STATE WATER RESOURCES CONTROL BOARD

WATER QUALITY ENFORCEMENT POLICY

DRAFT – January 8, 2008

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

This page is intentionally blank

TABLE OF CONTENTS

INTRODUCTION

The State Water Resources Control Board (State Water Board) and the Regional Water Quality Control Boards (Regional Water Boards) (together “Water Board or Water Boards”) are the principal state agencies with primary responsibility for the coordination and control of water quality. In the Porter-Cologne Water Quality Control Act (Porter-Cologne), the Legislature declared that the “state must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the state from degradation...” (California Water Code section 13000). Porter-Cologne grants the Water Boards the authority to implement and enforce the water quality laws, regulations, policies and plans to protect the groundwater and surface waters of the State. Timely and consistent enforcement of these laws is critical to the success of the water quality program and to ensure that the people of the State have clean water. It is the policy of the State Water Board that the Water Boards shall strive to be fair, firm and consistent in taking enforcement actions throughout the State, while recognizing the individual facts of each case. The primary goal of this Enforcement Policy is to create a framework for identifying and investigating instances of noncompliance, for taking enforcement actions that are appropriate in relation to the nature and severity of the violation, and for prioritizing enforcement resources to achieve maximum environmental benefits. Toward that end, it is the intent of the State Water Board that the Regional Water Boards operate within the framework provided by this Policy.

Enforcement serves many purposes. First and foremost, it assists in protecting the beneficial uses of waters of the State. Swift and firm enforcement can prevent threatened pollution from occurring and can promote prompt cleanup and correction of existing pollution problems. Enforcement ensures compliance with requirements in State Water Board and Regional Water Board regulations, plans, policies, and orders. Enforcement not only protects the public health and the environment, but also creates an "even playing field," ensuring that dischargers who comply with the law are not placed at a competitive disadvantage by those who do not. It also deters potential violators and, thus, further protects the environment. Monetary remedies, an essential component of an effective enforcement program, provide a measure of compensation for the damage that pollution causes to the environment and ensure that polluters do not gain an economic advantage from violating water quality laws.

It is important to note that enforcement of the State's water quality requirements is not solely the purview of the Water Boards and their staff. Other agencies (e.g., the California Department of Fish and Game) have the ability to enforce certain water quality provisions in state law. State law also allows for members of the public to bring enforcement matters to the attention of the Water Boards and authorizes aggrieved persons to petition the State Water Board to review most actions or in actions by the Regional Water Boards. In addition, state and federal statutes provide for public participation in the issuance of most orders, policies and water quality control plans. Finally, the federal Clean Water Act (CWA) authorizes citizens to bring suit against dischargers for certain types of CWA violations.

I. FAIR, FIRM, AND CONSISTENT REGULATION AND ENFORCEMENT

A. Standard and Enforceable Orders

Fair, firm, and consistent enforcement depends on a foundation of solid requirements in law, regulations, policies, and the adequacy of enforceable orders. Such orders include but are not limited to: waste discharge requirements (WDRs), including National Pollutant Discharge Elimination System (NPDES) permits; waivers, certifications, and cleanup and abatement orders. The extent to which enforceable orders include well-defined requirements and apply similar requirements to similar situations affects the consistency of compliance and enforcement. Whenever the circumstances of a discharge are similar, the provisions of the enforceable orders should be comparable.

The State Water Board, with assistance and advice from the Regional Water Boards and other stakeholders will compile and maintain examples of standard enforceable orders. Regional Water Boards' orders shall be consistent except as appropriate for the specific circumstances related to the discharge and to be consistent with applicable water quality control plans. Such modifications must be consistent with applicable state and federal law. Regional Water Board Water Quality Control Plans may include unique requirements that apply within a region and that must be implemented.

B. Determining Compliance

The Water Boards shall implement consistent and valid methods to determine compliance with enforceable orders. Compliance assurance activities include the review of self-monitoring reports, facility inspections, and complaint response. Compliance assurance activities are discussed in more detail in Section II of this Policy.

C. Timely and Appropriate Enforcement

An enforcement action is any informal or formal action taken to address the failure to comply or the threatened failure to comply with applicable statutes, regulations, plans, policies, or enforceable orders. Enforcement actions should be initiated as soon as possible after discovery of the violation.

Enforcement actions should be appropriate for each type of violation and should be similar for violations that are similar in nature and have similar water quality impacts. Appropriate enforcement informs the violator that the violation has been noted and recorded by the Water Board, results in a swift return to compliance, and serves as a deterrent for future violations. When appropriate, enforcement also requires remediation of environmental damage.

D. Progressive Enforcement

Progressive enforcement is an escalating series of actions that allows for the efficient and effective use of enforcement resources to: (1) assist cooperative dischargers in achieving compliance; (2) compel compliance for repeat violations and recalcitrant violators; and (3) provide a disincentive for noncompliance. For some violations, an informal response such as a phone call or staff enforcement letter is sufficient to inform the discharger that the violation has been noted by the Regional Water Board and to

encourage a swift return to compliance. More formal enforcement is often an appropriate first response for more consequential violations. If any violation continues, the enforcement response should be quickly escalated to increasingly more formal and serious actions until compliance is achieved. Progressive enforcement is not appropriate in all circumstances. For example, where there is an emergency situation needing immediate response, immediate issuance of a cleanup and abatement order may be appropriate.

E. Enforcement Priorities

Every violation deserves an appropriate enforcement response. However, because resources are limited, the Water Boards must continually balance the need to complete non-enforcement program tasks with the need to address violations. With available resources for enforcement, the Water Boards must balance the importance or impact of each potential enforcement action against the cost of that action. Informal enforcement actions are usually very cost-effective and are therefore the most frequently used enforcement response. Most formal enforcement actions are relatively costly and must therefore be used on the Water Boards' highest priority violations.

The first step in establishing enforcement priorities is the determination of the relative importance of the violation. Section III of this Policy identifies general criteria for categorizing violations as class I, II, or III violations with class I being the highest priority violations. Water Board Staff will have to determine and indicate, for each violation, the classification of that violation in accordance with the criteria established in Section III of this Policy.

The second step is to identify dischargers that are repeatedly or continuously in violation of applicable laws, regulations, permits, or Water Board orders. For example, California Water Code section 13385(i) prescribes mandatory minimum penalties for specific instances of multiple violations of NPDES discharges. Those provisions are discussed in more detail in Section IV.C.10. of this Policy. Furthermore, the USEPA's Quarterly NonCompliance Report (QNCR) and the Clean Water Act (CWA) Watch Lists both identify NPDES permittees with a pattern of repeated violations. Such repeat offenders should be given priority over first time offenders with violations of the same severity and nature.

Similarly, when classifying violations in accordance with Section III, Water Boards will assign non-NPDES violations that are recurring or continuous a higher prioritization class. The State Water Board will develop enhanced data routines and reporting capabilities to improve the Water Boards' ability to identify chronic violators.

The third step is for senior staff and management to review, for each discharger identified as having class I or II violations, other characteristics of the discharger and violations that would affect decisions about the appropriate enforcement response. Once each month senior staff and management should meet and assign, for each discharger with class I or II violations, a relative priority for enforcement based on the criteria established in this Policy. Except for confidential information regarding ongoing investigations or enforcement, the list of dischargers identified as class I priority violations for enforcement should be reported to the Water Board members and should

be available upon request. The criteria for determining relative enforcement priority include, but are not limited to:

(a) evidence of, or threat of, pollution or nuisance, and the magnitude or impacts of the violation;

(b) evidence of willful misconduct, negligence, or recalcitrance;

(c) the applicability of mandatory minimum penalty provisions of California Water Code sections 13385 and 13399.33;

(d) USEPA's expectations for timely and appropriate enforcement of NPDES-delegated programs[1];

(e) any case-by-case factors that may mitigate a violation including the compliance history of the violator and good-faith efforts of the violator to eliminate noncompliance;

(f) the impact or threat to watersheds or water bodies that the Regional Water Board considers high priority (e.g., due to the vulnerability of an existing beneficial use or an existing state of impairment);

(g) the potential to clean up and abate effects of pollution;

(h) the strength of evidence in the record to support the enforcement action; and

(i) the availability of resources for enforcement.

Serious threats of violation must also be dealt with promptly in order to avoid or mitigate the effects of the threatened violation. Within available resources, formal enforcement actions should be targeted at dischargers with the highest priority violations, chronic violations, and threatened violations. Dischargers with priority violations that do not receive formal enforcement should receive informal enforcement. The State Water Board will work with the Regional Water Boards to develop a standard procedure for tracking informal enforcement actions and documenting whether or not those actions are effective in achieving compliance.

F. Environmental Justice

The Water Boards shall promote enforcement of all health and environmental statutes within their jurisdictions in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations in the State. The State Water Board is participating in, and fully supports,

[1] For NPDES facilities that are listed on the Quarterly Noncompliance Reports (QNCR) USEPA considers timely enforcement of Significant Noncompliance (SNC) violations to be an enforcement action taken within five months after the first quarter of SNC (Guidance for Oversight of NPDES Programs, USEPA Office of Water, May 1987). USEPA considers appropriate enforcement to be an enforceable order or agreement that requires specific corrections to address the violations; in California, Cease and Desist Orders, Cleanup and Abatement Orders, or judicial consent decrees are considered by USEPA to meet this expectation.

the efforts of the California Environmental Protection Agency Working Group on Environmental Justice (convened pursuant to Public Resources Code 72002) to develop and implement an interagency environmental justice strategy.

II. COMPLIANCE ASSURANCE

Compliance with WDRs, Water Quality Control Plan prohibitions, enforcement orders, and other provisions of law administered by the State Water Board or Regional Water Boards can be determined through discharger self-monitoring reports (SMRs), compliance inspections, facility reporting, complaints, or file review.

A. Self-Monitoring Reports (SMRs)

The Water Boards ensure compliance with WDRs and other Water Board orders by requiring dischargers to implement a monitoring and reporting program under California Water Code sections 13267 and 13383, and to periodically submit SMRs. Reporting frequency for regulated dischargers depends on the nature and impact of the discharge. The regulations that implement the CWA also specify monitoring requirements. Enforceable orders that require a monitoring and reporting program should explicitly require the discharger to clearly identify all violations of applicable requirements in a cover letter or in the SMR and to discuss corrective actions taken or planned and the proposed time schedule of corrective actions. Identified violations should include a description of the requirement that was violated and a description of the violation.

When specifying signatory requirements in WDRs, the Water Boards should ensure that those individuals who have responsibility for the collection, analysis and/or reporting of compliance monitoring data are required to sign and certify reports of monitoring results. Responsible individuals may include the following: the chief plant operator; the chief of an in-house laboratory; and/or the individual(s) responsible for preparation and submittal of SMRs.

Regional Water Board staff shall regularly review all discharger SMRs and document all violations and any subsequent enforcement response in the Water Boards' enforcement data management system.

B. Compliance Inspections

On-site compliance inspections are conducted by the Water Board staff under the authority provided in California Water Code sections 13267 and 13383. Compliance inspections provide the Water Board an opportunity to verify that information submitted in SMRs is complete and accurate. Compliance inspections address compliance with WDRs, laboratory quality control and assurance, record keeping and reporting, time schedules, best management practices, pollution prevention plans, and any other pertinent requirements. Water Board staff shall document all violations identified as the result of compliance inspections and any subsequent enforcement response in the facility file and in the Water Boards' enforcement data management system.

C. Direct Facility Reporting

California Water Code section 13271 requires any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State to notify the Office of Emergency Services of the discharge as specified in that section. The Office of Emergency Services then immediately notifies the appropriate Regional Water Board and the local health officer and administrator of environmental health of the discharge.

WDRs, including NPDES permits, should require regulated facilities to report to the Regional Water Board by phone within a specified time, followed by a written report and/or a discussion in the next SMR, when certain events occur, such as:

1. discharges that are not in accordance with WDRs and that pose an immediate public health threat;

2. bypass of raw or partially treated sewage or other waste from a treatment unit or discharge of wastewater from a collection system in a manner inconsistent with WDRs;

3. treatment unit failure or loss of power that threatens to cause a bypass; and

4. any other operational problems that threaten to cause significant violations of WDRs or impacts to receiving waters or public health.

D. Complaints and Complaint Investigations

Often information regarding an actual or potential violation or unauthorized discharge is obtained through telephone or written notification from a member of the public, another public agency or an employee working at a regulated facility. Complaints may also involve nuisance conditions, such as noxious odors that extend beyond a wastewater treatment plant boundary. During the course of an investigation additional violations that are indirectly related or unrelated to the original investigation may also be discovered. Water Board staff shall document all complaints and findings resulting from complaint investigations.

Often the Water Board first hears about spills or other violations from the California Department of Fish and Game, the California Department of Toxic Substance Control, the Office of Emergency Services or other agencies. District Attorneys are another source of information. The Water Boards can use this information to decide whether to initiate joint or separate enforcement actions.

E. Case Record Maintenance and Review

WDRs, enforcement orders (e.g., cleanup and abatement orders, cease and desist orders, and time schedule orders), and requests for reports required pursuant to California Water Code section 13267 frequently mandate completion of tasks, which the dischargers must confirm by submission of appropriate reports to the Regional Water Boards. Failure to submit the reports or to complete the required tasks may be the

basis for additional enforcement. Regional Water Boards shall use data management systems to track tasks and reports required of dischargers.

III. DETERMINING the "PRIORITY" of VIOLATIONS

The Water Boards should identify priority violations and categorize those violations into multiple classifications based on statewide water quality goals identified in the strategic plan, region-specific water quality goals, and the potential for adverse impacts on (1) human health, (2) water quality, (3) natural resources, and (4) the integrity and effectiveness of the applicable regulatory program. The general criteria below have been developed to assist the Water Boards in identifying and classifying significant violations in order to help establish priorities for enforcement efforts. In addition to these criteria, the Water Boards will continue to address enforcement obligations imposed by the law (e.g. Water Code 13385(h) and (i)).

Water Board staff should indicate, for each violation, the classification of that violation in accordance with the criteria outlined in this section. Water Board senior staff and management should also use the procedures provided in Section I. E. of this policy to further evaluate the relative priority of a specific discharger within the Water Board's enforcement case load. Water Boards should use available resources to target formal enforcement actions at the highest priority violations.

