

## **7052.0010 DEFINITIONS.**

**Subpart 1. Scope.** The terms used in this chapter have the meanings given them in this part, chapters 7001 and 7050, and Minnesota Statutes, chapter 115. If terms defined in this part conflict with the definitions in chapters 7001 and 7050, the definitions in this part govern for this chapter.

**Subp. 2. Acute toxicity.** "Acute toxicity" means a stimulus severe enough to rapidly induce a response. In toxicity tests, a response is normally observed in 96 hours or less. Acute effects are often measured in terms of mortality or other debilitating effects, represented as LC50s or EC50s, and expressed as concentrations of mass per unit volume, percent effluent, or toxic units.

**Subp. 3. Background.** "Background" means all loadings that:

A. flow from upstream waters into the specified watershed, waterbody, or waterbody segment for which a total maximum daily load (TMDL), wasteload allocation (WLA) in the absence of a TMDL or preliminary WLA for the purpose of determining the need for a water quality-based effluent limitation is being developed;

B. enter the specified watershed, waterbody, or waterbody segment through atmospheric deposition or sediment release or resuspension; or

C. occur within the specified watershed, waterbody, or waterbody segment as a result of chemical reactions.

**Subp. 4. Bioaccumulative chemical of concern or BCC.** "Bioaccumulative chemical of concern" or "BCC" means any chemical that has the potential to cause adverse effects which, upon entering the surface waters of the state, by itself or as its toxic transformation product, accumulates in aquatic organisms by a human health bioaccumulation factor (BAF) greater than 1,000, after considering metabolism and other physiochemical properties that might enhance or inhibit bioaccumulation, in accordance with the methodology in part 7052.0110, subpart 3. Chemicals with half-lives of less than eight weeks in the water column, sediment, and biota are not BCCs. The minimum BAF information needed to define an organic chemical as a BCC is either a field-measured BAF or a BAF derived using the biota-sediment accumulation factor (BSAF) methodology. The minimum BAF information needed to define an inorganic chemical, including an organometal, as a BCC is either a field-measured BAF or a laboratory-measured bioconcentration factor. The BCCs are a subset of the GLI pollutants, and are listed in part 7052.0350. A chemical may not be treated as a BCC for purposes of this chapter unless and until it is added to the list in part 7052.0350.

**Subp. 5. Bioaccumulative substances of immediate concern or BSICs.** "Bioaccumulative substances of immediate concern" or "BSICs" means a list of substances

identified in the September 1991 Bi-National Program to Restore and Protect the Lake Superior Basin. The BSICs are a subset of the BCCs, and are listed in part 7052.0350.

Subp. 6. **Biota-sediment accumulation factor or BSAF.** "Biota-sediment accumulation factor" or "BSAF" means the ratio (in kg of organic carbon/kg of lipid) of a substance's lipid-normalized concentration in tissue of an aquatic organism to its organic carbon-normalized concentration in surface sediment, in situations where the ratio does not change substantially over time, both the organism and its food are exposed, and the surface sediment is representative of average surface sediment in the vicinity of the organism.

Subp. 7. **Chronic criterion or CC.** "Chronic criterion" or "CC" means the highest water concentration of a toxicant or effluent to which organisms can be exposed indefinitely without causing chronic toxicity.

Subp. 8. **Chronic standard or CS.** "Chronic standard" or "CS" means the highest water concentration of a toxicant to which organisms can be exposed indefinitely without causing chronic toxicity. Chronic standards are listed in parts 7050.0222 and 7052.0100.

Subp. 9. **Chronic toxicity.** "Chronic toxicity" means a stimulus that lingers or continues for a long period of time, often one-tenth the life span or more. A chronic effect can be mortality, reduced growth, reproduction impairment, harmful changes in behavior, and other nonlethal effects.

Subp. 10. **Control document.** "Control document" means a national pollutant discharge elimination system permit, a state disposal system permit, a feedlot permit issued under chapter 7020, or a Clean Water Act section 401 certification.

Subp. 11. **Criterion.** "Criterion" means a number or numbers established for a pollutant derived under parts 7050.0218, 7050.0219, 7052.0110, or issued by the EPA, to protect aquatic life, humans, or wildlife.

Subp. 12. **Discharge-induced mixing area.** "Discharge-induced mixing area" means the area of initial mixing of an effluent with a receiving water, which is determined by the discharge velocity and the buoyancy of the effluent. Beyond the discharge-induced mixing area, mixing of the effluent with the receiving water is dependent on the mixing characteristics of the receiving water.

Subp. 13. **Economic or social development.** "Economic or social development" means the jobs, taxes, recreational opportunities, and other impacts on the public at large that will result from a new or expanded discharge.

