Enforcement Policy Penalty Calculation Methodology

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Today's Presentation

- * Penalty Calculation Methodology
 - Current Policy and Proposed Amendments
- * Two Penalty Calculation Scenarios
 - * Potable Water Discharge
 - * Sewer Overflow

Monetary Assessment in Administrative Civil Liability

- * California Water Code section 13385(e) describes several factors that the Board must consider
 - * The nature, circumstances, extent, and gravity of the violation or violations
 - * Whether the discharge is susceptible to cleanup or abatement,
 - * The degree of toxicity of the discharge

Factors to be considered (continued)

- * With respect to the violator
 - * the ability to pay,
 - * the effect on its ability to continue its business,
 - * any voluntary cleanup efforts undertaken,
 - any prior history of violations,
 - * the degree of culpability,
 - economic benefit or savings,
 - other matters that justice may require

Enforcement Policy Penalty Calculation

- * The Enforcement Policy provides directions on how to weigh those factors in 13385
- * Ten Steps in Methodology
 - * Some steps have several factors

First Scenario – Potable Water

- * Pipe breaks near a creek
- * Discharge occurs over three days
- * Approximately 900,000 gallons discharge to the creek
- * No fish kill, but there is the potential for moderate impacts

Violations

- * California Water Code section 13376
 - * Prohibits the discharge of pollutants to waters of the United States without filing a report of waste discharge
- Clean Water Act section 301
- Basin Plan prohibitions

Step 1: Potential for Harm for Discharge Violations

- * 3 Factors in this step
 - * Factor 1: Harm or Potential Harm to Beneficial Uses
 - * Factor 2: The Toxicity of the Discharge
 - * Factor 3: Susceptibility to Cleanup or Abatement

Harm or Potential Harm to Beneficial Uses - Factor 1

- * Considers the harm or potential harm that may result from exposure to the pollutants or contaminants in the illegal discharge
- * A score between 0 and 5 is assigned based on a determination of whether the harm or potential for harm is:
 - * negligible (0), minor (1), below moderate (2), moderate (3), above moderate (4), or major (5).

Beneficial Uses

- * Cold Freshwater Habitat
 - * Uses of water that support cold water ecosystems, including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates
- * Warm Freshwater Habitat
- * Wildlife Habitat

Score for Factor 1

- * Scale goes from 0 to 5
- * Selected 3: Moderate threat to beneficial uses
 - * Although no evidence of fish kill, potential to affect beneficial uses is moderate and likely to attenuate without long term effects

Toxicity of the Discharge Factor 2

- * Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge
 - * Degree of toxicity of the discharge
 - * A score between o and 4 is assigned based on a determination of the *risk* or *threat* of the discharged material
 - * Negligible (0), minor (1), moderate (2), above moderate (3), or significant (4).

Potable Water

- * Contains residual chlorine
 - Very toxic to aquatic life
- * U.S. EPA's Water Quality Criterion to prevent acute effects is 0.019 mg/L
- * Let's assume testing showed concentration prior to discharge was 0.060 mg/L

Score for Factor 2

- * Scale goes from 0 to 4
- * Selected 3: Above-moderate risk or threat to potential receptors
 - * Based on the concentration prior to discharge 3 times the level of acute water quality criteria

Susceptibility to Cleanup – Factor 3

- * Dependent on if the spill could be cleaned up
 - Score o if more than 50% could be cleaned
 - * Score 1 if less than 50% could be cleaned
- * This scenario, a large spill over multiple days could not be cleaned up
 - * Score is a 1

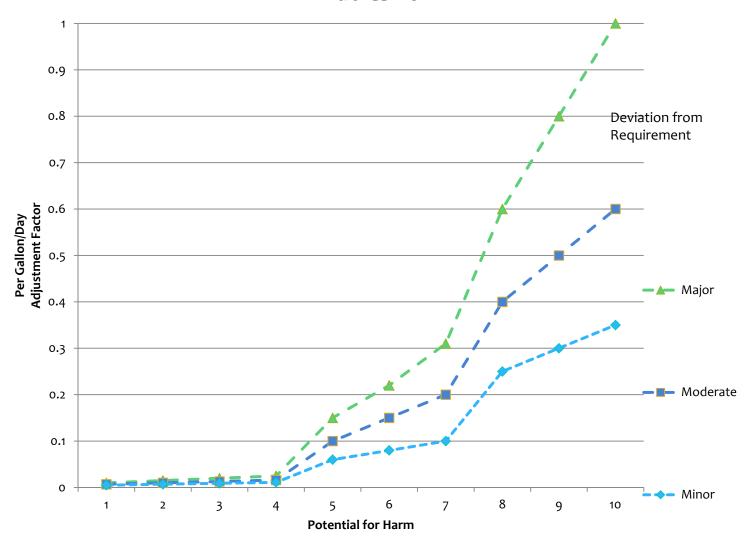
Step 2: Assessments for Discharge Violations