A. Class I Priority Violations

Class I priority violations are those violations that pose an immediate and substantial threat to water quality and in turn have potential to cause significant detrimental impacts to human health or the environment. Violations that are the result of knowingly avoiding water quality regulations are also considered class I priority violations because they pose a serious threat to the integrity of the Water Boards' regulatory programs. Accordingly, class I violations are the type of violations that are most likely to merit formal enforcement action. Generally, class I priority violations include, but are not limited to, the following:

1. violations that result in, or present a substantial risk of, causing acute or chronic toxicity to fish or wildlife or a threat to public health[2];

2. spills or unauthorized discharges that pose a significant threat to water quality; falsification of information submitted to the Water Boards or intentional withholding of information required by applicable laws, regulations, or enforceable orders;

[2] Acute toxicity is toxicity that is severe enough to cause mortality or extreme physiological disorder rapidly (typically within 48 or 96 hours). Chronic toxicity is the toxicity impact that lingers or continues for a relatively long period of time, often 1/10 of a lifespan or more. Chronic effects include, but are not limited to mortality, stunted growth, or reduced reproduction rates.

3. falsification of information submitted to the Water Boards or intentional withholding of information required by applicable laws, regulations, or enforceable orders;

4. violations of prior enforcement actions such as a clean up and abatement order or time schedule order that results in a unauthorized discharge of waste or pollutants to water of the State; and

5. violations that would otherwise be considered a class II violation except that the noncompliance continues over an unreasonably long period after being brought to the discharger's attention, is a recurring violation, or is perpetrated by a discharger with a history of chronic noncompliance.

B. Class II Violations

Class II violations are those violations that pose a moderate, indirect, or cumulative threats to water quality and, therefore, have the potential for causing detrimental impact on human health and the environment. Negligent or inadvertent noncompliance with water quality regulations that have the potential for causing or allowing the continuation of an unauthorized discharge, or hiding past violations are also class II violations, because they are a threat to the integrity of the Water Board's regulatory programs. Generally, class II violations include, but are not limited to, the following:

1. spills or unauthorized discharges that pose a moderate, indirect, or cumulative threat to water quality;

2. negligent or inadvertent failure to comply with monitoring requirements as required by applicable laws, regulations, or enforceable orders;

3. negligent or inadvertent failure to submit information as required by applicable laws, regulations, or an enforceable order where that information is necessary to confirm past compliance or to prevent or curtail an unauthorized discharge;

4. violations of compliance schedule dates (e.g., schedule dates for starting construction, completing construction, or attaining final compliance) by 30 days or more from the compliance date specified in an enforceable order;

5. violations of other types of prior enforcement actions--such as a 13267 request of information--that does not results in a unauthorized discharge of waste or pollutants to waters of the State; and

6. violations that would otherwise be considered a class III violation but in which the noncompliance continues over an unreasonably long period after being brought to the discharger's attention, is reoccurring, or is perpetrated by a discharger with a history of chronic noncompliance.

C. Class III Violations

Class III violations are those violations that pose only a minor threat to water quality and have little or no known potential for causing detrimental impact on human health and the environment. Class III violations include statutorily required liability for late reporting when such late filings do not result in causing or allowing an unauthorized discharge to continue. Violations that would otherwise be considered a class III violation should be treated as a class II violation when those violations are continuous over an unreasonable period of time, reoccurring, or perpetrated by a discharger with a history of chronic noncompliance. Class III violations should only include violations from dischargers who are first time or infrequent violators and are not part of a pattern of chronic violations. Generally, class III violations include, but are not limited to, the following:

1. negligent or inadvertent late submission of information required by applicable laws, regulations, or enforceable orders;

2. failure to pay fees, penalties, or liabilities within 30 days of the due date, unless the discharger has filed a timely petition pursuant to California Water Code section 13320 for review of the fee, penalty or liability; or an alternative payment schedule has been accepted by the RWCQB; and

3. other violations that do not qualify as class I or class II priorities.

IV. ENFORCEMENT ACTIONS

The Water Boards have a variety of enforcement tools to use in response to noncompliance by dischargers. This section describes the range of options and discusses procedures that are common to some or all of these options. With certain specified exceptions California Water Code section 13360(a) prohibits the State Water Board or Regional Water Board from specifying the design, location, type of construction, or particular manner in which compliance may be had with a particular requirement.

A. Standard Language

In order to provide a consistent approach to enforcement throughout the State, enforcement orders should be standardized where appropriate. The State Water Board will maintain model enforcement orders containing standardized provisions for use by the Regional Water Boards. Regional Water Boards should use the models, modifying terms and conditions as appropriate to fit the specific circumstances related to a discharge and to be consistent with Regional Water Board plans and policies.

B. Informal Enforcement Actions

An informal enforcement action is any enforcement action taken by Water Board staff that is not defined in statute or regulation. Informal enforcement action can include any form of communication (oral, written, or electronic) between Water Board staff and a

discharger concerning an actual, threatened or potential violation. These actions cannot be directly petitioned to the State Water Board.

The purpose of an informal enforcement action is to quickly bring an actual, threatened, or potential violation to the discharger's attention and to give the discharger an opportunity to return to compliance as soon as possible. The Regional Water Board may take formal enforcement action in place of, or in addition to, informal enforcement actions. Continued noncompliance, particularly after informal actions have been unsuccessful, should trigger formal enforcement action.

1. Oral Enforcement Actions and Enforcement Letters

For many violations, the first step is an oral enforcement action. This involves contacting the discharger by phone or in person and informing the discharger of the specific violations, discussing how and why the violations have occurred or may occur, and discussing how and when the discharger will correct the violation and achieve compliance. Staff must document such conversations in the facility case file and in the enforcement database.

An enforcement letter is often appropriate as a follow-up to, or in lieu of, an oral enforcement action. Enforcement letters are signed by staff or by the appropriate senior staff. The letter should inform the discharger of the specific violations and, if known to staff, discuss how and why the violations have occurred or may occur as well as how and when the discharger will correct the violation and achieve compliance. The letter should require a prompt response and certification that the violation(s) has been corrected.

Oral enforcement actions and enforcement letters may not include language excusing the violation or modifying a compliance date in WDRs or other orders issued by the Water Boards.

2. Notices of Violation (NOV)

The NOV letter is the most significant level of informal enforcement action and should be used only where a violation has actually occurred. An NOV should be signed by the Regional Water Board Executive Officer or designated staff and should be addressed and mailed to the discharger(s) by certified mail. In cases where the discharger has requested that their consultant be notified of Regional Water Board actions, the consultant should also receive a copy of the NOV. The NOV letter should include a description of specific violations, a summary of potential enforcement options available to address noncompliance (including the potential daily or per gallon maximum Administrative Civil Liability (ACL) available), and a request for a written response by a specified. A response should include a certification of correction of the violation or a certified statement of when the violation will be corrected. The NOV can be combined with a request for technical information pursuant to California Water Code section 13267, where appropriate. The summary of potential enforcement options must include appropriate citations to the California Water Code and should specify that the Regional Water Board reserves the right to take any enforcement action authorized by law.

C. Formal Enforcement Actions

Formal enforcement actions are statutorily recognized actions to address a violation or threatened violation of water quality laws, regulations, policy or orders. Formal enforcement orders should contain findings of facts that establish all the statutory requirements of the specific statutory provision being cited. The actions listed below present options available for enforcement.

1. Notices to Comply

Notices to Comply are issued pursuant to California Water Code section 13399 et seq., which requires the use of Notices to Comply as the only means by which the State Water Board or Regional Water Board can issue citations for minor violations. A violation is determined to be minor by the State Water Board or the Regional Water Board after considering factors defined in California Water Code sections 13399(e) and (f) and the danger the violation poses to, or the potential that the violation has for endangering human health, safety, welfare or the environment.

(a) The violations listed below are considered to be minor violations for the purpose of compliance with California Water Code section 13399 et seq.:

(i) Inadvertent omissions or deficiencies in recordkeeping that do not prevent an overall compliance determination.
(ii) Records (including WDRs) not physically available at the time of the inspection provided the records do exist and can be produced in a timely manner.
(iii) Inadvertent violations of insignificant administrative provisions that do not involve a discharge of waste or a threat thereof.
(iv) Failure to have permits available during an inspection.
(v) Violations that result in an insignificant discharge of waste or a threat thereof; provided, however, there is no significant threat to human health, safety, welfare or the environment.

(b) A violation is not considered minor if it is a priority violation as described in Section III of this Policy or includes any of the following:

(i) Any knowing, willful, or intentional violation of Division 7 (commencing with Section 13000) of the California Water Code.
(ii) Any violation that enables the violator to benefit economically from noncompliance, either by realizing reduced costs or by gaining a competitive advantage.
(iii) Chronic violations or violations committed by a recalcitrant violator.
(iv) Violations that cannot be corrected within 30 days.

2. Notices of Stormwater Noncompliance

The Stormwater Enforcement Act of 1998 (California Water Code section 13399.25 et seq.) requires that each Regional Water Board notify storm water dischargers who have failed to file a notice of intent to obtain coverage, a notice of non-applicability, a construction certification, or annual reports. If, after two notifications, the discharger fails to file the applicable document a mandatory civil liability shall be assessed against the discharger.

3. Technical Reports and Investigations

California Water Code sections 13267(b) and 13383 allow Regional Water Boards to conduct investigations and to require technical or monitoring reports from any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste in accordance with the conditions in the section. Failure to comply with requirements made by a Regional Water Board pursuant to California Water Code section 13267(b) is a priority violation and may result in administrative civil liability pursuant to California Water Code section 13268. Failure to comply with orders made pursuant to California Water Code section 13383 may result in administrative civil liability pursuant to California Water Code section 13385. Section 13267(b) and 13383 requirements are enforceable when signed by the Executive Officer of the Regional Water Board.

California Water Code section 13267 (b) requires Regional Water Boards to:

- provide the person who is required to provide the reports with a written explanation with regard to the need for the reports, and
- identify the evidence that supports requiring that person to provide the reports.

To comply with these requirements, the Regional Water Board should include a brief statement regarding the relationship between the information that is being sought and the water quality issue that is being investigated (e.g., to determine the level of the discharge's impact on beneficial uses or to determine compliance with waste discharge requirements.) The Regional Water Board should also identify a basis for suspecting that the recipient(s) of the order discharged, is discharging, or may discharge waste. This may be accomplished by including a brief statement regarding the person's current or former ownership or control over the location of the discharge or the person's control over the discharge itself. If the existence of a discharge is in question, the statement should also identify a basis for suspecting a discharge (e.g., a brief description of the condition downstream or down-gradient of the suspected discharge). These statements required by 13267(b) may, for example, be contained in a transmittal letter, in the 13267(b) requirements, or in the findings in an order. Note these statements are not required by California Water Code section 13383, which applies only to discharges subject to regulation under the NPDES program.

Although they should be cited in Cleanup and Abatement Orders, Cease and Desist Orders, and section 13308 Time Schedule Orders (TSOs), it is important to note that California Water Code sections 13267 and 13383 are not strictly enforcement statutes. Regional Water Boards should routinely cite those sections as authority whenever

asking for technical or monitoring reports. California Water Code section 13267 should also be cited in all non-NPDES WDRs, waivers and certifications as authority for monitoring and reporting requirements. California Water Code section 13383 should be cited in all NPDES permits.

4. Cleanup and Abatement Orders (CAOs)

Cleanup and Abatement Orders (CAOs) are adopted pursuant to California Water Code section 13304. CAOs may be issued to any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the State Water Board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the State and creates, or threatens to create, a condition of pollution or nuisance (discharger). The CAO requires the discharger to clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.

Regional Water Boards should keep an accurate record of staff oversight costs for CAOs, because dischargers are liable for such costs. When a CAO specifies that staff costs are to be recovered from the discharger, failure to pay invoiced amounts for staff costs is a violation of the CAO that is subject to an ACL.

Regional Water Boards shall comply with State Water Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under Water Code Section 13304", in issuing CAOs. CAOs should require discharger(s) to clean up the pollution to background levels or the best water quality which is reasonable if background levels of water quality cannot be restored in accordance with Resolution No. 92-49. At a minimum, cleanup levels must be sufficiently stringent to fully support beneficial uses, unless the Regional Water Board allows a containment zone. In the interim, and if restoration of background water quality cannot be achieved, the CAO should require the discharger(s) to abate the effects of the discharge. Abatement activities may include the provision of alternate water supplies. CAOs should name all dischargers for whom there is sufficient evidence of responsibility as set forth in California Water Code section 13304.

CAOs that require submission of technical and monitoring reports should always state that the reports are required pursuant to California Water Code section 13267. CAOs shall contain language describing likely enforcement options available for noncompliance and should specify that the Regional Water Board reserves its right to take any enforcement action authorized by law. Such language shall include appropriate California Water Code citations. Violations of CAOs should trigger further enforcement in the form of an ACL, a TSO under California Water Code section 13308, or a referral to the Attorney General for injunctive relief or monetary remedies.

5. Section 13300 Time Schedule Orders (TSOs)

Pursuant to California Water Code section 13300, the Regional Water Board can require the discharger to submit a time schedule which sets forth the actions that the discharger will take to address actual or threatened discharges of waste in violation of requirements. TSOs that require submission of technical and monitoring reports should state that the reports are required pursuant to California Water Code section 13267.

6. Section 13308 Time Schedule Orders (13308 TSOs)

California Water Code section 13308 authorizes the Regional Water Board to issue a Section 13308 Time Schedule Order (13308 TSO) which prescribes a civil penalty if compliance is not achieved in accordance with the time schedule. The Regional Water Board may issue a 13308 TSO if there is a threatened or continuing violation of a cleanup and abatement order, cease and desist order, or any requirement issued under California Water Code sections 13267 or 13383. The penalty must be set based on an amount reasonably necessary to achieve compliance and may not contain any amount intended to punish or redress previous violations. Therefore, the 13308 TSO should contain findings explaining how the penalty amount will induce compliance without imposing punishment. For example, it could include a calculation of how much money the discharger is saving each day by delaying compliance. The 13308 TSO provides the Regional Water Boards with their primary mechanism for motivating compliance, and if necessary, assessing monetary penalties against federal facilities.

If the discharger fails to comply with the 13308 TSO, the penalty is imposed when the Regional Water Board Executive Officer issues a complaint for Administrative Civil Liability. If the amount of proposed liability in the complaint is less than the amount specified in the 13308 TSO, the Regional Water Board is required by California Water Code section 13308(c) to include specific findings setting forth the reasons for its action based on California Water Code section 13327. The penalty may not exceed $10,000 for each day in which the violation of the 13308 TSO occurs.

7. Cease and Desist Orders (CDOs)

Cease and Desist Orders (CDOs) are adopted pursuant to California Water Code sections 13301-13303. CDOs may be issued to dischargers violating or threatening to violate WDRs or prohibitions prescribed by the Regional Water Board or the State Water Board. CDOs are often issued to dischargers with chronic noncompliance problems. These problems are rarely amenable to a short-term solution. Often, compliance involves extensive capital improvements or operational changes. The CDO will usually contain a compliance schedule, including interim deadlines (if appropriate), interim effluent limits (if appropriate), and a final compliance date. CDOs may also include restrictions on additional service connections to community sewer systems and combined stormwater/sewer systems.

