CalEPA

State Water Resources Control Board

NOTICE OF PUBLIC HEARINGS

Proposed Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California

Monday, November 17, 1997 – 10:00 a.m. and 7:00 p.m.

First-Floor Auditorium
Resources Building
1416 Ninth Street, Sacramento, California

Wednesday, December 3, 1997 – 10:00 a.m. and 7:00 p.m.

Newport Beach City Council Chambers
3300 Newport Boulevard, Newport Beach, California

NOTICE IS HEREBY GIVEN that public hearings will be held by the State Water Resources Control Board (SWRCB) to seek comments regarding a proposed State policy for water quality control: the draft "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California" (proposed Policy). The purpose of the proposed Policy is to establish (1) statewide implementation provisions for priority toxic pollutant standards, and (2) statewide toxicity control provisions. The proposed Policy represents Phase I in a two-phase process to adopt a new Inland Surface Waters Plan (ISWP) and Enclosed Bays and Estuaries Plan (EBEP).

The proposed Policy will affect entities who discharge to the State's non-ocean surface waters, and are subject to regulation under the State's Porter-Cologne Water Quality Control Act and the Federal Clean Water Act (CWA). These entities are dischargers who are subject to regulation under waste discharge requirements, including National Pollutant Discharge Elimination System (NPDES) permits.

BACKGROUND

In April 1991, the SWRCB adopted the ISWP and EBEP. Those two statewide water quality control plans were adopted, in part, to comply with Section 303(c)(2)(B) of the CWA, which was added in the 1987 amendments to the CWA. This section of the CWA required the states to adopt water quality criteria for all CWA Section 307(a) priority toxic pollutants (priority pollutants) that could interfere with the designated uses of the State's waters and for which the U.S. Environmental Protection Agency (U.S. EPA) has published criteria guidance under CWA Section 304. (Criteria and uses together constitute water quality

Recycled Paper

CVRWQCB Delta Dredging Permits

Comply with Clean Water Act Requirements of Meeting Water Quality Standards at the Edge of a Mixing Zone for the Dredged Sediment Disposal Return Flows and at 300 Feet Downstream of Dredging

Overly Protective
Unnecessarily Increase the Cost of Dredging

How Should Dredging Be Regulated?
Some Who Wish to Have a Channel Dredged Want a Blanket Exemption from Meeting Clean Water Act Requirements – Cannot Be Granted by Regional Boards

Must Protect Designated Beneficial Uses of Waterbodies without Significant Unnecessary Expenditures for Managing Water Quality Impacts of Dredging and Dredged Sediment Disposal

As Part of a Dredging Project, Must Have Sufficient Funds Available to Reliably Evaluate, Prior to Dredging, Whether Proposed Project Could Be Adverse to the Beneficial Uses of Receiving Waters

Must Reliably Monitor Water Quality Impacts During and Following Dredging Operations

Typically, Inadequate Monitoring Occurs

One of the Basic Purposes of the Monitoring Should Be to Determine if the Exceedance of the Water Quality Objective Associated with Dredging and Dredged Sediment Disposal Return Waters Represents an Administrative Exceedance of the Overly Protective Water Quality Objective or a Real Water Quality Use-Impairment That Is Adverse to the Beneficial Uses of the Waterbody

Important to Understand That Dredging Projects Are Adverse to Aquatic Life
Organisms Are Killed as Part of Dredging Projects

In Section 404 of Clean Water Act, Congress Allows Disposal of Dredged Sediments in US Waters Provided There Is Avoidance of *"Unacceptable Effects"*

The Disposal Should Not Result in Violation of Applicable Water Quality Standards after Considering Dispersion and Dilution, Toxic Effluent Standards, Marine Sanctuary Requirements, and Jeopardize Existence of Endangered Species.

Need to Find a Way to Enable Dredging without Unnecessary Costs While Reasonably Protecting the Beneficial Uses of Potentially Impacted Waters

Suggested Approach

Those Concerned with Dredging within the Delta and the Utilization of Dredged Sediments for Beneficial Purposes Should Work with the Regulatory Agencies in Developing a Consensus Approach for Dredging Projects That Includes:

- Pre-Dredging Evaluation of Potential Water Quality Impacts
- Monitoring/Impact Evaluation at the Time of Dredging and Following Dredging
- Developing a Temporary Waiver from Meeting Water Quality Standards/Objectives That Would Allow Short-Term, Limited-Area Exceedances of Water Quality Standards Outside of the Conventional Mixing Zone That Will Protect the Designated Beneficial Uses of the Waterbody
  - Address Administrative Exceedances of Water Quality Standards

This Approach Is Being Considered by the US EPA as an Approach for Regulating Urban Stormwater Runoff

If Urban Stormwater Runoff Regulated Like Wastewaters with No More Than One Exceedance of a Water Quality Standard Every Three Years in the Receiving Waters for the Runoff for Constituents Derived from the Urban Area, Then Costs to the Public Will Be $1 to $2/person/day forever.

