New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233-3502



John P. Cahill Commissioner

# **MEMORANDUM**

# \*\*\* N O T I C E \*\*\*

This document has been developed to provide Department staff with guidance on how to ensure compliance with statutory and regulatory requirements, including case law interpretations, and to provide consistent treatment of similar situations. This document may also be used by the public to gain technical guidance and insight regarding how the department staff may analyze an issue and factors in their consideration of particular facts and circumstances. This guidance document is not a fixed rule under the State Administrative Procedure Act section 102(2)(a)(i). Furthermore, nothing set forth herein prevents staff from varying from this guidance as the specific facts and circumstances may dictate, provided staff's actions comply with applicable statutory and regulatory requirements. This document does not create any enforceable rights for the benefit of any party.

Previous Date: New

**TO:** Regional Water Engineers, Bureau Directors, Section Chiefs

**SUBJECT:** Division of Water Technical and Operational Guidance Series (1.1.3)

PROCEDURES FOR DERIVATION OF SITE-SPECIFIC STANDARDS AND GUIDANCE VALUES FOR PROTECTION OF AQUATIC LIFE

(Originator -John Zambrano)

#### **PURPOSE**

The primary purpose of this document is to provide the technical reference for the calculation of a site-specific standard or guidance value for the protection of aquatic life.

### **DISCUSSION**

The water quality regulations, Part 706.1, provide procedures for deriving standards and guidance values, including the circumstances for deriving site-specific values. The regulations, however, do not provide the detailed procedures for modifying the state-wide procedures to derive a site-specific value. This document provides a reference for such detailed procedures. The document also restates, for the convenience of the reader, the regulations in Part 706.1 concerning site-specific values for protection of aquatic life.

## **GUIDANCE**

I. Reference for Detailed Procedures

Detailed procedures for deriving site-specific standards and guidance values are provided in Chapter 3 of the U.S. EPA Water Quality Standards Handbook, Second Edition-Revised (1994).

II. Water Quality Regulations

The remainder of this document restates the material in the regulations concerning site-specific values. Wording in brackets has been added to provide explanation for context.

- A. These procedures [in Part 706.1 of the water quality regulations] will generally be used to derive state-wide standards or guidance values according to the classified uses described in Part 702.9 of this Title [Title 6] Site-specific modifications to such state-wide standards or guidance values are required or allowed as described below.
- B. Site-specific modifications to chronic or acute aquatic life values may be developed where:
  - 1. The local water quality characteristics such as pH, hardness, temperature, color, etc., alter the biological availability or toxicity of a pollutant; or
  - 2. The sensitivity of the aquatic organisms species that occur at the site differs from the species actually tested in developing the criteria. The phrase "occur at the site" includes the species, genera, families, orders, classes, and phyla that: are usually present at the site; are present at the site only seasonally due to migration; are present intermittently because they periodically return to or extend their ranges into the site; were present at the site in the past, are not currently present at the site due to degraded conditions, and are expected to return to the site when conditions improve; are present in nearby bodies of water, are not currently present at the site due to degraded conditions, and are expected to be present at the site when conditions improve; are present in nearby bodies of water, are not currently present at the site due to degraded conditions and are expected to be present at the site when conditions improve; are present in nearby bodies of water, are not currently present at the site due to degraded conditions of water are not currently present at the site due to degraded conditions and are expected to be present at the site when conditions improve. The taxa that occur at the site cannot be determined merely by sampling downstream and/or upstream of the site at one point in time. "Occur at the site" does not include taxa that were once present at the site but cannot exist at the site now due

to permanent physical alteration of the habitat at the site resulting, for example, from dams, etc.

- C. Site-specific modifications also may be developed to acute and chronic aquatic life values to reflect local hysical and hydrological conditions.
- D. Endangered species considerations.
  - 1. Any site-specific modifications that result in less stringent values must not be likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of such species' critical habitat.
  - 2. More stringent modifications shall be developed to protect endangered or threatened species where such modifications are necessary to ensure that water quality is not likely to jeopardize the continued existence of such species or result in the destruction or adverse modification of such species' critical habitat.

N.G. Kaul, Director Division of Water