**74:51:01:23.  Bioassay methods.** The toxicity of pollutants to aquatic life must be based on bioassays which determine concentrations of a substance that at a defined period of exposure are toxic to aquatic life. Toxicity tests must simulate expected receiving water conditions. Tests must be conducted according to test procedures approved or methods given in the references listed in 40 C.F.R. Part 136 (July 1, 2020).

The term, acute, means a stimulus severe enough to rapidly induce an effect. In aquatic toxicity tests, a deleterious response (e.g., mortality, disorientation, immobilization) to a stimulus observed in 96 hours or less is considered acute. When referring to aquatic toxicology or human health, an acute effect is not always measured in terms of lethality.

The term, chronic, means a stimulus of the lowest concentration of a constituent causing observable effects. In aquatic toxicity tests, observable effects may include lethality, reduced growth, or reduced reproduction.

**Source:** SL 1975, ch 16, § 1; 4 SDR 32, effective December 4, 1977; transferred from § 34:04:02:06, effective July 1, 1979; 10 SDR 145, effective July 4, 1984; 13 SDR 129, 13 SDR 141, effective July 1, 1987; 14 SDR 86, effective December 24, 1987; 19 SDR 111, effective January 31, 1993; transferred from § 74:03:02:06, July 1, 1996; 24 SDR 10, effective July 20, 1997; 35 SDR 253, effective May 12, 2009; 41 SDR 109, effective January 12, 2015; 47 SDR 110, effective April 27, 2021.

**General Authority:** SDCL 34A-2-10, 34A-2-11, 34A-2-93.

**Law Implemented:** SDCL 34A-2-10, 34A-2-11.