Section 4477 of the California Government Code prohibits all state agencies from entering into contracts of $5,000 or more for the purchase of supplies, equipment, or services from any nongovernmental entity who is the subject of a CDO which is no longer under review and which was issued for violation of WDRs or which has been finally determined to be in violation of federal laws relating to air or water pollution. The

State Water Board provides the list of such violators to other state agencies and publishes the list on the internet at http://www.swrcb.ca.gov.

CDOs that require submission of technical and monitoring reports should state that the reports are required pursuant to California Water Code section 13267. CDOs shall contain language describing likely enforcement options available for noncompliance and specify that the Regional Water Board reserves its right to take any further enforcement action authorized by law. Such language shall include appropriate California Water Code citations. Violations of CDOs should trigger further enforcement in the form of an ACL, 13308 TSOor referral to the Attorney General for injunctive relief or monetary remedies.

8. Modification or Rescission of Waste Discharge Requirements

In accordance with the provisions of the California Water Code, the Regional Water Board may modify or rescind WDRs in response to violations. Depending on the circumstances of the case, rescission of WDRs may be appropriate for failure to pay fees, penalties or liabilities; discharges that adversely affect beneficial uses of the waters of the State; and violation of the State Water Board General WDRs for discharge of bio-solids due to violation of the Background Cumulative Adjusted Loading Rate. Rescission of WDRs generally is not an appropriate enforcement response where the discharger is unable to prevent the discharge, as in the case of a publicly owned treatment works (POTW).

9. Administrative Civil Liabilities (ACLs)

ACLs are penalties imposed by a Regional Water Board or the State Water Board. The California Water Code and the Health and Safety Code authorize the imposition of an ACL for violations of law.

Table IV-1. Summary of Relevant California Water Code and Health and Safety Code Authority for Imposing Administrative Civil Liability.

STATUTE	**COVERAGE**
§ 13261 (California Water Code)	Up to $1,000 per day for failure to furnish reports of waste discharge or failure to pay annual program fees. ($5,000 per day for non-NPDES discharges if hazardous waste is involved and there is a willful violation.)
§ 13263.3(g) (California Water Code)	Liability pursuant to § 13385(c)(1) for failure to complete a pollution prevention plan required by the Water Boards or a regional board, for submitting a noncompliant plan, or not implementing a plan.
§ 13265 (California Water Code)	Up to $1,000 per day for discharging without a permit. ($5,000 per day for non-NPDES discharges if hazardous waste is involved and violation is due to negligence.)

STATUTE	COVERAGE
§ 13268 (California Water Code)	Up to $1,000 per day for failing or refusing to furnish technical or monitoring reports or falsifying information therein. (Up to $5,000 per day for non-NPDES discharges if hazardous waste is involved and there is a knowing violation.)
§ 13271 (California Water Code)	Up to $20,000 for failing to notify the Office of Emergency Services (OES) of a discharge of hazardous substances that exceeds the reportable quantity or more than 1000 gallons of sewage.
§ 13272 (California Water Code) (Limitation: Does not apply to spills of oil into marine waters as defined in Government Code §8670.3(f).)	Not less than $500 and not more than $5000 per day for each day of failure to notify OES of a discharge of any oil or product in or on the waters of the state.
§ 13308 (California Water Code)	Up to $10,000 per day for violations of time schedules. Amount to be prescribed when time schedule is established.
§ 13350 (California Water Code)	• Up to $10 per gallon of waste discharged, or • Up to $5000 per day of violation. The Regional Water Board is required to make a specific finding if it imposes civil liability in an amount less than $100 per day of violation if there is no discharge, or less than $500 per day of violation if there is a discharge and a CAO is issued.
§ 13385(a) (California Water Code)	For NPDES permit program violations or discharges to surface water: Up to $10,000 per day of violation plus an additional liability of $10 per gallon for each gallon over 1,000 gallons where there is a discharge that is not cleaned up. A “discharge” as used in this section is defined as any discharge from a point source to navigable waters of the United States, any introduction of pollutants into a POTW, or any use or disposal of sewage sludge.

STATUTE	COVERAGE
§ 13385(h) and (i) (California Water Code)	• 13385(h)(1) … Mandatory minimum penalties of three thousand dollars ($3,000) shall be assessed for the first serious violation as defined by statute and each additional serious violation in any period of six consecutive months, except that the State Water Board or Regional Water Board may elect to require the discharger to spend an amount equal to the penalty for the first serious violation on a supplemental environmental project or to develop a pollution prevention plan. • 13385(i) Mandatory minimum penalties of three thousand dollars ($3,000) shall be assessed for each violation whenever the person does any of the following four or more times in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations: (1) Exceeds a waste discharge requirement effluent limitation. (2) Fails to file a report pursuant to Section 13260. (3) Files an incomplete report pursuant to Section 13260. (4) Exceeds a toxicity discharge limitation contained in the applicable waste discharge requirements where the waste discharge requirements do not contain pollutant-specific effluent limitations for toxic pollutants.
§ 13399.33 (California Water Code)	• Not less than $5,000 per year or fraction thereof for failure to submit required notice of intent for coverage under stormwater permit. • Not less than $1,000 per year or fraction thereof for failure to submit notices on non-applicability, annual reports or construction certification as required by stormwater program.
§ 13529.4 (California Water Code)	$5000 for first violation $10,000 for second violation within 365 days of a previous violation $5000 for subsequent violation occurring more than 365 days of previous violation $25,000 for third or subsequent violation within 365 days of a previous violation • Administrative civil liability for violation of notification requirements for discharge of recycled water

STATUTE	COVERAGE
§ 13611 (California Water Code)	Up to $1000 per day for violation of perchlorate storage requirements
§ 13627.1(c) (California Water Code)	Up to $5000 per each violation involving: Fraud or deception in the course of operating a waste water treatment plant Certificate holder's failure to use to reasonable care or judgment in the operation of a plant Willfully or negligently violating waste discharge requirements or permits issued pursuant to the federal Clean Water Act Willfully or negligently causing or allowing a violation of waste discharge requirements or permits pursuant to the federal Clean Water Act Failure to use reasonable care in the management or operation of a wastewater treatment plant Dishonest conduct during the examination for certification [Misdemeanors for any person who operates a wastewater treatment plant without a valid, unexpired certificate of the appropriate grade (13267.1(a) or any person who owns or operates a wastewater treatment plant that employs any person who does not hold a valid and unexpired permit of the appropriate grade and up to $100 per day for each day of violation]
§ 13627.3(f) (California Water Code)	Up to $1000 for each day of violation for contracting with an owner of a wastewater treatment plant without registering or with renewing the registration with required information in 13267.3(a) [also a misdemeanor]
§ 13627.2 (California Water Code)	Up to $5000 per violation for submittal of false or misleading information to the State Water Board on an application for certificate or registration
§ 25299(d) (California Health and Safety Code)	Up to $10,000 per day for violating corrective action requirements related to underground storage tank releases

a. ACL Complaint

California Water Code sections 13323-13327 provide authority to impose ACLs. These provisions authorize Water Boards Executive Officers or Executive Director to issue an ACL complaint. Additionally, California Water Code section 13261(b)(1) authorizes both the Water Boards Executive Officers and Executive Director to issue an ACL complaint for failing to furnish a report of waste discharge or pay a waste discharge requirement fee. The ACL complaint describes the violation and provision of law authorizing imposition of the civil liability, proposes a specific civil liability, and informs the recipient that a public hearing will be held within 90 days from issuance of the complaint.

Section II of this policy provides specific instructions for staff to use when developing and documenting a recommendation for the amount of the assessment.

An ACL complaint can be resolved through settlement. It is the policy of the State Water Board that a public comment period should be provided prior to the settlement of any ACL, including mandatory minimum penalties. The State Water Board or Regional Water Board should use appropriate methods to notify the public of the proposed action. Appropriate methods include, but are not limited to, posting notices on the internet, mailing and/or e-mailing documents to all known interested parties and publishing notices in newspapers. ACLs issued under section 13385 for violations of the CWA must allow a 30-day public comment period and public notice may include publishing a notice in a newspaper of general circulation for any proposed settlement.

In the event that the discharger elects to waive its right to a public hearing and pays the liability (as permitted under Water Code Section 13323(b)), a third party may still comment on the complaint at any time during the public comment period. Following review of the comments, the Executive Officer or Executive Director may withdraw the ACL complaint or it can be redrafted and issued as appropriate. In cases where a public hearing before the Regional Water Board or State Water Board is not held, summary information regarding the final disposition of the complaint should be included on the next State Water Board or Regional Water Board agenda.

The hearing shall be before a panel of the Regional Water Board or before the Regional Water Board or State Water Board. Following the hearing the Regional Water Board or State Water Board will consider whether to affirm, modify or reject the liability. If the Regional Water Board or State Water Board adopts an ACL order, it may be for an amount that is greater or less than the amount proposed in the complaint but may not exceed the maximum statutory liability. The Executive Officer or Executive Director may decide to withdraw or modify a complaint that he/she has issued.

b. Suspended Liability

The Regional Water Board or State Water Board may, by various means, allow a portion of the liability to be satisfied through the successful completion of a supplemental environmental project (SEP) and/or a compliance project (CP). The remaining portion of the liability shall be paid to the State Cleanup and Abatement Account or other fund or account as authorized by statute. SEPs and CPs are addressed in more detail in Sections IX and X of this document. Procedures are addressed in the Adminstrative Civil Liability Guide.

c. Staff Costs

The portion of the ACL amount that is intended to recover staff costs should always be paid to the State Cleanup and Abatement Account or other fund or account as authorized by statute. It is the policy of the State Water Board that the maximum amount permissible be recovered to defray the staff costs in bringing the ACL action. Staff costs are discussed in greater detail in Section VII of this Policy.

d. ACL Orders

ACL orders are final upon adoption or issuance by the Executive Officer, when authority is expressly delegated by the Regional Board, and cannot be reconsidered by the Regional Water Board. ACL orders can only be modified by the State Water Board pursuant to California Water Code section 13320 or in connection with a superior court action if a petition for writ of mandate is properly filed in accordance with California Water Code section 13330. ACL orders issued by the State Water Board are final upon adoption and can only be modified pursuant to California Water Code section 13330. All cash payments to the State Water Board or Regional Water Boards shall be paid to the State Cleanup and Abatement Account or other fund or account as authorized by statute.

10. Mandatory Minimum Penalties for NPDES Violations

Mandatory penalty provisions are required by California Water Code section 13385(h) and (i) for specified violations of NPDES permits. For violations that are subject to those mandatory minimum penalties, the Water Board must either assess an ACL for the mandatory minimum penalty or - for a greater amount.

California Water Code section 13385(h) requires that a mandatory minimum penalty of $3,000 be assessed by a Water Board for each serious violation. A serious violation is any waste discharge that exceeds the effluent limitation for a Group I pollutant by 40 percent or more, or for a Group II pollutant by 20 percent or more. (See Appendices A and B). (Section III.A. (a) of this policy addresses situations where the effluent limit for a pollutant is less than or equal to the quantitation limit.) California Water Code section 13385.1 specifies that a serious violation also means failure to file certain monitoring reports for each period of 30 days during which such reports are late.

Exceptions to the imposition of mandatory minimum penalties are provided for violations that are caused by acts of war, an unanticipated, grave natural disaster or other natural phenomenon of an exceptional, inevitable, and irresistible character, or by an intentional act of a third party. Such exceptions do not apply if the violation could have been prevented or avoided by the exercise of due care or foresight by the discharger. Such exceptions are fact specific and should be evaluated on a case-by-case basis.

A Water Board is required by California Water Code section 13385(i) to assess mandatory minimum penalties of $3,000 for each non-serious violation. A non-serious violation occurs if the discharger does any of the following a fourth time in any period of six consecutive months:

(a) exceeds WDR effluent limitations;
(b) fails to file a report of waste discharge pursuant to California Water Code section 13260;
(c) files an incomplete report of waste discharge pursuant to California Water Code section 13260; or
(d) exceeds a toxicity discharge limitation where the WDRs do not contain pollutant-specific effluent limitations for toxic pollutants.

The six-month time period is calculated as a “rolling” 180 days.

The intent of these portions of the California Water Code is to assist in bringing the State's permitted facilities into compliance with WDRs. Water Boards should issue mandatory minimum penalties within seven months of the time that they became aware of the violations. This will encourage the discharger to correct the violation in a timely manner.

A single operational upset that that leads to simultaneous violations of one or more pollutant parameters is a single violation. EPA defines "single operational upset" as "an exceptional incident which causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one CWA effluent discharge pollutant parameter. Single operational upset does not include… noncompliance to the extent caused by improperly designed or inadequate treatment facilities" ("Issuance of Guidance Interpreting Single Operational Upset" Memorandum from the Associate Enforcement Counsel, Water Division, U.S.EPA, September 27, 1989.). The EPA Guidance further defines an "exceptional" incident as a "non-routine malfunctioning of an otherwise generally compliant facility." Single operational upsets include such things as an upset caused by a sudden violent storm, a bursting tank, or other exceptional event and may result in violations of multiple pollutant parameters. The discharger has the burden of demonstrating that a violation was the result of a single operational upset. The Regional Water Board shall apply the above EPA Guidance in determining if a single operational upset occurred. A finding that a single operational upset has occurred is not a defense to liability, but may affect the number of violations.

California Water Code section 13385(j) includes several limited exceptions to the mandatory minimum penalty provisions. The primary exceptions are for discharges that are in compliance with a cease and desist order or TSO under narrowly specified conditions.

California Water Code section 13385(k)(l) provides an alternative to assessing mandatory minimum penalties against a POTW that serves a small community with a financial hardship. Under this alternative, the Regional Water Boards may require the POTW to spend an amount equivalent to the mandatory minimum penalty toward a compliance project that is designed to correct the violations.

California Water Code section 11385(k)(2) defines "small community" as "a publicly owned treatment works serving a population of 10,000 persons or fewer or a rural county, with a financial hardship as determined by the State board after considering such factors as median income of the residents, rate of unemployment, or low population density in the service area of the publicly owned treatment works."

At a minimum, a community will be considered a "small community" pursuant to 13385(k)(2) if it is (1) a community with a population of 10,000 or fewer people; or (2) a community within a rural county as defined below.

It is the policy of the State Water Board that "rural county" means a county classified by the Economic Research Service, United States Department of Agriculture (ERS, USDA) with a rural-urban continuum code of four through nine.

