Total material—The quantity of a given material present in an unfiltered water sample, regardless of the form or occurrence of the material. (4)

Total recoverable material—The total quantity of all dissolved forms of a given material plus that which is brought into solution and into an analytically determinable form, usually by means of an acid-digestion pretreatment or an acid-oxidation-digestion pretreatment of the sample. The exact conditions of the digestion pretreatment must be specified. (4)

Toxic forming materials—Earth materials or bedrock mine waste which are acted upon by air, water, weathering, or microbiological processes and are likely to produce chemical or physical conditions in soils or water that are detrimental to biota or users of water. (9)

Toxic mine drainage—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 or physical effects is likely to kill, injure, or impair biota commonly present in the area that might be exposed to it. (9)

Trace element—Any constituent, other than organic, of water that generally occurs in concentrations of less than one milligram per liter. (10)

Transgressive sediments—Sediments deposited during the advance or encroachment of water over a land area or during the subsidence of the land. (8)

Transmissivity—The rate at which water of the prevailing kinematic viscosity is transmitted through a unit width of the aquifer under a unit hydraulic gradient. (1)

Transpiration—The process by which water absorbed by plants, usually through the roots, is evaporated into the atmosphere from the plant surface. (8)

Unconfined aquifer—See water-table aquifer.

Unconfined groundwater—Groundwater that has a free water table and is not overlain by a confining bed . . . (8)

Unconformity—(a) A substantial break or gap in the geologic record where a rock is overlain by another that is not next in stratigraphic succession. . . . (b) The structural relationship between rock strata in contact, characterized by a lack of continuity in deposition and corresponding to a period of non-deposition, weathering, or especially erosion . . . prior to the deposition of the younger beds, and often (but not always) marked by absence of parallelism between the strata; . . . (8)

Unconsolidated materials—(a) Sediment that is loosely arranged or unstratified, or whose particles are not cemented together, occurring either at the surface or at depth. (b) Soil material that is in a loosely aggregated form. (8)

Underburden—The barren rock material underlying a mineral deposit; opposite of overburden; underclay is a special type of underburden.

Underclay—A layer of fine-grained detrital material, usually clay, lying immediately beneath a coal bed or forming the floor of a coal seam. (8)

Underground mining activities—A combination of (a) surface operations incident to underground extraction of coal or in situ processing. . . . (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. (9)

Undifferentiated—Not separated into different formations of rock types.

Uniform flow—Specific discharge, at every point in the aquifer, that has the same magnitude and direction at any given instant in time. (1)

Unsaturated zone—The thickness of material between the land surface and the water table. (1)

Unsteady flow—Flow that results if the magnitude or direction of the specific discharge changes with time. (1)

Washout (mining)—A mass of shale, siltstone, or sandstone filling a channel in a coal seam that was cut into the coal swamp during the time of deposition. (8)

—A channel cut into or through a coal seam at some time during or after the formation of the seam, and generally filled in later by sand that later lithified into sandstone. (11)

Water-budget—See Hydrologic Budget.

Water table—The upper surface of a zone of saturation, where the body of groundwater is not confined by an overlying impermeable zone. (9)

Water-table aquifer—An aquifer having a water surface at which the water pressure is atmospheric. (1) (see unconfined groundwater)

Well yield—The quantity of water pumped, or withdrawn, from a well per unit of time; for example, the number of gallons per minute. (7)

Zone of saturation—A thickness of rock or soil material in which all the interstices are filled with water under pressure greater than atmospheric. The upper surface of the zone of saturation is the water table. (7)

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