Must Find Alternative Approach for Regulating NPDES-Permitted Urban Area Stormwater Discharges

Should Use US EPA Water Quality Criteria and State Standards Based on Those Criteria as an Indication of a Potential Problem

The Discharger Should be Allowed to Determine Whether Real Water Quality-Use Impairment Problem Exists

Urban and Highway Stormwater Runoff, Like Dredged Sediment Discharges, Contains Large Amounts of Particulate, Non-Toxic/Unavailable Chemical Constituents Which Lead to Administrative Exceedances of Water Quality Standards without Impairment of the Real Beneficial Uses

The Temporary Waiver Procedure for Urban-Area Stormwater Runoff and Dredging and Dredged Sediment Management Could Be a Readily Implementable Approach for Managing the Current Regulatory Problems Associated with Dredging in the Delta

Will Require Extensive, Reliable, Focused Monitoring

Could Be Incorporated into the WRCB's Approach for Implementing the California Toxics Rule

Human and Ecological Risk Assessment Vol. 1, No. 1, pp. 5-11, 1995

Appropriate Use of Numeric Chemical Concentration-Based Water Quality Criteria

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INTRODUCTION

Increasing attention is being given to the cost-effectiveness of chemical contaminant control programs established to reduce toxicity to aquatic life in the watercolumn and sediment, and excessive bioaccumulation of contaminants in aquatic life. Evaluation and control of chemical contaminants has generally focused on either the effects of the contaminant(s) on aquatic organisms (biological effects-based approaches), or on concentrations of individual chemical contaminants with extrapolations to their impact on aquatic organisms (chemical concentration-based approaches).

Owing to their comparative simplicity and ostensible ease of application, chemical concentration-based state water quality standards based on or equivalent to US EPA numeric water quality criteria are being increasingly relied upon as independently applicable regulatory tools for the assessment, protection, and/or enhancement of designated beneficial uses of aquatic systems. However, the present-day use of such criteria and standards largely ignores the aqueous environmental chemistry and toxicology of contaminants, the worst-case or near-worst-case foundation of those criteria, and the fact that there is a large body of contaminants for which numeric concentration criteria do not exist. Each of these factors diminishes the reliability of the extrapolation of chemical concentrations to impacts on aquatic organisms/beneficial uses of water, and tends to make them more stringent than necessary to protect designated beneficial uses of waters. That notwithstanding, the US EPA has adopted the policy of Independent Applicability for chemical concentration criteria in which chemical-specific concentration values are applied independent of biological effects-based approaches for regulating "water quality". They are presumed to be independently reliable even when they indicate an "effect" that is not supported by biological effects-based approaches, such as toxicity testing and actual measurements of bioaccumulation evaluated on a site-specific basis.

Beneficial Uses of Dredged Sediment

Many of the Regulatory Problems That Exist in Dredging Projects Also Occur in Using Dredged Sediment for Delta Levee Enhancement and Shallow Water Habitat Development

In Addition to the Clean Water Act Requirements of Complying with Water Quality Standards, the Beneficial Use of Dredged Sediments Also Faces Significant, Technically Invalid Regulation Based on Chemical Characteristics of the Sediments

San Francisco Regional Water Quality Control Board's Dredged Sediment Upland Disposal Criteria Are Technically Invalid

Board Was Informed of This by Numerous Experts at the Time They Were Developed

Adopted Just to Get Some Numeric Values on the Books Which Could Then Be Used to Claim That the Upland Disposal of Dredged Sediments for Beneficial Uses Was Regulated

Ignored the Fact That the Regulatory Approach Was Obviously Technically Invalid

CALFED's Proposed Use of Long and Morgan Co-Occurrence-Based Sediment Quality Values for Evaluating Sediment Problems is Technically Invalid

There Is Need for Those Concerned with Using Contaminated Dredged Sediments for Beneficial Purposes Such as Levee Enhancement and Shallow Water Habitat Development, as Well as Those Concerned with Protecting the Beneficial Uses of the Delta's Waters and Ecosystems, Should Work to Develop a Consensus Approach That Would:

- Reliably Assess the Potential for Chemical Constituents in a Dredged Sediment to Be Adverse to the Beneficial Uses of the Delta When Used for Levee Enhancement and/or Shallow Water Habitat Development
- Provide Guidance on the Characteristics of the Water Quality Monitoring/Evaluation Program That Should Be Part of Any Beneficial Use of Dredged Sediment Project
- Periodically Review the Monitoring/Evaluation Programs from Dredged Sediment Beneficial Use Projects to Develop Updated Regulatory Guidance Covering Pre-Project Evaluations and Monitoring/Evaluation Programs

Will Likely Need Procedure for Temporary Waiver from Meeting Water Quality Standards Associated with the Placement of Contaminated Dredged Sediments on Levees and/or for Shallow Water Habitat Development