It is the policy of the State Water Board that "financial hardship" means that the community meets one of the following criteria:

1. Median household income[3] for the community is less than 80% of the California median household income;

2. The community has an unemployment rate[4] of 10 percent or greater; or

3. 30% of the population is below the poverty level[5].

It is the policy of the State Water Board that "median household income" "unemployment rate", and "poverty level" of the community is based on the most recent U.S. Census block group[6] data or a local survey approved by the State Water Board.

If a community believes that the U.S. Census data do not accurately represent the community, and the community is not a Census Designated Place, a City or a Town, or if a community believes that additional factors such as low population density in the service area should be considered, the community may apply to the State Water Board for designation as a "small community with a financial hardship".

The application must include a map of community boundaries, a list of properties, the number of households, and the number of people in the community. Additional information including information regarding income and/or property values of the community may be submitted in support of the application. If the application does not provide an adequate basis for the calculation of median household income, the State Water Board may require an independent income survey conducted in accordance with a pre-approved methodology. A subdivision of state government cannot be considered a small community with a financial hardship.

The following counties qualify as rural counties		
Alpine	Inyo	Plumas
Amador		

[3] **Median household income**
The median income divides the income distribution into two equal groups, one having incomes above the median, and the other having incomes below the median.

[4] **Unemployed**
All civilians 16 years old and over are classified as unemployed if they (1) were neither "at work" nor "with a job but not at work" during the reference week, and (2) were actively looking for work during the last 4 weeks, and (3) were available to accept a job. Also included as unemployed are civilians who did not work at all during the reference week, were waiting to be called back to a job from which they had been laid off, and were available for work except for temporary illness.

[5] **Poverty**
Following the Office of Management and Budget's (OMB's) Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level."

[6] **Block group**
A subdivision of a census tract (or, prior to 2000, a block numbering area), A block group is the smallest geographic unit for which the Census Bureau tabulates sample data. A block group consists of all the blocks within a census tract with the same beginning number.

Example: block group 3 consists of all blocks within a 2000 census tract numbering from 3000 to 3999. In 1990, block group 3 consisted of all blocks numbered from 301 to 399Z.

The following counties qualify as rural counties		
Calaveras		Sierra
Colusa	Lake	Siskiyou
Del Norte	Lassen	Tehama
Glenn	Mariposa	Trinity
Humboldt	Mendocino	Tuolumne
	Modoc	
	Mono	
	Nevada	
Based on 2003 USDA Rural-Urban Continuum Codes for California		

11. Referrals to Attorney General, District Attorney, United States (U.S.) Attorney or City Attorney

The Regional Water Board or State Water Board can refer violations to the State Attorney General for civil enforcement actions. The Regional Water Board or State Water Board can also request the appropriate county District Attorney or City Attorney seek criminal prosecution. A superior court may be requested to impose civil or criminal penalties. In some cases (e.g., when the District Attorney or Attorney General is unable or unwilling to accept a case), the Regional Water Board may find it appropriate to request the USEPA's criminal investigation division or the U.S. Attorney's Office to review potential violations of federal environmental statutes, including but not limited to the CWA, the Endangered Species Act, the Migratory Bird Treaty Act, or the Resource Conservation and Recovery Act.

a. Attorney General

At the request of the Regional Water Board or State Water Board, the Attorney General can seek judicial civil liabilities on behalf of the Regional Water Board or State Water Board for California Water Code violations, essentially the same ones for which the Regional Water Board or State Water Board can impose ACLs. Maximum per-day or per-gallon civil monetary remedies are two to ten times higher when imposed by the court instead of the Regional Water Board. The Attorney General can also seek injunctive relief in the form of a restraining order, preliminary injunction, or permanent injunction pursuant to California Water Code sections 13262, 13264, 13304, 13331, 13340 and 13386. Injunctive relief may be appropriate in emergency situations, or where a discharger has ignored enforcement orders or does not have the ability to pay a large ACL.

For civil assessments, referrals to the Attorney General should be reserved for cases where the violation merits a significant enforcement response but where an ACL would be inappropriate or ineffective. For example, when a major oil spill occurs, several state agencies can seek civil monetary remedies under different state laws; a single civil action by the Attorney General may be more efficient than numerous individual agency actions. A violation (or series of violations) with major public health or water quality impacts should be considered for referral in order to maximize the monetary assessment because of its effect as a deterrent. Referral for recovery of natural resources damages under common law theories, such as nuisance, may also be appropriate.

b. District Attorney, City Attorney, USEPA or U.S. Attorney

District Attorneys, City Attorneys, USEPA, or U.S. Attorneys may seek civil or criminal penalties under their own authority for some of the same violations the Regional Water Board pursues. A request by the Regional Water Board is not required. The decision to file a criminal action and what charges to bring is within the sole discretion of the prosecutor who acts on behalf of the people of the State in general. A Regional Water Board can request prosecution or investigation and should cooperate with a prosecutor but the criminal action is not controlled by, or the responsibility of, the Regional Water Board. Staff should always request that any settlement by the District Attorney require any actions that are necessary to prevent recurrence of a spill and/or to mitigate damage to the environment and include recovery of staff costs.

A major area where District Attorney involvement should be considered is where there is suspected criminal action related to releases of hazardous substances or toxic materials. A request for District Attorney involvement would support the local agency or another state agency that is taking the lead (e.g., county health department, city fire department, California Department of Fish and Game or the California Department of Toxic Substances Control). Many District Attorney offices have created task forces specifically staffed and equipped to investigate environmental crimes including water pollution. These task forces may request Regional Water Board support which should be provided within available resources. District Attorneys also have the resources to carry out investigations that may be beyond the expertise of Regional Water Board staff. For example, a District Attorney's investigator is skilled at interviewing witnesses and collecting evidence. Such assistance can help a Regional Water Board determine if enforcement action is required and help with developing the evidence needed to prove the basis for enforcement.

In addition to the criminal sanctions and civil fines, the District Attorney often pursues injunctive actions to prevent unfair business advantage. The law provides that one business may not gain unfair advantage over its competitors by using prohibited tactics. A business that fails to comply with its WDRs or an enforcement order competes unfairly with other businesses that obey the law.

In cases where there is a serious violation of the CWA and additional investigatory resources are needed, the USEPA or U.S. Attorney may be contacted. Civil matters should be referred to the USEPA, not directly to the U.S. Attorney

Investigations by prosecutors are confidential and are generally not subject to Public Records Act disclosure. It is essential that staff working with the prosecutor or prosecutor's investigators maintain this confidentiality.

c. Civil Versus Criminal Actions

Enforcement actions taken by the Water Boards are administrative or civil actions. In cases where there is reason to believe that specific individuals or entities have engaged in criminal conduct, the Water Boards may refer the case to the District Attorney, City Attorney, Attorney General, USEPA's criminal investigation division or the U.S. Attorney. Under criminal law, individual persons, as well as responsible parties in public agencies and business entities, may be subject to fines or imprisonment.

While criminal statutes differ, most require some type of intent or knowing behavior on the part of the violator. This intent may be described as knowing, reckless, or willful. In addition to the required intent, criminal offenses usually consist of a number of elements, each one of which must be proven. Determining whether the required degree of intent and each of the elements exists often involves a complex analysis. If a potential environmental criminal matter comes to the attention of staff, staff should inform Water Board management and the Water Board's attorney(s).

D. Petitions of Enforcement Actions

Persons affected by most formal enforcement actions or failures to act by a Regional Water Board may file petitions with the State Water Board for review of such actions or failures to act. The petition must be received by the State Water Board within 30 days of the Regional Water Board action. A petition on the Regional Water Board's failure to act must be filed within 30 days of the date the Regional Water Board refuses to act or within 60 days after a request has been made to the Regional Water Board to act. Actions taken by the Executive Officer of the Regional Water Board pursuant to authority delegated by the Regional Water Board (e.g., cleanup and abatement orders, ACL orders) are considered actions by the Water Board and are also subject to the 30-day time limit. In addition, significant enforcement actions by a Regional Water Board Executive Officer may be reviewed by the Regional Water Board at the request of the discharger. When a discharger has unsuccessfully petitioned the Regional Water Board and subsequently petitions the State Water Board for review, the petition to the State Water Board must be filed within 30 days of the Executive Officer's action. The State Water Board may, at any time and on its own motion, review most actions or failures to act by a Regional Water Board. When a petition is filed with the State Water Board, the time for payment of fees, liabilities or penalties that are the subject of the petition is extended during the State Water Board review of the petition.

V. SPECIFIC ENFORCEMENT PROCEDURES FOR FAILURE TO PAY FEES OR LIABILITIES

It is the intent of the State Water Board that the following specific instances of noncompliance receive consistent enforcement responses from the Water Boards. Decisions by the Water Boards to deviate from these specific recommendations should be based on extenuating circumstances that are documented in the discharger/facility record (e.g., file, databases, other records).

A. Failure to Pay Annual Fees

California Water Code section 13260 requires that each person prescribed WDRs pay an annual fee, except solid waste landfills, which are not subject to WDR fees pursuant to Public Resources Code section 48004(b). Failure to pay the fee when requested is a misdemeanor pursuant to California Water Code section 13261. All fees are due and payable within 30 days from issuance of the invoice. Dischargers who argue that they are exempt from payment of a fee should be referred to the Office of Chief Counsel.

- If the annual fee is not paid within 30 days of the due date on the original invoice, the State Water Board will issue a Demand for payment letter.

If the fee is not paid within 30 days of the date of the Demand for payment letter, the State Water Board will issue a Notice of Violation letter and refer the account to the Attorney General's Office if the amount owed is at least $4,000. If the amount owed is less than $4,000, the State Water Board will refer the account to a private collection agency, pursue payment through small claims court, utilize in-house collection efforts, or take other appropriate action to collect the fee.[7]

If the annual fee is not paid after six months, the State Water Board will implement the following process to revoke the permit:

- The State Water Board will identify dischargers who have not paid their permit fees six months after receiving an invoice.
- The State Water Board will contact the Regional Water Boards to discuss the impending terminations and whether there are extenuating circumstances that warrant not terminating a particular permit. The Water Boards will develop a plan of action for those permits that are not terminated for non-payment of permit fees.
- The State Water Board will attempt to contact targeted dischargers and inform them of the pending revocation of their permit. Dischargers will be given 30 days to pay all past due invoices or file the necessary paperwork with the appropriate Regional Water Board to terminate the permit.
- After the 30 days has elapsed, the State Water Board will send the Regional Water Boards a list of dischargers who failed to resolve their outstanding debts or could not be located.
- The Regional Water Boards will revoke the permits of dischargers on the list and send those dischargers a letter informing them of the revocation.
- The Regional Water Boards will closely monitor all dischargers whose permits have been revoked and take appropriate enforcement action against those who are discharging without a permit.

[7] In some cases, the Water Boards may elect to tissue an ACL under the authority granted in California Water Code section 13261 through either the State Water Board or the Regional Water Board as its preferred collection strategy. These cases wshould be coordinated through the State Water Board's Fee Unit.

- When legally feasible, the Regional Water Boards will work closely with the State Board to prevent dischargers from renewing terminated permits or applying for new permits without paying past due permit fees.

In appropriate cases and in consultation with the Office of the Attorney General, the State Water Board may request an offset whereby the Franchise Tax Board or the Water Board of Equalization will intercept tax refunds or other amounts that may be owed to a discharger by the State. When all reasonable collection efforts have been exhausted, the State Water Board will request a discharge from accountability for uncollectible amounts from the State Controller's Office.

B. Failure to Pay Administrative Civil Liabilities

The State Water Board should pursue collection of unpaid administrative civil liabilities. The California Water Code states that ACL assessments shall be made not later than 30 days from the Regional Water Board's adoption of an ACL order unless the discharger files a petition for review under California Water Code section 13320. When a petition is filed, payment is stayed during the State Water Board review of the petition but are due within 30 days of the State Water Board's decision on the petition provided the petitioner does not seek judicial review. If the petitioner fails to pay the liability or seek judicial review within 30 days of the State Water Board action, the State Water Board may apply to the clerk of the appropriate superior court for a judgment to collect the assessment pursuant to California Water Code section 13328.

As an alternative to Section 13328, the State Water Board or Regional Water Board may pursue judicial collection for failure to pay an ACL imposed for CWA violations pursuant to California Water Code section 13385. The California Water Code provides that after the time to file for judicial review has expired, the Attorney General upon request must petition the appropriate court to collect the liability. The person failing to pay the liability on a timely basis is required to pay, in addition to that penalty, interest, attorney's fees, cost for collection proceedings, and a quarterly nonpayment fee for each quarter during which the failure to pay persists. The nonpayment fee is equal to 20 percent of the aggregate amount of the person's liability and the nonpayment fees unpaid at the beginning of each quarter.

VI. SPECIAL CONSIDERATIONS

A. Penalty Actions at All Federal Facilities

For penalty actions, the CWA and the Resource Conservation and Recovery Act (RCRA) contain limited waivers of sovereign immunity. Due to sovereign immunity, the State cannot assess penalties or liabilities against federal agencies for past violations (i.e., no ACLs) under most circumstances. One significant exception is provided by the Federal Facilities Compliance Act of 1992 (42 USCA 6901 et seq.), which allows the states to penalize federal agencies, under specified circumstances, for violations of state hazardous waste management requirements. In addition, under California Water Code section 13308, a Regional Water Board may issue a TSO prescribing a civil penalty that is based upon the amount necessary to achieve future compliance with an

existing enforcement order. The Regional Water Board may collect this amount administratively, but if the federal government declines to pay, the Regional Water Board must refer the matter to the Attorney General's Office to file an action in state or federal court.

B. Non-Penalty Actions at U.S. Department of Defense Facilities

In addition to being shielded from penalty actions by sovereign immunity, a 1992 Memorandum of Agreement (MOA) (http://www.waterboards.ca.gov/cwphome/dod/docs/DSMOA1993.pdf) between the U.S. Department of Defense (DoD) and the State Water Board, stipulates that non-penalty enforcement actions against DoD facilities must first be negotiated pursuant to the dispute resolution procedures of the MOA. The MOA specifies three levels for dispute resolution, with the final level being the Governor and the Secretary of Defense. The MOA is interpreted by DoD to preclude State enforcement until the dispute resolution process has been fully exhausted without successful resolution.

