended solids to settle out; and

(b) Does not mean secondary sedimentation control structures, such as straw dikes, riprap, check dams, mulches, dugouts, and other measures that reduce overland flow velocity, reduce runoff volume, or trap sediment, to the extent that the secondary sedimentation structures drain to a sedimentation pond.

(66) "Shadow area" means the surface area overlying underground mine works and surface areas associated with auger and in situ mining.

(67) "Slope" means average inclination of a surface, measured from the horizontal, generally expressed as the ratio of a unit of vertical distance to a given number of units of

horizontal distance (e.g., 1v:5h). It is also expressed as a percent or in degrees.

(68) "Slurry mining" means the hydraulic breakdown of subsurface coal with drill-hole equipment, and the eduction of the resulting slurry to the surface for processing.

(69) "Soil horizons" means contrasting layers of soil parallel or nearly parallel to the land surface. Soil horizons are differentiated on the basis of field characteristics and laboratory data. The four (4) master soil horizons are:

(a) "A horizon." The uppermost mineral layer, often called the surface soil. It is the part of the soil in which organic matter is most abundant, and leaching of soluble or suspended particles is typically the greatest;

(b) "E horizon." The layer commonly near the surface below an A horizon and above a B horizon. An E horizon is most commonly differentiated from an overlying A horizon by lighter color and generally has measurably less organic matter than the A horizon. An E horizon is most commonly differentiated from an underlying B horizon in the same sequum by color of higher value or lower chroma, by coarser texture, or by a combination of these properties;

(c) "B horizon." The layer that typically is immediately beneath the E horizon and often called the subsoil. This middle layer commonly contains more clay, iron, or aluminum than the A, E, or C horizons; and

(d) "C horizon." The deepest layer of soil profile. It consists of loose material or weathered rock that is relatively unaffected by biologic activity.

(70) "Soil survey" means a field and other investigation, resulting in a map showing the geographic distribution of different kinds of soils and an accompanying report that describes, classifies, and interprets the soils for use. Soil surveys meet the standards of the National Cooperative Soil Survey.

(71) "Spoil" means overburden and other materials, excluding topsoil, coal mine waste, and mined coal, that are excavated during surface coal mining and reclamation operations.

(72) "Steep slope" means any slope of more than twenty (20) degrees.

(73) "Substantially disturb" means, for purposes of coal exploration, to significantly impact land or water resources by blasting; by removal of vegetation, topsoil, or overburden; by construction of roads or other access routes; by placement of excavated earth or waste material on the natural land surface; or by other activities, or to remove more than twenty-five (25) tons of coal.

(74) "Surety bond" means an indemnity agreement in a sum certain, payable to the cabinet and executed by the permittee, which is supported by the performance guarantee of a corporation licensed to do business as a surety in the Commonwealth of Kentucky.

(75) "Surface coal mining and reclamation operations" is defined by KRS 350.010.

(76) "Surface coal mining operations" is defined by KRS 350.010.

(77) "Suspended solids" or nonfilterable residue, expressed as milligrams per liter, means organic or inorganic materials carried or held in suspension in water that are retained by a standard glass fiber filter in the procedure outlined by the U.S. EPA's regulations for waste water and analyses (40 C.F.R. 136).

(78) "Ton" means 2,000 pounds avoirdupois (.90718 metric ton).

(79) "Topsoil" means the A and E soil horizon layers of the four (4) master soil horizons.

(80) "Toxic-forming materials" means earth materials or wastes that, if acted upon by air, water, weathering, or microbiological processes, are likely to produce chemical conditions in soils or water that are detrimental to biota or uses of water.

(81) "Toxic mine drainage" means water that is discharged from active or abandoned mines or other areas affected by coal exploration or surface coal mining and reclamation operations, which contains a substance that through chemical action is likely to kill, injure, or impair biota commonly present in the area that might be exposed to it.

(82) "Transfer, assignment, or sale of permit rights" means a change in ownership or other effective control over the right to conduct surface coal mining operations under a permit issued by the cabinet.

(83) "Underground development waste" means waste coal, shale, claystone, siltstone, sandstone, limestone, or similar materials that are extracted from underground workings in connection with underground mining activities.

(84) "Underground mining activities" means a combination of:

(a) Surface operations incident to underground extraction of coal or in situ processing, including construction, use, maintenance, and reclamation of roads, aboveground repair areas, storage areas, processing areas, and shipping areas; areas upon which are sited support facilities including hoist and ventilating ducts; areas utilized for the disposal and storage of waste; and areas on which materials incident to underground mining operations are placed; and

(b) Underground operations such as underground construction, operation, and reclamation of shafts, adits, underground support facilities; in situ processing; and underground mining, hauling, storage, and blasting.

(85) "U.S. EPA" means United States Environmental Protection Agency.

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

(18 Ky.R. 2490; 2853; eff. 4-3-1992; TAm eff. 8-9-2007; 44 Ky.R. 656, 1017, 1327; eff. 1-5-2018; Crt eff. 7-3-2018.)