Subp. 14. **Effluent design flow.** "Effluent design flow" means the annual average dry weather flow for publicly owned mechanical wastewater disposal systems or permit-designated maximum design flows for other facilities.

Subp. 15. **Endangered or threatened species.** "Endangered or threatened species" means those species that are listed as endangered or threatened under chapter 6134 or section 4 of the Endangered Species Act, United States Code, title 16, section 1533.

Subp. 16. **Environmental Protection Agency or EPA.** "Environmental Protection Agency" or "EPA" means the United States Environmental Protection Agency.

Subp. 17. **Existing discharger.** "Existing discharger" means any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," as defined in Code of Federal Regulations, title 40, section 122.2, to the Lake Superior Basin, that is not a new discharger.

Subp. 18. **Expanded discharge or expanding discharge.** "Expanded discharge" or "expanding discharge" means a discharge of a BCC to a surface water of the state in the Lake Superior Basin that changes in volume, quality, location, or any other manner due to an action or activity identified in part 7052.0310, subpart 4, after either:

A. the effective date the water was designated as an outstanding resource value water as described in parts 7050.0460 and 7050.0470; or

B. March 9, 1998, if the water was designated as an outstanding international resource water under part 7052.0300, subpart 3, or a high quality water under part 7052.0300, subpart 4.

In determining whether an increased loading would result from the change in the discharge, the agency shall compare the loading that would result from the change with the loading that exists as of the effective date specified in item A or B, whichever applies.

Subp. 19. **Final acute value or FAV.** "Final acute value" or "FAV" means an estimate of the concentration of a pollutant corresponding to the cumulative probability of 0.05 in the distribution of all the acute toxicity values for the genera or species from the acceptable acute toxicity tests conducted on a pollutant. The FAV is the acute toxicity limitation applied to mixing zones in parts 7050.0210, subpart 5, and 7052.0210, subpart 1; and to dischargers in parts 7050.0211, subpart 1; 7050.0212, subpart 6; 7050.0214, subpart 1; 7052.0200, subpart 5; 7052.0230, subpart 4; and 7052.0270, subpart 5.

Subp. 20. **GLI Guidance.** "GLI Guidance" means the Water Quality Guidance for the Great Lakes System, Code of Federal Regulations, title 40, part 132, as amended through March 12, 1997.

Subp. 21. **GLI pollutant.** "GLI pollutant" means a toxic pollutant or chemical listed as a pollutant of initial focus in the GLI Guidance, Code of Federal Regulations, title 40, part 132, Table 6, as amended.

Subp. 22. **High quality waters.** "High quality waters" means surface waters of the state in which, on a parameter by parameter basis, the quality of the waters exceeds levels

necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water.

Subp. 23. **Intake pollutant.** "Intake pollutant" means a GLI pollutant that is present in the surface waters of the state in the Lake Superior Basin and groundwater as provided in part 7052.0220, subparts 5 and 6, at the time it is withdrawn from such waters by the discharger or other facility, such as a public water supply, supplying the discharger with intake water.

Subp. 24. **Lake Superior Basin.** "Lake Superior Basin" means the drainage basin of Lake Superior, including Lake Superior, within the state of Minnesota.

Subp. 25. **Load allocation or LA.** "Load allocation" or "LA" means the portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources or to natural background sources, as more fully defined at Code of Federal Regulations, title 40, part 130.2, paragraph (g). Nonpoint sources include: in-place contaminants, direct wet and dry deposition, groundwater inflow, and overland runoff.

Subp. 26. **Loading capacity.** "Loading capacity" means the greatest amount of loading that a water can receive without violating water quality standards or criteria.

Subp. 27. **Long-term average.** "Long-term average" means the projected design concentration level for an effluent or pollutant that must be maintained by a discharger in order to maintain water quality standards or criteria.

Subp. 28. **Maximum standard or MS.** "Maximum standard" or "MS" means the highest concentration of a toxicant in water to which aquatic organisms can be exposed for a brief time with zero to slight mortality. The MS equals the FAV divided by two. Maximum standards are listed in parts 7050.0222 and 7052.0100.

Subp. 29. **Method detection level or MDL.** "Method detection level" or "MDL" means the minimum concentration of an analyte (substance) that can be measured and reported with a 99 percent confidence that the analyte concentration is greater than zero as determined by the procedure in Code of Federal Regulations, title 40, part 136, Appendix B.

Subp. 30. **Minimum level or ML.** "Minimum level" or "ML" means the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes, and processing steps have been followed.

Subp. 31. **Natural background.** "Natural background" means the water quality characteristics or chemical concentrations existing where there is no discernible impact from point or nonpoint source pollutants attributable to human activity or from a physical

alteration of wetlands. Where water quality monitoring data are not available, natural background can be predicted based on data from a watershed with similar characteristics.