C. Integrated Enforcement

State Water Board and Regional Water Board staff should cooperate with other environmental regulatory agencies, where appropriate, to ensure that enforcement actions are coordinated. The aggregate enforcement authorities of the Water Boards and Departments of the California Environmental Protection Agency (Cal/EPA) and the Resources Agency should be coordinated to eliminate inconsistent and inappropriately duplicative efforts. Where appropriate and as resources allow, Regional Water Board staff should take the following steps to assist in integrated enforcement efforts:

(a) participate in multi-agency enforcement coordination;
(b) share enforcement information;
(c) participate in cross-training efforts;
(d) participate with other agencies in enforcement efforts focused on specific individuals or categories of discharges; and
(e) where other regulatory agencies have jurisdiction regarding site remediation, the Regional Water Board should inform and consult with those agencies to ensure that remedial activities will satisfy the aggregate requirements for all.

1. Solid Waste Facilities

Where a Regional Water Board has issued, or is likely to issue an enforcement action to a solid waste facility that is also under the jurisdiction of the Integrated Waste Management Board, the Regional Water Board must comply with California Public Resources Code sections 45016, 45019 and 45020.

2. Hazardous Waste Facilities

The role of the Regional Water Boards regarding enforcement at "offsite hazardous waste treatment, storage, or disposal activities and onsite activities which are required to have a Resource Conservation and Recovery Act (RCRA) Subtitle C permit" was prescribed by the 1995 Cal/EPA "Framework for the Implementation of Health and Safety Code Section 25204.6(b) (SB 1082)" (hereafter "Framework". The Regional

Water Board issues WDRs and monitoring programs that are no less stringent than RCRA requirements. The Department of Toxic Substances Control (DTSC) incorporates those WDRs by reference into its permit and carries out all oversight responsibilities associated with hazardous waste facilities, including oversight of groundwater monitoring and other requirements in WDRs. DTSC must coordinate enforcement actions for violation of the WDRs with the Regional Water Board before initiation of enforcement.

Under RCRA Subtitle C Authorization, corrective action is normally implemented pursuant to DTSC's authority. The Framework, however, identifies over 60 hazardous waste facilities where the Regional Water Board acts as lead agency for corrective action oversight of existing releases. Regional Water Boards shall consult with DTSC to ensure that corrective action at those facilities is at least RCRA equivalent.

3. Oil Spills

Responses to oil spills to inland waters that may impact fish and wildlife resources or to marine or estuarine waters should be coordinated with the Department of Fish and Game's Office of Oil Spill Prevention and Response (OSPR). Staff shall consult with the Regional Water Board management and the Regional Water Board attorney to determine appropriate action. Staff should assist in an investigation by providing documentation, sampling, etc. If the discharger has not prepared a spill prevention plan or the plan is not acceptable to the Regional Water Board, the Regional Water Board should request a technical report under California Water Code sections 13267 or 13383. Major oil spills, those in excess of 10,000 gallons, usually involve a number of governmental jurisdictions. Such spills should be brought to the Regional Water Board for consideration of referral to the Attorney General for recovery of civil liability and other remedies.

If formal enforcement actions are taken, they are usually enforced by the county district attorney under either the Fish and Game Code or the Health and Safety Code, or by the Regional Water Board under the California Water Code. In general, if the District Attorney is interested in pursuing the case, the Regional Water Board should consult with the district attorney before pursuing its own enforcement action to avoid any potential double jeopardy issues. However, staff should always request that any settlement by the district attorney include recovery of staff costs and require any actions that appear necessary to prevent recurrence of a spill and/or to mitigate damage to the environment. If a district attorney is the enforcement lead, Regional Water Board staff should generally focus their efforts on cleanup and prevention of future spills.

4. Hazardous Waste Spills

Hazardous wastes are those meeting the criteria specified in Title 22, Division 4.5, Chapter 11, California Code of Regulations. Regional Water Board staff should coordinate enforcement actions involving hazardous waste spills with the DTSCand/or any local or county hazardous waste program. The Department of Fish and Game should be consulted whenever pollution events may impact fish and wildlife resources. Spills constitute unlawful disposal of hazardous waste pursuant to the Health and Safety Code.

Regional Water Board staff should consider referring spills of all but the smallest amounts to the appropriate district attorney. In addition, the Regional Water Board should consider assessing an ACL unless the spill was very small or limited in impact. Due to the nature of the materials discharged, the Regional Water Board should consider assessing an ACL in an amount at or near the legal maximum. If the DTSCis seeking penalties or damages through a referral to the Office of the Attorney General, the Regional Water Board should consider joining that action in lieu of assessing an ACL.

Large spills of hazardous waste or hazardous substances, 10,000 gallons or more, should be treated like large oil spills, and should be considered for referral to the Office of the Attorney General. If appropriate, Regional Water Board staff should coordinate with the district attorney or U.S. Attorney to determine whether criminal prosecution is warranted. In addition, such spills may constitute the unlawful disposal of hazardous waste pursuant to the Hazardous Waste Control Act (Health and Safety Code section 25100 et seq.) and, in most cases, should be investigated in conjunction with DTSC.

D. Violations at Waste Water Treatment Facilities That are Operating at 80% or More of Design Capacity

In addition to any formal or informal response to a violation at a waste water treatment facility that is operating at 80% or more of its permitted capacity, when appropriate, the Regional Water Board should require, pursuant to Water Code section 13300 or section 13301, a detailed time schedule of specific actions the discharger proposes to take in order to correct or prevent a violation of requirements.

VII. MONETARY ASSESSMENTS IN ADMINISTRATIVE CIVIL LIABILITIES (ACLs)

Penalties and other sanctions for violations of environmental requirements play an essential role in …[an] enforcement program. They are a critical ingredient to creating the deterrence [regulators] need to encourage the regulated community to anticipate, identify, and correct violations. Appropriate penalties for violators offer some assurance of equity between those who choose to comply with requirements and those who violate requirements. It also secures public credibility when governments at all levels are ready, willing, and able to back up requirements with action and consequences.[8]

The following provisions apply to all ACLs except mandatory minimum penalties required pursuant to California Water Code sections 13385(h) and (i) and penalties pursuant to California Water Code section 13399.33. Mandatory minimum penalties are discussed in Section IV.C.10 of this Policy.

As a general matter, where, as in the Water Code, a civil penalty structure has been devised to address environmental violations, civil penalties do not depend on proof of actual damages to the environment. Courts in reviewing similar environmental

[8] U.S. EPA, Policy on Civil Penalties (February 16, 1984).

protection statutes have held that a plaintiff need not prove a loss before recovering a penalty; instead, the defendant must demonstrate that the penalty should be less than the statutory maximum. In many cases, a strong argument can be made that consideration of the statutory factors can support the statutory maximum as an appropriate penalty for water quality violations, in the absence of any other mitigating evidence. Moreover, as discussed below, the Porter-Cologne Act requires that civil liabilities be set at a level that accounts for any "economic benefit or savings" violators gained through their violations. (Water Code sections 13351, 13385(e).) The Water Boards have powerful liability provisions at their disposal which the Legislature and the pubic expect them to fairly and consistently implement for maximum enforcement impact to address, correct, and deter water quality violations.

The Water Board must make several important decisions in specifying the conditions of an ACL. First, it must determine the amount of the liability after considering all of the factors in law. Next, it must consider whether the discharger should be allowed to satisfy some or all of that monetary assessment by completing or funding one or more supplemental environmental projects (SEPs). (SEPs are discussed in Section IX.) Finally, when the underlying problem that caused the violation(s) has not been corrected, the Water Board may include provisions in the ACL to encourage future work by the discharger to address problems related to the violation. The Water Board may do this in a number of ways. An ACL action may be combined with another enforcement mechanism such as a CAO, a CAO, or other order with a time schedule for obtaining compliance. An ACL action may include (as part of a settlement) additional monetary assessment, added to an amount assessed for the ACL violations, based on the cost of implementing operational measures more protective than those required by law, and/or maintaining compliance (i.e., the estimated cost of completing the specified projects). This portion of the monetary assessment (which must be sufficiently high so as to act as a disincentive to noncompliance) could be suspended pending the satisfactory completion of the specified projects. The appropriate orders to bring a discharger into compliance via an enforcement action will vary with the circumstances faced by the Water Boards. To the greatest extent possible, the Water Boards should not limit enforcement action to the assessment of monetary liability in situations where there is an outstanding or continuing violation of a requirement which impacts or threatens to impact water quality. Except where expressly provided for by law, an ACL action should not suspend penalties based on a discharger’s alleged costs of coming into compliance with existing legal requirements (See Chapter X for a discussion of statutorily-authorized compliance projects).

The Board shall take into consideration of a number of factors. Prior to issuing a complaint the prosecution staff should consider each applicable factor. This consideration must be documented in the ACL complaint or in a staff report. If the Regional Water Board issues an ACL order, the order must contain findings reflecting the Water Board's consideration of all the applicable statutorily-mandated factors.

Those factors are:

> … the nature, circumstance, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on ability to continue in business, any voluntary cleanup efforts undertaken, any prior history of

violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters as justice may require. (Water Code section 13327.)

California Water Code section 13385(e), governing ACL amounts for violations subject to the CWA, requires consideration of similar factors:

> The regional board, the state board, or the superior court, as the case may be shall take into account 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, and, 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, if any, resulting from the violation, and other matters that justice may require. At a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation.

The California Water Code does not specify how these factors are to be weighed or combined when setting the actual dollar amount of an ACL. This section discusses the factors to be used by Water Board staff in developing a recommendation for the amount of the monetary assessment in an ACL based on the facts of the case. The discussion is generally applicable to ACLs issued which must consider the factors under both California Water Code section 13327 and California Water Code section 13385(e)[9]. The manner in which the Water Boards consider these factors for any given situation is up to the discretion of the Water Board, within the limits of statutory maximums and minimums. The factors are more fully discussed below.

A. Liability Related to the Nature of the Discharge

Conceptually, a determination of liability should be based on factors related to the discharge - the nature, circumstances, extent, and gravity of the violation; the degree of toxicity of the discharge; and the susceptibility of the discharge to cleanup or abatement. This may include the consideration of information such as the pollutants contained in a discharge, the volume of the discharge, the sensitivity of the receiving water and its beneficial uses, threats to water quality and aquatic life, threats to human health, and the volume of the receiving water relative to the discharge. The way that these factors are evaluated will depend on the type of violation. For spills, effluent limitation violations, and similar violations, the initial water quality liability can be based on per gallon and/or per day charge.

For non-discharge violations such as late reports, failure to submit reports, and failure to pay fees, this initial liability should be evaluated considering the impact on the Water Board's ability to effectively administer its water quality programs in addition to the above factors. These impacts include, but are not limited to, additional Water Board staff costs beyond the normally required effort and the potential consequences of delayed cleanup, coordination, mitigation and enforcement response by the Water

[9] Water Code section 13351 identifies factors that a court must consider in determining the amount of civil liability to be judicially imposed pursuant to Division 7, Chapter 5 of the Water Code. The factors are similar to those address in Water Code sections 13327 and 13385.

Board due to late or omitted reports. For late or missing reports, the initial liability amount could also consider impacts to water quality caused by the delay or failure. Timely follow-up on these violations acts as a deterrent to the violator and others and supports those dischargers who readily commit the resources necessary to comply with similar requirements.

B. Harm to Beneficial Uses

The designated beneficial uses of the receiving water should be reviewed to determine whether the violation has resulted in any quantifiable impacts related to beneficial uses. Quantitative information may only be available for a limited number of impacts, such as beach closure days, but where readily available the Water Boards should consider it.

It may not be possible to determine a beneficial use liability in all situations. However, when it is possible to determine such harm, the Water Boards should assess the extent to which the harm to beneficial uses represents the entire economic harm resulting from the violations or whether there are additional harms that should be evaluated. Determining and quantifying in monetary terms the harm to beneficial uses and other harms may require the assistance of specialized expertise not available within a regional board or the Water Boards generally. Where it appears that a violation warrants a thorough economic valuation of the resulting harms, the Water Boards should identify the staff and expertise necessary to make the valuation and evaluate the opportunities to obtain the expertise.

C. Base Liability

Once the nature of the discharge and the economic harms has been determined, they can be combined conceptually to provide a base liability amount. The Water Boards may, at their discretion, find it appropriate to combine the liabilities from the Nature of the Discharge factor and the Beneficial Use factors in a way that reflects the significance of the total impacts of the violation - not just the direct environmental impacts quantified as a harm to beneficial uses.

The way that the nature of the discharge and the harms to beneficial uses factors should be evaluated in combination will depend on the nature of the discharge, how the violation harms the beneficial uses of the receiving waters, and the extent to which this harm has been quantified. For example, a sewage spill will typically result in a wide variety of impacts, such as fish kills, degradation of wildlife habitat, and beach closures. For a sewage spill to the ocean in an urban area with high beach use, impacts on beach recreation may represent most of the harm resulting from the spill. If it is possible to estimate the value of the lost beach recreation as part of the beneficial use liability evaluation, it is appropriate to consider some combination of this value and the nature of the discharge Liability amount to better reflect the total impacts of the spill for liability assessment purposes.

For a sewage spill contaminating a beach in a remote area, where beach use is relatively low, impacts on beach use may be less important than other impacts, such as degradation of wildlife habitat and harm to a pristine environment. In such a case, the combined liability may be based more heavily on the nature of the discharge factor, because the actual impacts quantified in a harm to beneficial uses determination may

be less significant relative to the potential impact of the violation inherent in the nature of the discharge.

D. Conduct of the Discharger

The base liability should be adjusted to reflect the conduct of the discharger. This adjustment reflects factors such as the degree of culpability of the discharger, any voluntary cleanup efforts undertaken and the discharger's history of violations. This adjustment can be made by determining values for the four factors in Table VII-1, and using them to determine a conduct factor that is applied to the base amount. The Water Boards should consider any applicable factors but may weigh the factors as it determines appropriate. For example, it is within a Water Board's discretion that the greater the culpability of the discharger for a violation, the less that any exemplary post-violation corrections should offset such violations.

Table VII-1. Conduct Factors to adjust ACLs

Factor	Adjustment for
Culpability Factor (CF1)	Discharger's degree of culpability regarding the discharge. Higher ACL amounts should be set for 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. The test is what a reasonable and prudent person would have done or not done under similar circumstances.
Notification Factor (CF2)	Extent to which the discharger reported the violation as required by law or regulation.
Cleanup and Cooperation Factor (CF3)	Extent to which the discharger cooperated in returning to compliance and correcting environmental damage, including any voluntary cleanup efforts undertaken.
History of violations factor (CF4)	Prior history of violations.

In considering the discharger's prior history of violations careful consideration should be given to whether or not past violations that were not subject to previous ACLs should be included in the current ACL. The significance of those past violations and the ability to prove them must be considered. Where there is a pattern of violations or the violation was intentional, considerations such as aggregate impacts and economic benefit should be included in setting an amount.

