**Section 302.540 Other Toxic Substances**

Waters of the Lake Michigan Basin must be free from any substance or any combination of substances in concentrations toxic or harmful to human health or animal, plant, or aquatic life. The numeric standards protective of particular uses specified for individual chemical substances in Section 302.504 are not subject to recalculation by this Section; however, where no standard applies to a category, a numeric value may be calculated.

a) Any substance will be deemed toxic or harmful to aquatic life if present in concentrations that exceed the following:

1) A Tier I Lake Michigan Basin Acute Aquatic Life Toxicity Criterion (LMAATC) or Tier II Lake Michigan Basin Acute Aquatic Life Toxicity Value (LMAATV) derived under procedures in Sections 302.555, 302.560 or 302.563 at any time; or

2) A Tier I Lake Michigan Basin Chronic Aquatic Life Toxicity Criterion (LMCATC) or Tier II Lake Michigan Basin Chronic Aquatic Life Toxicity Value (LMCATV) derived under procedures in Section 302.565 as an average of four samples collected on four different days.

b) Any combination of substances, including effluents, will be deemed toxic to aquatic life if present in concentrations that exceed either subsection (b)(1) or (b)(2):

1) A sample of water from the Lake Michigan Basin collected outside of a designated zone of initial dilution must not exceed 0.3 TUa as determined for the most sensitive species tested using acute toxicity testing methods.

2) A sample of water from the Lake Michigan Basin collected outside a designated mixing zone must not exceed 1.0 TUc as determined for the most sensitive species tested using chronic toxicity testing methods.

3) To demonstrate compliance with subsections (b)(1) and (b)(2), at least two resident or indigenous species must be tested. The rainbow trout must be used to represent fish for the Open Waters of Lake Michigan and the fathead minnow must represent fish for the other waters of the Lake Michigan Basin. Ceriodaphnia must represent invertebrates for all waters of the Lake Michigan Basin. Other common species may be used if listed in Table I (a) of 40 CFR 136, incorporated by reference at 35 Ill. Adm. Code 301.106, and approved by the Agency.

c) Any substance must be deemed toxic or harmful to wildlife if present in concentrations that exceed a Tier I Lake Michigan Basin Wildlife Criterion (LMWLC) derived under procedures in Section 302.575 as an arithmetic average of four samples collected over four different days.

d) For any substance that is a threat to human health through drinking water exposure only, the resulting criterion or value must apply to only the Open Waters of Lake Michigan. For any substance that is determined to be a BCC, the resulting criterion must apply to the entire Lake Michigan Basin. These substances must be deemed toxic or harmful to human health if present in concentrations that exceed either of the following:

1) A Tier I Lake Michigan Basin Human Health Threshold Criterion (LMHHTC) or Tier II Lake Michigan Basin Human Health Threshold Value (LMHHTV) based on disease or functional impairment due to a physiological mechanism for which there is a threshold dose below which no damage occurs as derived under procedures in Section 302.585 as an arithmetic average of four samples collected over four different days; or

2) A Tier I Lake Michigan Basin Human Health Nonthreshold Criterion (LMHHNC) or Tier II Lake Michigan Basin Human Health Nonthreshold Value (LMHHNV) based on disease or functional impairment due to a physiological mechanism for which any dose may cause some risk of damage as derived under procedures in Section 302.590 as an arithmetic average of four samples collected over four different days.

e) The derived criteria and values apply at all points outside of any waters in which mixing is allowed under Section 302.102 or 302.530.

f) The procedures of this Subpart E set forth minimum data requirements, appropriate test protocols, and data assessment methods for establishing criteria or values under subsections (b), (c), and (d). No other procedures may be used to establish these criteria or values unless approved by the Board in a rulemaking or adjusted standard proceeding under Title VII of the Act. The validity and applicability of these procedures may not be challenged in any proceeding brought under Title VIII or X of the Act, although the validity and correctness of application of the numeric criteria or values derived under this Subpart may be challenged in proceedings under subsection (g).

g) Challenges to Applying Criteria and Values

1) A permittee may challenge the validity and correctness of application of a criterion or value derived by the Agency under this Section only at the time the criterion or value is first applied in its NPDES permit under 35 Ill. Adm. Code 309.152 or in an action under Title VIII of the Act for violation of the toxicity water quality standard. Failure of a person to challenge the validity of a criterion or value at the time of its first application to that person's facility constitutes a waiver of a challenge in any subsequent proceeding involving an application of the criterion or value to that person.

2) Consistent with subsection (g)(1), if a criterion or value is included as, or is used to derive, a condition of an NPDES discharge permit, a permittee may challenge the criterion or value in a permit appeal under 35 Ill. Adm. Code 309.181.

3) Consistent with subsection (g)(1), in an action when the alleged violation of the toxicity water quality standard is based on an alleged excursion of a criterion or value, the person bringing the action has the burdens of going forward with proof and persuasion regarding the general validity and correctness of application of the criterion or value.

h) Subsections (a) through (e) do not apply to USEPA registered pesticides approved for aquatic application and applied under the following conditions:

1) Application must be made in strict compliance with label directions;

2) Applicator must be properly certified under the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.);

3) Applications of aquatic pesticides must comply with the laws, regulations and guidelines of all State and federal agencies authorized by law to regulate, use or supervise pesticide applications;

4) Aquatic pesticides must not be applied to waters affecting public or food processing water supplies unless a permit to apply the pesticide has been obtained from the Agency. All permits must be issued so as not to cause a violation of the Act or any of the Board's rules. To aid applicators in determining their responsibilities under this subsection (h), a list of waters affecting public water supplies must be published and maintained by the Agency's Division of Public Water Supplies.

(Source: Amended at 47 Ill. Reg. 4437, effective March 23, 2023)