

## **15A NCAC 02K .0104    DEFINITIONS**

As used in this Subchapter, the following terms have their stated meaning:

- (1) "Applicant" means any person who has notified the department that he or she desires to construct, repair, alter, or remove a dam and requests approval by the department.
- (2) "Appurtenance" means an accessory or integral subordinate structure associated with a dam, such as a spillway, conduit, walkway, valve, control gate, etc.
- (3) "Articulation" means provisions for safe movement at the joint or juncture of sections of conduit.
- (4) "As-built plans" means drawings, photographs, test data, and descriptions that clearly and accurately define the dam and its appurtenances after all construction is completed.
- (5) "Conduit" means a natural or artificial channel or pipe through which water or other fluid is conveyed.
- (6) "Critical circle" means the circle with the lowest factor of safety against mass movement in a circular arc analysis of slope stability.
- (7) "Critical failure wedge" means the mass or block having the lowest factor of safety against mass movement in an analysis of slope stability along planar surfaces.
- (8) "Director" means the Director of the Division of Energy, Mineral, and Land Resources, North Carolina Department of Natural Resources and Community Development.
- (9) "Equipotential lines" means lines which represent points of equal energy level or head in a flow net.
- (10) "Factor of safety" means the ratio of the forces or moments resisting mass movement to the forces or moments tending to produce mass movement.
- (11) "Flow lines" means lines which represent the direction of flow in a flow net.
- (12) "Flow net" means a graphical representation of flow lines and equipotential lines.
- (13) "Hazard potential" means the probable damage that would occur if the structure failed, in terms of loss of human life and economic loss or environmental damage.
- (14) "Maintenance plan" means written instructions prepared by the engineer that prescribe the proper servicing and repair of mechanical equipment, appurtenances, spillways, vegetative cover, and other aspects related to the safety of the dam.
- (15) "Owner" means the individual or association of individuals owning the property on which the dam exists or is to be constructed, and the persons financially responsible for the construction.
- (16) "Phreatic surface" means the free-water surface of a zone of seepage; it is represented by the uppermost flow line, or seepage line, in a flow net.
- (17) "Qualified engineer" means a professional engineer legally qualified to practice in North Carolina pursuant to Chapter 89C of the General Statutes of North Carolina, and having appropriate specialty expertise for the particular dam engineering problem with which he is involved.
- (18) "Qualified geologist" means an earth scientist experienced in applied geology with respect to the interaction of lithologies, soils, and geologic structures with dams and impoundments, who can provide professional credentials such as certification by the American Institute of Professional Geologists or registration as a geologist in the United States.
- (19) "Quality control" means that combination of testing, observation, and monitoring provided during construction to confirm that requirements stated or depicted in the plans and specifications are being achieved.
- (20) "Rapid drawdown" means removal of liquid from a reservoir at a rate that is significantly faster than the rate of drainage of the materials composing the portions of the reservoir exposed by the fluid removal.
- (21) "Seepage" means the movement of water in a porous material and the water exiting at the visible surface of the material.
- (22) "Sliding base analysis" means an analysis of the safety of a structure against lateral movement along its foundation.
- (23) "Waste treatment and mine refuse dam" means a structure for impounding, restraining, storing, or disposing of liquids, slurries, or materials capable of liquification, produced from industrial, commercial, municipal, agricultural, or mining activities.
- (24) "Construction" means any action, other than by natural causes, that creates a structure capable of impounding water or other liquids, or which increases the impoundment capacity of an existing structure. For the purposes of 15A NCAC 2K .0222, it shall also mean the reduction of the height

or impoundment capacity of a dam when the effect of such reduction will be to exempt the dam from the North Carolina Dam Safety Law of 1967.

*History Note:* Authority G.S. 143-215.25; 143-215.31;  
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Amended Eff. July 1, 1988; November 1, 1984;  
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Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. December 23, 2017.