E. Economic Benefit to Discharger From Noncompliance

Economic benefit is any savings or monetary gain derived from the acts that constitute the violation. Economic benefit may have nothing to do with the intent of the discharger. In cases when the violation occurred through no fault of the discharger and it was demonstrated that the discharger exercised due care, there may be no economic benefit. In cases where the violation occurred because the discharger postponed

improvements to a treatment system, failed to implement adequate control measures (such as best management practices (BMPs)) or did not take other measures needed to prevent the violations, economic benefit may be substantial and should be evaluated. Economic benefit should be calculated as follows:

(a) Determine those actions required by an enforcement order or an approved facility plan, or that were necessary in the exercise of reasonable care, to prevent the violation. Needed actions may have been capital improvements to the discharger's treatment system, implementation of adequate BMPs or the introduction of procedures to improve management of the treatment system.

(b) Determine when and/or how often these actions should have been taken as specified in the order or approved facility plan, or as necessary to exercise reasonable care, in order to prevent the violation.

(c) Estimate the type and cost of these actions. There are two types of costs that should be considered, delayed costs and avoided costs. Delayed costs include expenditures that should have been made sooner (e.g., for capital improvements such as plant upgrades and collection system improvements, training, development of procedures and practices, etc.) but that the discharger is still obligated to perform. Avoided costs include expenditures for equipment or services that the discharger should have incurred to avoid the incident of noncompliance, but that are no longer required. Avoided costs also include ongoing costs such as needed additional staffing from the time determined under step "b" to the present, treatment or disposal costs for waste that cannot be cleaned up, and the cost of effective erosion control measures that were not implemented as required.

(d) Calculate the present value of the economic benefit. The economic benefit is equal to the present value of the avoided costs plus the "interest" on the delayed costs. This calculation reflects the fact that the discharger has had the use of the money that should have been used to avoid the instance of noncompliance. This calculation, at a minimum, should be done using the USEPA's BEN [10]computer program (the most recent version is accessible at http://www.waterboards.ca.gov/plnspols/docs/wqplans/benmanual.pdf) unless the Water Board determines, or the discharger demonstrates to the satisfaction of the Water Board, that, based on case-specific factors, an alternate method is more appropriate for a particular situation. However, in more complex cases,

[10] USEPA developed the BEN model to calculate the economic benefit a violator derives from delaying and/or avoiding compliance with environmental statutes. Funds not spent on environmental compliance are available for other profit-making activities or, alternatively, a defendant avoids the costs associated with obtaining additional funds for environmental compliance. BEN calculates the economic benefits gained from delaying and avoiding required environmental expenditures such as capital investments, one-time non-depreciable expenditures, and annual operation and maintenance costs.

BEN uses standard financial cash flow and net present value analysis techniques based on generally accepted financial principles. First, BEN calculates the costs of complying on time and of complying late adjusted for inflation and tax deductibility. To compare the on time and delayed compliance costs in a common measure, BEN calculates the present value of both streams of costs, or "cash flows," as of the date of initial noncompliance. BEN derives these values by discounting the annual cash flows at an average of the cost of capital throughout this time period. BEN can then subtract the delayed-case present value from the on-time-case present value to determine the initial economic benefit as of the noncompliance date. Finally, BEN compounds this initial economic benefit forward to the penalty payment date at the same cost of capital to determine the final economic benefit of noncompliance.

such as where the economic benefit may include revenues from continuing production when equipment used to treat discharges should have been shut down for repair or replacement, the total economic benefit should be determined by experts available from the Office of Research Planning and Performance or outside experts retained by the enforcement staff.

(e) Determine whether the discharger has gained any other economic benefits. These may include income from continuing production when equipment used to treat discharges should have been shut down for repair or replacement.

(f) The Water Boards should not adjust the economic benefit for expenditures by the discharger to abate the effects of the unauthorized conduct or discharge. In fact, the costs of abatement may be a factor that demonstrates the economic extent of the harm from the violation and, therefore, may be a factor in upwardly adjusting any monetary liability as a benefit from noncompliance.

By legislative mandate and Water Board policy, the denial of economic benefit to a violator is a key goal of enforcement actions. This is to ensure that the monetary liability penalty serves as a deterrent to illegal activity. Such illegal activity can not viewed by the discharger or the regulated community as an acceptable risk of doing business. It is important that the Water Boards utilize the appropriate resources to ensure that calculations of these benefits to the violator are appropriate, accurate, and defensible.

F. Staff Costs

Staff costs may be one of the "other factors that justice may require", and should be considered when setting an ACL. Staff should calculate the cost that investigation of the violation and preparation of the enforcement action(s) has imposed on all government agencies. Staff costs should be calculated based on the total costs incurred by the Water Boards enforcement or prosecution staff, including legal costs, that are reasonably attributable to the enforcement action. Costs include the total financial impact on the staff of the Water Board, not just wages, and should include benefits and indirect overhead costs.

G. Deterrence Factors

The Water Boards should always consider whether a discharger acted on the assumption that the benefit of noncompliance would exceed the likely liability, considering the likelihood of enforcement for such misconduct. Ideally, the proposed liability should be sufficient to act as a complete deterrent to other dischargers considering similar conduct. The monetary liability should include the cost of coming into compliance once a violation is discovered, discounted by the probability that a violation will be detected.

It is the goal of the Water Boards to bring appropriate enforcement action for every violation detected. The real variable becomes the probability of detection. Assessing the probability of detection in the estimation of penalties will affect the penalty assessments depending on the type of discharge. For example, for a category of dischargers with monitoring programs with a high probability of detection (i.e., continuous monitoring, or independent random sampling) this factor should have little impact since the probability of detection is nearly 100%. For the category of

dischargers who do not self-report or who otherwise have a reduced likelihood of detection, such as those entities that operate outside of the regulatory system, the probability of detection is lower. The lower the probability of detection, the higher the "multiplier" for the liability and the higher the penalty should be to successfully deter misconduct from dischargers and others similarly situated. Consideration of the probability of detection aids in giving any proposed liability assessment a true deterrent value. While the probability of detection/probability of enforcement factor is different between categories of dischargers, it is the same between similarly situated types of dischargers and therefore can be applied fairly and consistently.

H. Other Factors

If the Water Board believes that the amount determined using factors in subsections A through G is inappropriate, the amount should be adjusted under the "other factors as justice may require." Examples of circumstances warranting an adjustment under this step are:

1. The discharger publicized the violation and the subsequent enforcement actions in a way that encourages others to violate water quality laws and regulations.

2. The threat to human health or the environment was so egregious that the preceding factors did not, in the opinion of the Water Board, adequately address this violation.

3. The discharger has provided, or Water Board staff has identified, other pertinent information not previously considered that indicates a higher or lower amount is justified.

4. A consideration of issues of environmental justice indicates that the amount would have a disproportionate impact on a particular socioeconomic group.

5. The calculated amount is entirely disproportionate to assessments for similar conduct made in the recent past.

The administrative record must reflect how the Water Board arrived at its conclusion. This is especially true for any adjustments that are made to the staff proposal, as the staff report may not reflect those considerations, or for any adjustments that are made at the hearing that are different from those recommended by the staff proposal.

I. Ability to Pay and Ability to Continue in Business

Consideration of the foregoing factors provides the basis for determining an amount that is appropriate to the extent and severity of the violation, economic benefit, the conduct of the discharger, deterrence considerations, and other factors. This amount may be reduced or increased based on the discharger's ability to pay.

The ability of a discharger to pay an ACL is determined by its revenues and assets. In most cases, it is in the public interest for the discharger to continue in business and bring its operations into compliance. If there is strong evidence that an ACL would result in widespread hardship to the service population or undue hardship to the

discharger, the amount of the assessment may be reduced on the grounds of ability to pay. The Water Boards may also consider increasing an ACL to assure that the enforcement action would have a similar deterrent effect for a business or public agency that has a greater ability to pay.

Normally, an ACL assessment should not seriously jeopardize the discharger's ability to continue in business or operation. The Water Board must have information in the record about a discharger's ability to pay the proposed liability.

If staff anticipates that the discharger's ability to pay and/or ability to continue in business will be a contested issue in the proceeding, staff should conduct a simple preliminary asset search prior to issuing the ACL complaint. Staff should submit a summary of the results (typically as a finding in the Complaint or as part of staff's initial transmittal of evidence to the discharger), in order to put some evidence on these factors into the record for the proceeding and to give the discharger an opportunity to submit additional financial evidence if it chooses. If staff does not put any financial evidence into the record initially and the discharger later contests the issue, staff may then either choose to rebut the financial evidence submitted by the discharger, if any, or submit some financial evidence and provide an opportunity for the discharger to submit its own financial evidence to rebut staff's evidence. In some cases, this may necessitate a continuance of the proceeding to provide the discharger with a reasonable opportunity to rebut the staff's evidence. As a general practice, in order to maintain the transparency and legitimacy of the Water Boards' enforcement programs, any financial evidence that the discharger chooses to submit in an enforcement proceeding will generally be treated as public information.

An adjustment can be used to reduce the ACL to an amount that the discharger can reasonably pay and still bring operations into compliance.

The Water Boards may also consider increasing the ACL because of ability to pay. For example, if the Water Board determines that the proposed amount is unlikely to have an appropriate deterrent effect on an uncooperative discharger with a greater ability to pay, the amount should be increased to the level that the Water Board determines is necessary to assure future compliance.

J. Statutory Maximum Limits

The ACL must be checked against the statutory maximum limits to ensure that it is in compliance with the appropriate section of law. The maximum amount for an ACL issued under California Water Code section 13385 is $10,000 for each day in which a violation occurs plus $10 per gallon for amounts discharged but not cleaned up in excess of 1,000 gallons. The statutory maximum amounts for ACLs issued under California Water Code sections 13261, 13350, and 13399.33 are summarized in Table IV-1.

Minimum statutory penalties apply only in the case of Mandatory Minimum Penalties under Water Code Section 13385. These minimum penalties are discussed at length in Chapter IV.C.10. It is the policy of the SWRCB that all ACLs that are not Mandatory Minimum Penalties should be assessed at a level that at a minimum recovers the economic benefit.

VIII. STATE WATER POLLUTION CLEANUP AND ABATEMENT ACCOUNT

Sections 13440-13443 of the California Water Code establish a Cleanup and Abatement Account (CAA)[11] that is administered by the State Water Board. The CAA receives monies from court judgments, ACLs[12], and other specified sources. A Regional Water Board attempting to remedy a significant unforeseen water quality problem that poses an actual or potential public health threat, and for which the Regional Water Board does not have adequate resources budgeted, may apply to the State Water Board to receive money from the CAA to assist it in responding to the problem. In addition, the State Water Board and other public agencies with the authority to clean up waste or abate the effects thereof may utilize the account to assist in the cleanup or abatement of the waste. Each application for CAA funds is judged on its own merits.

A. Emergency Requests

Regional Water Board Executive Officers (or their designees) or public agencies may request emergency funds verbally for amounts up to $100,000. These requests shall be directed to the Chief of the Division of Financial Assistance. In the absence of that individual, other designated staff should be called in the order listed: the Chief Counsel, the Executive Director, the Chief Deputy Director, the Chief of the Division of Administrative Services. Any of these five individuals may review and approve the request.

Within one week following the oral request, the requesting agency shall submit the request in writing to the Chief of the Division of Financial Assistance.

B. Non-Emergency Requests

Non-emergency requests and all requests for more than $100,000 must be submitted, in writing, for approval by the State Water Board. The Chief of the Division of Financial Assistance, determines if the request is eligible for funding, and presents eligible requests to the State Water Board with a staff recommendation.

C. Contracts

Contracts executed by a Regional Water Board consistent with Water Code section 13304 and funded by the CAA are exempt from General Services review, and may be approved more quickly. When time permits, these contracts should be in writing. Otherwise, section 13304 allows a Regional Water Board to enter into oral contracts. If the Regional Water Board enters into an oral contract, the terms of the contract must be documented and submitted to the Division of Financial Assistance. It must be submitted

[11] The SWRCB Administrative Procedures Manual, Chapter 4.4, 1992 (subject to ammendment), explains the process and responsibilities for the management of the CAA.

[12] Not all of the money received from ACLs is deposited in the CAA. For example, money received from ACLs issued pursuant to California Water Code section 13399.33 is deposited in the Waste Discharge Permit Fund.

within one week of the date of the oral contract with copies for the Accounting and Contracts Offices.

IX. SUPPLEMENTAL ENVIRONMENTAL PROJECTS (SEPs)

The State Water Board or Regional Water Board may allow a discharger to satisfy part of the monetary assessment imposed in an ACL complaint or order by completing or funding one or more SEPs. SEPs are projects that enhance the beneficial uses of the waters of the State, provide a benefit to the public at large, and that, at the time they are included in the resolution of an ACL action, are not otherwise required of the discharger. California Water Code section 13385(l) allows limited use of SEPs associated with mandatory minimum penalties. California Water Code section 13399.35 also allows limited use of SEPs for up to 50 percent of a penalty assessed under section 13399.33. In the absence of other statutory authority in the Water Code regarding the use of SEPs, Government Code section 11415.60 has been interpreted by the Office of Chief Counsel to allow the imposition of SEPs as part of the settlement of an administrative enforcement action.

The State Water Board supports the inclusion of SEPs in ACL actions, even when SEPs are not expressly authorized, so long as these projects meet the criteria specified in this section to ensure that the selected projects have environmental value, further the enforcement goals of the Water Boards, and are subject to appropriate input and oversight by the Water Boards. These criteria should also be considered when the State Water Board or Regional Water Board is considering SEPs as part of the settlement of civil litigation.

It is the intent of the State Water Board that the use of SEPs be consistent with the policies of other environmental regulatory programs. It is important that the Water Boards and the public understand that SEPs are an adjunct to the Water Boards' enforcement program and are never the basis or reason for bringing an enforcement action. While SEPs can be useful in the facilitation of settlements, the funding of SEPs is not a primary goal of the Water Boards' enforcement program.

A. General Considerations

1. Types of SEPs

There are two general categories of SEPs: (1) Payment SEPs; and (2) Performance SEPs. Payment SEPs involve the payment of funds to a third party who will provide general services of value or interest to the Water boards including projects which enhance the beneficial uses of the waters of the State of California. Performance SEPs require the ongoing performance of specific work by or on behalf of the discharger over a period of time and may require oversight by Water Board staff to ensure that the requirements of the Water Board are met. Third-party entities who receive Payment SEPs must be independent of both the discharger and the Water Board. Any actual or apparent conflict of interest must be avoided. This means that the officers, representatives, staff, or directors of that entity should not have any affiliation with the discharger or the Water Board.