**Subp. 32. New discharge.** "New discharge" means a discharge that was not in existence either:

A. on the effective date an outstanding resource value water was designated as such as described in parts 7050.0460 and 7050.0470; or

B. on March 9, 1998, for surface waters of the state designated as outstanding international resource waters under part 7052.0300, subpart 3, or high quality waters under part 7052.0300, subpart 4.

**Subp. 33. New discharger.** "New discharger" means any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," as defined in Code of Federal Regulations, title 40, section 122.2, to surface waters of the state in the Lake Superior Basin which recommenced discharging after the termination of its control document or the construction of which commenced after either:

A. the effective date an outstanding resource value water was designated as such as described in parts 7050.0460 and 7050.0470; or

B. March 9, 1998, for surface waters of the state designated as outstanding international resource waters under part 7052.0300, subpart 3, or high quality waters under part 7052.0300, subpart 4.

**Subp. 34. Outstanding international resource waters or OIRWs.** "Outstanding international resource waters" or "OIRWs" means the surface waters of the state in the Lake Superior Basin, other than Class 7 waters and those waters designated as outstanding resource value waters as described in parts 7050.0460 and 7050.0470. The OIRWs designation prohibits any new or expanded point source discharge of BSICs unless a nondegradation demonstration that includes the installation of the best technology in process and treatment is completed under part 7052.0320, and approved by the agency under part 7052.0330.

**Subp. 35. Preliminary effluent limitation or PEL.** "Preliminary effluent limitation" or "PEL" means the preliminary daily maximum water quality-based effluent limitation calculated for a GLI pollutant according to the procedure described in part 7052.0200, subpart 5, which is compared with the projected effluent quality of the GLI pollutant to determine if the pollutant has the reasonable potential to exceed water quality standards or criteria.

**Subp. 36. Projected effluent quality or PEQ.** "Projected effluent quality" or "PEQ" means the observed maximum pollutant concentration, or an expected upper bound pollutant concentration from a statistical distribution of an effluent data set, used for

comparison against a preliminary water quality-based effluent limitation calculated for that pollutant.

Subp. 37. **Quantification level.** "Quantification level" means a measurement of the concentration of a pollutant obtained by using a specified laboratory procedure calibrated at a specified concentration above the method detection level. Quantification level is considered the lowest concentration at which a particular pollutant can be quantitatively measured using a specified laboratory procedure for monitoring of the pollutant.

Subp. 38. **Reasonable potential.** "Reasonable potential" means the process for determining the possibility for a discharged pollutant to exceed water quality standards or criteria. The reasonable potential determination is described in part 7052.0220 for chemical-specific water quality-based effluent limitations, and part 7052.0240, subpart 5, for whole effluent toxicity.

Subp. 39. **Stream design flow.** "Stream design flow" means the flow that represents critical conditions for protection of aquatic life, human health, or wildlife. The stream design flow is determined upstream of the discharge point.

Subp. 40. **Tier I.** "Tier I" means the methods referenced in part 7052.0110 for developing aquatic life and wildlife standards or criteria.

Subp. 41. **Tier II.** "Tier II" means the methods referenced in part 7052.0110 for developing aquatic life standards or criteria when there is not a set of data available that meets Tier I data requirements.

Subp. 42. **Total maximum daily load or TMDL.** "Total maximum daily load" or "TMDL" means the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background, as more fully defined in Code of Federal Regulations, title 40, section 130.2, paragraph (i). A TMDL sets and allocates the maximum amount of a pollutant that may be introduced into a water of the state and still assure attainment and maintenance of water quality standards.

Subp. 43. **Trophic level.** "Trophic level" means the food web level in an ecosystem that is occupied by an organism or group of organisms because of what they eat and how they are related to the rest of the food web. For example, trophic level 3 in an aquatic ecosystem consists of small fish such as bluegills, crappies, and smelt and trophic level 4 consists of larger carnivorous fish such as walleye, salmon, and northern pike.

Subp. 44. **Uncertainty factor or UF.** "Uncertainty factor" or "UF" means one of several numeric factors used in operationally deriving criteria from experimental data to account for the quality or quantity of the available data.

Subp. 45. **Wasteload allocation or WLA.** "Wasteload allocation" or "WLA" means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution, as more fully defined in Code of Federal Regulations,

title 40, section 130.2, paragraph (h). In the absence of a TMDL approved by EPA under Code of Federal Regulations, title 40, section 130.7, or an assessment and remediation plan developed and approved according to part 7052.0200, subpart 1, item C, a WLA is the allocation for an individual point source that ensures that the level of water quality to be achieved by the point source is derived from and complies with all applicable water quality standards and criteria.

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