- Deviation from Requirement
 - Minor, Moderate, or Major
 - * Selected **Major** because there was a violation of the discharge prohibition
- * High Volume Discharge
 - * Instead of a maximum \$10 per gallon, we assessed it at \$2 per gallon

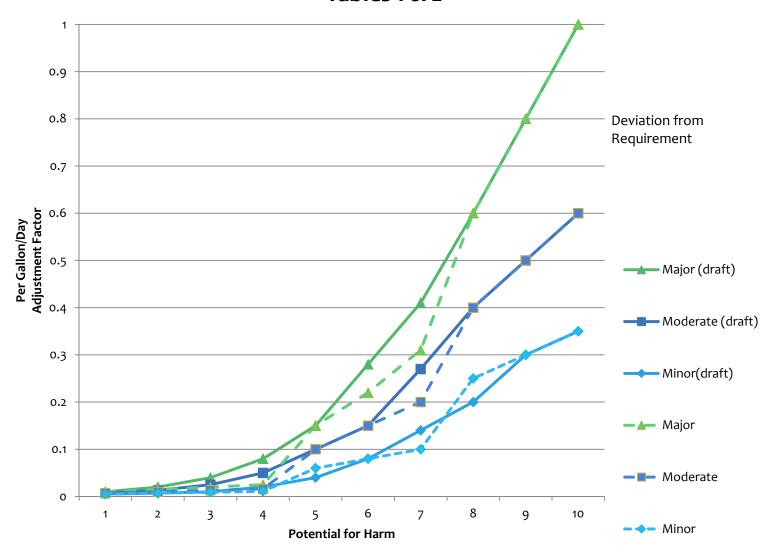
Initial Amount

- * Uses the Potential for Harm score, Deviation from Requirement, volume or number of days, maximum liability or high volume assessment, and Tables 1 or 2
 - * Tables 1 and 2 have changes to smooth out the curves

Enforcement Policy Tables 1 & 2



Enforcement Policy Tables 1 & 2



Initial Amount

- * Potential for Harm Score = 7, Major Deviation
- * Table 1 (current policy) = 0.31
- * Table 1 (proposed policy) = 0.41
- * 900,000 gallons and 3 days
- * High Discharge: \$2 per gallon
- * Initial Amount
 - * Current Policy = \$567,000
 - * Proposed Policy = \$750,300

Step 3: Non-Discharge Violations

- * Examples of non-discharges violations include:
 - Failure to conduct monitoring
 - * Failure to submit required reports
 - * Failure to use Best Management Practices (BMPs)
- * Initial liability based on Potential for Harm and Deviation from Requirement
- * No non-discharge violations for this scenario

Step 4: Adjustment Factors

- * Adjustment Factors
 - * Culpability (multiplier between .5 to 1.5)
 - * Proposed policy between 1.0 to 1.5
 - * Cleanup/Cooperation (multiplier between .75 to 1.5)
 - * History of violations (multiplier of 1.1 or greater where there is a history of repeat violations)

Culpability

- * Higher liabilities should result from intentional or negligent violations than for accidental, non-negligent violations.
 - * A first step is to identify any performance standards (or, in their absence, prevailing industry practices) in the context of the violation.
- * Pipe was old and not well maintained
- * Inadequate response to alarm contributed to the duration and volume
- * Scored 1.2

Cleanup and Cooperation

- * Extent to which the discharger voluntarily cooperated in returning to compliance and correcting environmental damage
 - * Minimal cleanup efforts
 - * Discharger did not properly notify the Water Boards of the discharge
 - Discharger did not respond to requests for information
- * Scored **1.4**

History of Violations

- * Prior history of violations. Where there is a history of repeat violations, a minimum multiplier of 1.1 should be used to reflect this.
- * No prior violations for this discharger
- * Scored **1.0**

Step 5: Determination of Total Base Liability Amount

- * Add the adjusted amounts for each violation
- * Current Policy = \$953,064
- * Proposed Policy = \$1,260,504

Step 6: Ability to Pay

- * Consideration of a Discharger's ability to pay a civil liability and ability to continue in business
- * Enforcement Policy requires a preliminary analysis prior to issuance of a complaint or order
- * Discharger may claim inability to pay
 - * Requires submittal of additional financial documents

Step 7: Other Factors Justice May Require

- * If the Water Board believes the amount determined using the above factors is inappropriate, the amount may be adjusted
 - * Express findings must be made to justify the changes
- * Staff costs of the investigation and enforcement