2. Project Credit

There is no requirement that a SEP be given a dollar-for-dollar credit against what would be the assessed penalty. Under certain circumstances, the Water Boards could find that the money spent on a SEP should be discounted because the value of the project is limited. A similar approach is taken by USEPA where the credit that a SEP is entitled to receive could be no more than 80% of the value of the SEP unless the SEP is of outstanding quality. USEPA places this general limitation on the amount of project credit based on the fact that acceptable SEPs vary in quality in terms of the environmental benefits provided. The Water Boards may similarly determine that while a SEP meets the criteria for acceptance, its costs should not qualify for a full credit against the otherwise assessed penalty.

3. Accounting Treatment

The amount of a SEP credit will be treated as a suspended penalty. From an accounting perspective, the Water Boards will treat the credit for the SEP as a contingent receivable subject to the complete implementation of the SEP. Once the SEP is completed as required by the order, the Water Board should issue a written acknowledgement that the SEP requirements in the order have been satisfied. At that point it is no longer a contingent receivable.

Unless otherwise required by law, any order imposing a SEP shall state that, if the SEP is not fully implemented in accordance with the terms of the order and any costs of Water Board oversight, documentation, or auditing are not paid, the Water Board is entitled to recover the full amount of the suspended penalty less any amount that has been permanently suspended or excused based on the timely and successful completion of any interim milestone. Full payment of the penalty shall be in addition to any other applicable remedies for noncompliance with the terms of the order.

4. SEP Credit Relative to Penalty Amount

Except in certain expressly recognized circumstances, the Water Code imposes civil liability on a discharger for violations in the form of monetary payments to designated funds managed by the State Water Board (e.g., Water Code sections 13350, 13385). Therefore, the State Water Board believes that the imposition of such monetary assessments is an important component of its enforcement program for its deterrent effect on potential violations. Unless otherwise required by statute, the credit permitted for a SEP generally should not exceed 25% of the total monetary assessment. This limit is consistent with the Cal/EPA Recommended Guidance on Supplemental Environmental Projects, dated October 2003. Such credit does not include any projected administrative costs incurred by the discharger that are associated with the implementation of a SEP. Only in exceptional circumstances should the value of the SEP be greater than 25% of the total monetary assessment that the discharger is required to pay (exclusive of any future administrative costs paid to a Water Board for the oversight of the implementation of a SEP).

In all cases, the actual monetary liability or civil penalty paid by the discharger should be no less than the amount of economic benefit that the discharger received from its unauthorized activity, plus an additional amount consistent with the factors for monetary

liability assessment, so that the monetary liability or civil penalty serves as a deterrent to illegal activity and is not viewed by the discharger or the regulated community as an acceptable cost of doing business. A deterrent premium is consistent with the SEP policy of the United States Environmental Protection Agency (April 10, 1998) and is consistent with the statutory factors for liability assessments. Consistent with any ACL settlement every order allowing a SEP must include an analysis of the economic benefit, as specified in Section VII.E, to the discharger resulting from the violations to ensure that the SEP meets these valuation requirements.

B. General SEP Qualification Criteria

All SEPs approved by a Water Board must satisfy the following general criteria:

1. a SEP should only consist of measures that go above and beyond the otherwise applicable obligations of the discharger. That is, no SEP may be proposed for a project that the discharger was already obligated to carry out. (Note: Compliance Projects under Section X are not SEPs.) For example, sewage pump stations should have appropriate reliability features to minimize the occurrence of sewage spills in that particular collection system. The installation of these reliability features following a pump station spill would not qualify as a SEP.

2. the SEP should directly benefit or study groundwater or surface water quality or quantity, and the beneficial uses of waters of the State. Examples include but are not limited to:

3. monitoring programs;

4. studies or investigations (e.g., pollutant impact characterization, pollutant source identification, etc.);

5. Water or soil treatment;

6. habitat restoration or enhancement;

7. pollution prevention or reduction;

8. wetland, stream, or other waterbody protection, restoration or creation;

9. conservation easements;

10. stream augmentation;

11. reclamation;

12. watershed assessment (e.g., citizen monitoring, coordination and facilitation);

13. watershed management facilitation services;

14. compliance training for regulated entities;

15. enforcement projects such as training for environmental compliance and enforcement personnel;

16. non-point source program implementation;

17. aSEP should never directly benefit a Water Board's functions, members of its staff, or family or friends of staff members. Any indirect benefits enjoyed by staff or the family or friends of staff should be only those that are enjoyed by the public generally. For example, SEPs may not involve gifts of computers, equipment, etc. to a Water Board and should not involve contracts with persons associated with staff members; and

18. The SEP should not be an action, process, or product that is otherwise required of the discharger by any rule or regulation of any entity (e.g., local government, California Coastal Commission, United States Environmental Protection Agency, United States Army Corps of Engineers, etc.) or proposed as mitigation to offset the impacts of a discharger's project(s).

C. Additional SEP Qualification Criteria

The following additional criteria should be evaluated by the Water Boards during final approval of non-listed SEPs that are proposed by the discharger:

1. The SEP should, when appropriate, include documented support by other public agencies, public groups, and affected persons.

2. The SEP proposal must, when appropriate, include documentation that the project complies with the California Environmental Quality Act.

3. A SEP should directly benefit the area where the harm occurred or provide a regionwide or statewide use or benefit. Some projects may benefit only one specific watershed yet still provide added value regionwide or even statewide. For example, development of a spill prevention course could benefit not just the local watershed but the whole region or state under the right circumstances. Likewise, a monitoring program for a particular water body could also provide information that staff could use in assessing other discharges, spills, 401 certifications or flood control activities in a river. Projects that provide the Water Boards with added value to existing regulatory activities are encouraged. Projects that provide a direct benefit to the area affected by a violation should be favored over projects with a more general, regionwide benefit.

4. A SEP that leverages additional funding should be encouraged. Some projects use seed money to create a much greater or leveraged impact. Often other agencies will contribute staff time, laboratory services, equipment use, or other services as part of a monitoring project. While the applicant may propose to spend hard money on equipment or materials, it may be donating expertise and labor to accomplish a much larger project.

5. A SEP proposal must consider the institutional stability and capacity of the discharger or contractor. The Water Board must consider the ability of the discharger or third party contractor to accomplish the work and provide the products and reports expected.

6. A SEP proposal for a project that involves environmental protection, restoration, enhancement, or creation of waterbodies should include success criteria and requirements for monitoring to track the long-term success of the project. The length of the monitoring period should be determined on a case-by-case basis and be consistent with the nature of the project and its success criteria.

D. Nexus Criteria

There must be a nexus between the violation(s) and the SEP. In other words there must be a relationship between the nature or location of the violation and the nature or location of the proposed project. A nexus exists only if the project remediates or reduces the probable overall environmental or public health impacts or risks to which the violation at issue contributes, or if the project is designed to reduce the likelihood that similar violations will occur in the future. A SEP that does not meet one of the following criteria should not be approved. Projects meeting more than one of the criteria should receive extra consideration.

Geographic Nexus - The proposed project should have a geographic link or nexus to the area where the water quality problem or violation occurred. For example, a spill to a river might require a plan to improve habitat or fish populations in the river in the general area of the spill. Work in a tributary watershed might be appropriate depending on the circumstances; however, work in a far different part of the region or state would likely not meet the geographic nexus criteria.

Category Nexus - The proposed project should be related to the specific type of spill or violation. For example, a SEP for a sewage spill ACL could include holding spill prevention workshops for other dischargers in the general area (both a geographic and violation type nexus). The workshops should go beyond the minimum necessary address mandatory work, equipment, and improvements required to correct the nature of the violation.

Beneficial Use Nexus - Where specific beneficial uses were affected by the violation, it is appropriate to choose SEPs that address protection and improvement of those or related uses. For example, where fish populations and habitats are affected, efforts to improve habitats and populations would be ideal, especially in the same watershed. Water quality monitoring of such things as flows, channel morphology, and habitat characteristics would be an appropriate project. In that case, the nexus is between the type of violation and the specific beneficial uses affected. It is also important to keep endangered species issues in focus and to consult with the Department of Fish and Game, the National Marine Fisheries Service, and US Fish and Wildlife Service about impacts of violations on these species and possible SEPs.

E. Process for Project Selection

Any public or private entity may submit a proposal to the Water Board bringing the enforcement action for a SEP that they propose to fund through this process. Staff at that Water Board should evaluate each proposal consistent with the criteria in this policy and recommend SEPs for approval by their Water Board. Each Water Board will maintain a list of approved SEPs that satisfy the general criteria. The list of approved SEPs will be made available on the Internet. When a Regional Water Board is considering allowing a discharger to perform a SEP, in lieu of payment of some portion of a civil liability assessment, the Regional Water Board should direct the discharger to the list of candidate SEPs. The discharger may select a SEP from the list of candidate SEPs, provided that the nexus requirement is satisfied, or may propose a different SEP that satisfies the general criteria for SEPs. When the discharger submits a proposal to the Regional Water Board for a SEP, it should include draft provisions (i.e., details of the specific activities that will be conducted and of the estimated budget for each activity in the SEP) for a contract to be executed between the discharger(s) who will be funding the project and the entity performing the SEP, if different from the discharger. The discharger should provide information regarding the additional selection criteria in subsection B of this section and must demonstrate to the satisfaction of the Water Board that the selected or proposed SEP also satisfies the nexus requirements in subsection C of this section.

F. Addressing the State Water Board's Interest in Supplemental Environmental Projects

By statute, the funds generated by civil liabilities under the Water Code are placed into the Waste Discharge Permit Fund or the State Water Pollution Cleanup and Abatement Account (CAA), both of which are under the direction of the State Water Board (see Water Code sections 13350(k), 13385(n) and 13440 – 13443). These funds allow the State Water Board to assist Regional Water Boards and other public agencies to clean up waste or abate the effects of waste. Among the authorized uses, the CAA provides funds specifically for a regional board, upon application to the State Water Board, to pay moneys from the account to a regional board for overseeing and tracking the implementation of a SEP required as a condition of an order imposing administrative civil liability.

The State Water Board has a strong interest in the use of funds for SEPs that would otherwise be paid into accounts for which it has statutory responsibilities to manage and disperse. As such, the State Water Board must have the option to review SEPs which are greater than 25% of the total monetary assessment against a discharger.

If a Regional Water Board accepts a SEP that exceeds 25% of the total monetary assessment, that Regional Water Board shall affirmatively notify the State Water Board of that acceptance and the State Water Board may review the Regional Water Board's action on its own motion. The Regional Water Board shall ensure that such a SEP will not be commenced until Regional Board advises the discharger that the State Water Board has not exercised its opportunity to review the SEP or the State Water Board has viewed the SEP and made no modifications. The notification shall be by the Regional Board to the Executive Director of the State Water Board and shall describe in detail the proposed SEP, the settlement value of the SEP, the reasons why the Regional Water

Board accepted the SEP in lieu of monetary penalties, and the reasons why the SEP amount exceeds the limits on percentage set forth in this section. If the State Water Board chooses to review the settlement, it shall notify the Regional Water Board within thirty (30) days of receipt of the completed notice. The State Water Board will review the SEP after public notice pursuant to its procedures for review of Regional Water Board actions.

The Water Boards shall post on the Internet, by March 1 of each year, a list of the completed SEPs for the prior calendar year, and shall post information on the status of SEPs that are in progress during that period. The Water Boards are encouraged to provide information to the public on the status of SEPs on a more frequent basis.

G. Orders Allowing SEPs

There is no legal authority for an ACL complaint to contain a proposed SEP. SEPs are ordinarily entertained as offer to settle liability in an ACL complaint. This is consistent with the original intent of SEPs and the legal justification for them. Therefore, when SEPs are appropriate, they are imposed as stipulated ACL orders, in settlement of an ACL complaint or some other order entered under the authority of a Water Board.

All orders that include suspended liabilities for SEPs must:

- include or reference detailed specifications for evaluating the timely and successful completion of the SEP;
- contain or reference specific milestones, performance standards, and identified measures or indicators of performance; and
- specify that the discharger is required to meet these milestones, standards, and indicators.

Any portion of the liability that is not suspended must be paid to the CAA or other fund or account as authorized by statute. The order must state that failure to pay any required monetary assessment on a timely basis will cancel the provisions for suspended penalties for SEPs and that the suspended amounts will become immediately due and payable.

The order must either include a time schedule or reference to a time schedule order with single or multiple milestones and state the amount of liability that will be permanently suspended or excused upon the timely and successful completion of each milestone. Except for the final milestone, the amount of the liability suspended for any portion of a SEP cannot exceed the projected cost of performing that portion of the SEP. The ACL order should state that if the final total cost of the successfully completed SEP is less than the amount suspended for completion of the SEP, the discharger will be required to remit the difference to the CAA or other fund or account as authorized by statute. The ACL order should state that if any SEP milestone is not completed to the satisfaction of the designated Water Board representative by the date of that milestone, the previously suspended liability associated with that milestone will be immediately due and payable to the CAA or other fund or account as authorized by statute. It is the discharger's responsibility to pay the amount(s) due, regardless of any

agreements between the discharger and any third party contracted to implement the project. Therefore, the discharger may want to consider a third-party performance bond or the inclusion of a penalty clause in their contract, or secure an agreement that no payment be made from the discharger to the third-party until an authorized representative of the Water Boards determines that the associated work satisfies the order.

Since ACL orders are final upon adoption, the Regional Water Board should include provisions in the ACL order to extend the deadline for any milestone if it determines that the delay was beyond the reasonable control of the discharger. The Regional Water Board should also reserve jurisdiction to substitute a different SEP, or authorize its Executive Officer to do so, if the project cannot be completed for reasons beyond the discharger's reasonable control. (If the Regional Water Board fails to reserve jurisdiction for this purpose, the time schedule in the ACL order can only be modified by the State Water Board pursuant to California Water Code section 13320.)

Except under unusual circumstances, the ACL order should include provisions for project tracking, reporting, and oversight:

1. For any SEP that requires any oversight by the State Water Board or Regional Water Board, the full costs of staff or third-party oversight must be fully covered by the discharger. Such payments should be made so that the money supplements rather than offsets existing budgets. In many cases, this will mean that a disinterested contractor may be hired to provide oversight and report to the State Water Board or Regional Water Board. If no arrangement for the payment of necessary oversight can be made, the SEP should be not be approved except under extraordinary circumstances.

2. An order implementing a payment SEP must require, at a minimum, a written acknowledgment and other appropriate verification, and enforceable representation to the Water Boards by the third-party recipient that any SEP funds it receives will be spent in accordance with the terms of the order, that the recipient will produce a final, certified report to the Water Board showing how the funds were expended, and that the recipient agrees to an audit of its SEP expenditures, if requested by the Water Board. Such an audit, if required, must be paid for by the settling discharger and must be performed by an independent third party acceptable to the Water Board.

