3745-1-44 Whole effluent toxicity provisions.

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules and federal statutory provisions referenced in this rule, see rule 3745-1-03 of the Administrative Code.]

[Comment: See rule 3745-2-09 of the Administrative Code for whole effluent toxicity water quality based effluent limit calculation procedures.]

(A) Protection of aquatic life - whole effluent approach.

1. An acute toxicity level of 0.3 acute units (TUₐ) shall apply outside the mixing zone to limited resource water, warmwater, exceptional warmwater, coldwater, seasonal salmonid, and modified warmwater habitat use designations in accordance with this chapter and the following equation:

\[ TUₐ = \frac{100}{LC₅₀} \]

Where:

LC₅₀ = the median lethal concentration as defined in rule 3745-2-02 of the Administrative Code.

2. A chronic toxicity level of 1.0 chronic toxic units (TUₖ) shall apply outside the mixing zone to warmwater, exceptional warmwater, coldwater, seasonal salmonid, and modified warmwater habitat use designations, where:

\[ TUₖ = \frac{100}{IC₂₅} \]

for all chronic endpoints, except that:

\[ TUₖ = \frac{100}{(\text{geometric mean of NOEC and LOEC})} \]

for survival or mortality endpoints using daphnid species when this is more restrictive than the TUₖ value resulting from the definition based on IC₂₅.

(B) The chronic toxicity level does not apply to limited resource water use designations.

(C) For undesignated waters, an acute toxicity level of 0.3 TUₐ and a chronic toxicity level of 1.0 TUₖ shall apply outside of the mixing zone.

(D) Acute toxicity within the mixing zone shall be regulated by paragraph (B) of 3745-33-07 of the Administrative Code.
Replaces: Part of 3745-2-09
Effective: 02/06/2017
Five Year Review (FYR) Dates: 02/06/2022

Promulgated Under: 119.03
Statutory Authority: 6111.03, 6111.041, 6111.12
Rule Amplifies: 6111.12