Step 8: Economic Benefit

- * Economic Benefit is any savings or monetary gain derived from the violation
 - * Examples include:
 - * Costs of the preparing reports
 - * Installing necessary equipment
- * The Economic Benefit is use to determine the minimum liability
- * In this scenario, avoided maintenance
 - Economic Benefit is \$10,000

Final Steps

- * Step 9: Minimum and Maximum Liability
- * Minimum is 10% more than the economic benefit
 - * Minimum = \$11,000
- * Maximum is based on statute
 - * Maximum = \$9,030,000
- * Step 10: Final Liability Amount
 - * Current Policy = \$953,064
 - Proposed Policy = \$1,260,504

Second Scenario – Sewer Overflow

- * Pipe breaks near a creek
- * Discharge occurs over two days
- * Approximately 4,000,000 gallons discharged and reached the ocean
 - Beaches are closed for 3 days

Violations

- * California Water Code section 13376
 - Prohibits the discharge of pollutants to waters of the United States without filing a report of waste discharge
- Clean Water Act section 301
- Basin Plan prohibitions

Step 1: Potential for Harm for Discharge Violations

- * 3 Factors in this step
 - * Factor 1: Harm or Potential Harm to Beneficial Uses
 - * Factor 2: The Toxicity of the Discharge
 - * Factor 3: Susceptibility to Cleanup or Abatement

Score for Factor 1

- * Scale goes from 0 to 5
- * Beneficial Use Recreational Contact
- * Selected 4: Above moderate threat to beneficial uses
 - * Beaches were closed
 - * Substantial temporary restrictions on beneficial uses

Toxicity of Discharge Score for Factor 2

- * Scale goes from 0 to 4
- * Selected 3: Above-moderate risk or threat to potential receptors
 - * Wastewater contains numerous pathogens

Susceptibility to Cleanup – Factor 3

- * Dependent on if the spill could be cleaned up
 - Score o if more than 50% could be cleaned
 - * Score 1 if less than 50% could be cleaned
- * This scenario, a large spill over multiple days could not be cleanup
 - * Score is a 1

Step 2: Assessments for Discharge Violations

- * Deviation from Requirement
 - Minor, Moderate, or Major
 - * Selected **Major** because there was a violation of the discharge prohibition
- * High Volume Discharge
 - Current Policy assessed at \$2 per gallon
 - * Proposed Policy assessed at \$1 per gallon

Initial Amount

- * Potential for Harm Score = 8, Major Deviation
- * Table 1 = 0.6
- * 4,000,000 gallons and 2 days
- * High Discharge (current policy) = \$2 per gallon
- * High Discharge (proposed policy) = \$1 per gallon
- * Initial Amount
 - * Current Policy = \$4,812,000
 - * Proposed Policy = \$2,412,000

Step 4: Adjustment Factors

- * Adjustment Factors
 - * Culpability (multiplier between .5 to 1.5)
 - * Proposed policy between 1.0 to 1.5
 - * Cleanup/Cooperation (multiplier between .75 to 1.5)
 - * History of violations (multiplier of 1.1 or greater where there is a history of repeat violations)

Culpability

- * Higher liabilities should result from intentional or negligent violations than for accidental, non-negligent violations.
- * Pipe was old and damaged
 - * It was identified as a high priority project on the Capital Improvement Projects list over ten years ago
- * Scored **1.3**

Cleanup and Cooperation

- * Extent to which the discharger voluntarily cooperated in returning to compliance and correcting environmental damage
 - Extensive cleanup efforts
 - * Discharger promptly notified the Water Boards of the discharge
 - Discharger responded to requests for information
- * Scored **0.75**

History of Violations

- * Prior history of violations. Where there is a history of repeat violations, a minimum multiplier of 1.1 should be used to reflect this.
- Discharger had a large overflow two years prior
- * Scored 1.1

Step 5: Determination of Total Base Liability Amount

- * Add the adjusted amounts for each violation
- * Current Policy = \$5,160,870
- * Proposed Policy = \$2,586,870

Step 8: Economic Benefit

- * Economic Benefit is any savings or monetary gain derived from the violation
 - * Examples include:
 - * Costs of the preparing reports
 - * Installing necessary equipment
- * The Economic Benefit is use to determine the minimum liability
- * In this scenario, avoided capital improvement project
 - * Economic Benefit is \$1,000,000

Final Steps

- * Step 9: Minimum and Maximum Liability
- * Minimum is 10% more than the economic benefit
 - * Minimum = \$1,100,000
- * Maximum is based on statute
 - * Maximum = \$40,020,000
- * Step 10: Final Liability Amount
 - * Current Policy = \$5,160,870
 - * Proposed Policy = \$2,586,870

The End

Questions?

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