"Aerobic digestion" shall mean the biochemical decomposition of organic matter in residuals into carbon dioxide and water by microorganisms in the presence of air.

"Agricultural land" shall mean land on which a food crop, feed crop, or fiber crop is grown.

"Anaerobic digestion" shall mean the biochemical decomposition of organic matter in residuals into methane gas and carbon dioxide by microorganisms in the absence of air.

"Bag and other container" shall mean a bag, bucket, bin, box, carton, vehicle, trailer, tanker, or an open or closed receptacle with a load capacity of 1.102 short tons or one metric ton, or less.

"Base flood" shall mean a flood that has a one percent chance of occurring in any given year.

"Biological residuals" shall mean residuals that have been generated during the treatment of domestic wastewater, the treatment of animal processing wastewater, or the biological treatment of industrial wastewater.

"Biological treatment" shall mean treatment in a system that uses biological processes, including lagoons, activated sludge systems, extended aeration systems, and fixed film systems.

"Bulk residuals" shall mean residuals that are transported and not sold or given away in a bag or other container for application to the land.

"Class A residuals" shall mean residuals that are either bagged or bulk residuals meeting:
(a) the pollutant limits in Rule .1105(a) and .1105(c) of this Section;
(b) the pathogen reduction requirements in Rule .1106(a) of this Section; and
(c) the vector attraction reduction requirements in Rule .1107 of this Section.

"Class B residuals" shall mean residuals that are bulk residuals meeting:
(a) the pollutant limits in Rule .1105(a) and .1105(b) of this Section;
(b) the pathogen reduction requirements in Rule .1106(b) of this Section; and
(c) the vector attraction reduction requirements in Rule .1107 of this Section.

"Cover" shall mean soil or Division-approved material used to cover residuals placed in a surface disposal unit.

"Cumulative pollutant loading rate" shall mean the maximum amount of a pollutant that is permitted to be applied to a unit area of land.

"Dedicated program" shall mean a program involving the application of residuals in which any of the permitted land meets the definition of a dedicated land application site.

"Dedicated land application site" shall mean land:
(a) to which residuals are applied at greater than agronomic rates;
(b) to which residuals are applied through fixed irrigation facilities or irrigation facilities fed through a fixed supply system; or
(c) that is primarily used for the disposal of residuals and agricultural crop production is of secondary importance.

"Density of microorganisms" shall mean the number of microorganisms per unit mass of total solids on a dry weight basis in the residuals.

"Dry weight basis" shall mean the weight calculated after the residuals have been dried at 105 degrees Celsius until they reach a constant mass.

"Feed crop" shall mean a crop produced for consumption by animals.

"Fiber crop" shall mean a crop grown for fiber production, including flax and cotton.

"Food crop" shall mean a crop produced for consumption by humans, including fruits, vegetables, and tobacco.

"Grit" shall mean sand, gravel, cinders, or other materials with a high specific gravity generated during preliminary treatment of wastewater in a wastewater treatment facility.

"Incorporation" shall mean the mixing of residuals with top soil to a depth of four inches by methods such as discing, plowing, and rototilling.

"Injection" shall mean the subsurface application of liquid residuals to a depth of four to 12 inches.

"Land application" shall mean the spraying or spreading of residuals onto the land surface, the injection of residuals below the land surface, or the incorporation of residuals into the soil so that the residuals can condition the soil or fertilize crops or vegetation grown in the soil.

"Lower explosive limit for methane gas" shall mean the lowest percentage of methane gas in air, by volume, that propagates a flame at 25 degrees Celsius and atmospheric pressure.
"Monthly average" shall mean the arithmetic mean of all measurements taken during a month.

"Pathogens" shall mean disease-causing organisms, including disease-causing bacteria, protozoa, viruses, and viable helminth ova.

"Place residuals" shall mean to dispose of residuals in a surface disposal unit.

"Person who prepares residuals" shall mean either the person who generates residuals during the treatment of waste in a wastewater treatment facility or the person who derives a material from residuals.

"Pollutant limit" shall mean a numerical value that describes the amount of a pollutant allowed per unit amount of residuals or the amount of a pollutant that can be applied to a unit area of land.

"Public contact site" shall mean land with a high potential for contact by the public as defined in 40 CFR 503.11(1), including public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

"Runoff" shall mean rainwater, leachate, or other liquid that drains over the land surface.

"Screenings" shall mean rags or other large materials generated during preliminary treatment of wastewater in a wastewater treatment facility.

"Seismic impact zone" shall mean an area that has a 10 percent or greater probability that the horizontal ground level acceleration of the rock in the area exceeds 0.10 gravity once in 250 years.

"Specific oxygen uptake rate (SOUR)" shall mean the mass of oxygen consumed per unit time per unit mass of total solids on a dry weight basis in the residuals.

"Surface disposal unit" shall mean the land on which only residuals are placed for final disposal, including monofills, lagoons, and trenches, and not including land on which residuals are either treated or stored.

"Surface disposal unit boundary" shall mean the outermost perimeter of a surface disposal unit.

"Total solids" shall mean the materials that remain as residue after the residuals have been dried at between 103 and 105 degrees Celsius until they reach a constant mass.

"Water treatment residuals" shall mean residuals that have been generated during the treatment of potable or process water.

"Unstabilized residuals" shall mean residuals that have not been treated in either an aerobic or an anaerobic treatment process.

"Unstable area" shall mean land subject to natural or human-induced forces that may damage the structural components of a surface disposal unit, including land on which the soils are subject to mass movement.

"Vector attraction" shall mean the characteristic of residuals that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

"Volatile solids" shall mean the amount of the total solids in the residuals lost when they are combusted at 550 degrees Celsius in the presence of excess air.

History Note: Authority G.S. 143-215.1; 143-215.3(a);
Eff. September 1, 2006;