3. A requirement that the discharger provide the Water Boards progress reports, as appropriate, and a final report, submitted under penalty of perjury, declaring the completion of the SEP and that the expected outcome(s) or performance standard(s) for the project were met.

4. A requirement that the discharger provide the Water Board a post-project accounting of expenditures, unless the Water Board determines such an audit is unduly onerous and the Water Board has other means to verify the work. Such accounting must be paid for by the discharger and must be performed by an independent, third party acceptable to the Water Board.

5. A provision indicating that the Water Board will not manage or control funds that may be set aside or escrowed for performance of a SEP but that a SEP may require pre-approval of invoices or confirmation of completed work by the Water Board before escrowed or set-aside funds are disbursed; that the Water Board does not retain authority to manage or administer the SEP; and that the Water Board may require the discharger to select and hire an independent management company or other appropriate third party, which reports solely to the State Water Board or Regional Water Board, to audit implementation of the SEP. The independent management company should evaluate compliance with performance measures and report to the Water Board about the timely and successful completion of the SEP. As a condition of the SEP, the Water Board should require the discharger to pay into the CAA, or other fund or account as authorized by statute, an amount equal to the estimated cost for any Water Board staff oversight of the SEP. The Water Board or third-party auditor will track the implementation of the SEP (e.g., through progress reports, meetings with the discharger, etc.) to ensure that the implemented SEP reasonably follows the approved project and achieves the original objectives.

6. A requirement that whenever the discharger publicizes a SEP or the results of the SEP, it will state in a prominent manner that the project is being undertaken as part of the settlement of an enforcement action.

X. COMPLIANCE PROJECTS (CPs)

A Compliance Project (CP) is a project that is designed to address problems related to the violation and bring the discharger back into compliance in a timely manner. They should only be considered in the context of mandatory minimum penalties where they are authorized by statute.

A. CPs Under California Water Code Section 13385(k)

In lieu of assessing all or a portion of a mandatory minimum penalty against a POTW that serves an eligible small community, the Water Boards may, pursuant to California Water Code section 13385(k), require that the POTW spend an equivalent amount toward the completion of a CP. The statute provides that CPs must be proposed by the POTW and the Water Boards must find all of the following:

a. The CP is designed to correct the violations within five years;
b. The CP is in accordance with this Enforcement Policy; and
c. The POTW has demonstrated that it has sufficient funding to complete the CP.

It is the policy of the State Water Board that the following conditions shall also apply to CPs under California Water Code section 13385(k):

(a) The amount of the penalty that is suspended may not exceed the cost necessary to complete the CP.

(b) CPs may include, but are not limited to:
(1) Constructing new facilities;

(2) Upgrading or repairing existing facilities;
(3) Conducting water quality investigations or monitoring;
(4) Operating a cleanup system;
(5) Adding staff;
(6) Providing training;
(7) Conducting studies; and
(8) Developing operation, maintenance and/or monitoring procedures.

(c) CPs should be designed to bring the discharger back into compliance in a timely manner and to prevent future noncompliance.

(d) A CP is a project that the discharger is otherwise obligated to perform independent of the ACL itself.

(e) CPs must have clearly identified project goals, costs, milestones, and completion dates and these must be specified in the ACL order.

(f) CPs that will last longer than one year must have at least annual reporting requirements.

(g) If the discharger completes the CP to the satisfaction of the Water Board by the specified date, the suspended amount is permanently suspended.

(h) If the CP is not completed to the satisfaction of the Water Board on the specified date the amount suspended becomes due and payable to the CAA or other fund or account as authorized by statute.

(i) The ACL complaint or order must clearly state that payment of the previously suspended amount does not relieve the discharger of its independent obligation to take necessary actions to achieve compliance.

Since ACL orders are final upon adoption, the order should include a provision setting up a time schedule for completing CPs. Such provision should reserve the Water Boards' jurisdiction to modify the time schedule if it determines that the delay was beyond the reasonable control of the discharger. If a Regional Water Board fails to reserve jurisdiction for this purpose, the time schedule in the ACL order can only be modified by the State Water Board pursuant to California Water Code section 13320. Another option that allows some flexibility is for the Water Board to adopt a CAO or a CDO containing a time schedule for the CP at the same time it adopts the ACL order. The ACL would require compliance with the time schedule in the CAO or CDO. All monetary payments, including previously suspended liabilities assessed for failure to comply with CPs or SEPs, must be paid to the CAA or other fund or account as authorized by statute.

B. CPs in Other ACLs

It is the policy of the State Water Board that the costs of projects to bring a discharger or facility into compliance are not appropriate for consideration of a suspended liability in ACLs unless specifically provided for by statute. If the underlying problem that caused the violations addressed in the ACL has not been corrected, the appropriate

manner for compelling compliance is through a enforcement order with injunctive terms such as a CAO, CDO, or time schedule order.

XI. ENHANCED COMPLIANCE ACTIONS

Separate from projects designed to merely bring a discharger into compliance are projects which enable a discharger to make capital or operational improvements beyond those required by law. The Water Boards may approve a settlement with a discharger which includes a suspension of a portion of the monetary liability assessment for the cost of specific improvements or activities which exceed statutory requirements or enhance the discharger's operations above those necessary for compliance with existing requirements. For these "enhanced compliance actions" (ECAs) the Water Boards should require the following:

(a) ECAs must have clearly identified project goals, costs, milestones, and completion dates and these must be specified in the ACL order.

(b) ECAs that will last longer than one year must have at least annual reporting requirements.

(c) If the discharger completes the ECA to the satisfaction of the Water Board by the specified date, the suspended amount is permanently suspended.

(d) If the ECA is not completed to the satisfaction of the Water Board on the specified date the amount suspended becomes due and payable to the CAA or other fund or account as authorized by statute.

(e) The ACL complaint or order must clearly state that payment of the previously suspended amount does not relieve the discharger of its independent obligation to take necessary actions to achieve compliance.

If an ECA is utilized as part of a settlement of an enforcement action against a discharger, the monetary liability which is not suspended should be no less than the amount of the economic benefit that the discharger received from its unauthorized activity, plus an additional amount consistent with the factors for monetary liability assessment in section VII. In addition, where the discharger's noncompliance with a specific requirement is not addressed by the ECA (i.e, where there may be multiple types of violations addressed by the ACL complaint), the settlement should also contain an order to address the areas of noncompliance

XII. DISCHARGER VIOLATION REPORTING

Dischargers are expected and/or required to report all violations of their regulated water quality related activities. Dischargers may be required to report such violations immediately upon the discharger's discovery of such violations and to report them in a format and manner as directed by the Water Boards. For permitted discharges, all violations must be reported in self-monitoring reports. Voluntary disclosure of violations that are not otherwise required to be reported to the Water Boards shall be considered

by the Water Boards when determining the appropriate enforcement response. Falsification or misrepresentation of such voluntary disclosures shall be brought to the attention of the appropriate Regional Water Board for possible enforcement action.

XIII. ENFORCEMENT REPORTING

In order to ensure greater consistency in the reporting by the Regional Water Boards on violations and enforcement actions, the enforcement reports for all Regions will be standardized. These reports will include a listing of facilities with a water quality violation during the reporting period or unresolved from a previous reporting period, including violations without a Regional Water Board response. This listing shall include at least the following information:

(a) the date of violation;

(b) an identification whether the violation is considered to be a priority violation (see Section III);

(c) the Regional Water Board response, if any;

(d) the date of the response;

(e) the corrective action taken by the discharger, at least in cases of priority violations; and

(f) a listing of all previous violations for the facility which occurred in the previous 12 months and the associated Regional Water Board response.

The enforcement reports will be presented to the Regional Water Boards on no greater than quarterly intervals. The report format will be produced by the California Integrated Water Quality System (CIWQS) data system and the Regional Water Boards will utilize the CIWQS to track and monitor discharger's violations and Regional Water Board's enforcement activities. Utilization of the CIWQS data system by the Regional Water Boards is essential for the State Water Board's compliance with California Water Code section 13385(m), which requires statewide reporting of violations to the Legislature.

A. Summary Violation and Enforcement Reports

All Regional Water Boards shall produce standard quarterly reports addressing priority violations. The State Water Board will specify the format of the summary reports.

B. Spill Reporting for Sanitary Sewer Collection Systems

The Regional Water Boards shall enter all available data on spills into the Sanitary Sewer Overflow/Spills Module of the State Water Board's CIWQS data system. It is the State Water Board's goal to achieve consistent reporting of spills from regulated sanitary sewer collections systems.

XIV. POLICY REVIEW AND REVISION

It is the intent of the State Water Board that this Policy be reviewed and revised, as appropriate, at least every five years.

Appendix A. Group 1 Pollutants

This list of pollutants is based on Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations.

Oxygen Demand
Biochemical Oxygen Demand (BOD)
Chemical Oxygen Demand (COD)
Total Oxygen Demands
Total Organic Carbon
Other*

Solids
Total Suspended Solids (TSS)
Total Dissolved Solids (TDS)
Other*

Nutrients
Inorganic Phosphorous Compounds
Inorganic Nitrogen Compounds
Other*

Detergents and Oils
Methylene Blue Active Substances
Nitrillotriacetic Acid
Oil and Grease
Other Detergents or Algicides*

Minerals
Calcium
Chloride
Fluoride
Magnesium
Sodium
Potassium
Sulfur
Sulfate
Total Alkalinity
Total Hardness
Other Minerals*

Metals
Aluminum
Cobalt
Iron
Vanadium

---

* The following list of pollutants is hereby included as Group 1 pollutants (pursuant to Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations) under the classifications of “other.”

5-DAY SUM OF BOD5 DISCHARGED
5-DAY SUM OF WLA VALUES
7-DAY SUM OF BOD5 DISCHARGED
7-DAY SUM OF WLA VALUES
ACIDITY
ACIDITY, CO2 PHENOL (AS CACO3)
ACIDITY, TOTAL (AS CACO3)
ACIDITY-MINRL METHYL ORANGE (AS CACO3)
ALGICIDES, GENERAL
ALKALINITY, BICARBO-NATE (AS CACO3)
ALKALINITY, CARBO- NATE (AS CACO3)
ALKALINITY, PHENOL- PHTHALINE METHOD
ALKALINITY, TOTAL (AS CACO3)
ALUMINUM
ALUMINUM CHLORIDE, DISSOLVED, WATER
ALUMINUM SULFATE
ALUMINUM, ACID SOLUABLE
ALUMINUM, DISSOLVED (AS AL)
ALUMINUM, IONIC
ALUMINUM, POTENTIALLY DISSOLVD
ALUMINUM, TOTAL
ALUMINUM, TOTAL (AS AL)
ALUMINUM, TOTAL RECOVERABLE
AMMONIA & AMMONIUM- TOTAL
AMMONIA (AS N) + UNIONIZED AMMONIA
AMMONIA, UNIONIZED
AVG. OF 7-DAY SUM OF BOD5 VALUES
BARIUM, SLUDGE, TOT, DRY WEIGHT (AS BA)
BICARBONATE ION- (AS HCO3)
BIOCHEMICAL OXYGEN DEMAND-5
BIOCIDES
BOD % OVER INFLUENT
BOD (ULT. 1ST STAGE)
BOD (ULT. 2ND STAGE)
BOD (ULT. ALL STAGES)
BOD 35-DAY (20 DEG. C)

BOD CARBONACEOUS, 25-DAY (20 DEG. C)
BOD, 11-DAY (20 DEG. C)
BOD, 20-DAY (20 DEG. C)
BOD, 20-DAY, PERCENT REMOVAL
BOD, 5-DAY (20 DEG. C)
BOD, 5-DAY 20 DEG C PER CFS OF STREAMFLW
BOD, 5-DAY DISSOLVED
BOD, 5-DAY PERCENT REMOVAL
BOD, 5-DAY(20 DEG.C)PER PRODUCTION
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL
BOD, CARBONACEOUS (5-DAY, 20 DEG C)
BOD, CARBONACEOUS 05 DAY, 20C
BOD, CARBONACEOUS 20 DAY, 20C
BOD, CARBONACEOUS 5 DAY,5 C
BOD, CARBONACEOUS, 28-DAY (20 DEG.C)
BOD, CARBONACEOUS, PERCENT REMOVAL
BOD, FILTERED, 5 DAY, 20 DEG C
BOD, NITROG INHIB 5-DAY (20 DEG. C)
BOD, PERCENT REMOVAL (TOTAL)
BOD, MASS, TIMES FLOW PROP. MULTIPLIER
BOD-5 LB/CU FT PROCESS
BORIC ACID
BORON, DISSOLVED (AS B)
BORON, SLUDGE, TOTAL DRY WEIGHT (AS B)
BORON, TOTAL
BORON, TOTAL (AS B)
BORON, TOTAL RECOVERABLE
BROMIDE (AS BR)
BROMINE REPORTED AS THE ELEMENT
CALCIUM IN BOTTOM DEPOSITS
CALCIUM, DISSOLVED (AS CA)
CALCIUM, PCT EXCHANGE
CALCIUM, PCT IN WATER, (PCT)
CALCIUM, TOTAL RECOVERABLE
CARBON DIOXIDE (AS CO2)
CARBON, TOT ORGANIC (TOC)
CARBON, TOT ORGANIC (TOC) PER 1000 GALS.
CARBON, TOTAL (AS C)
CARBON, TOTAL INORGANIC (AS C)
CARBONACEOUS BOD, 5 DAY, 20 DEG C FILTRD
CARBONACEOUS OXYGEN DEMAND, % REMOVAL
CARBONATE ION- (AS CO3)
CBOD5 / NH3-N
CHEM. OXYGEN DEMAND (COD) % REMOVAL
CHEM. OXYGEN DEMAND PER PRODUCTION
CHEMICAL OXYGEN DEMAND (COD)
CHEMICAL OXYGEN DEMAND (COD)
CHEMICAL OXYGEN DEMAND, SOLUBLE
CHLORIDE
CHLORIDE (AS CL)
CHLORIDE, DISSOLVED (AS CL)
CHLORIDE, DISSOLVED IN WATER
CHLORIDE, PER CFS OF STREAMFLOW
CHLORIDE, PERCENT REMOVAL
CHLORIDE, SLUDGE, TOTAL DRY WEIGHT
CHLORIDES & SULFATES
CHLORINE DEMAND,1 HR
CHLORITE
COBALT, DISSOLVED (AS CO)
COBALT, TOTAL (AS CO)
COPPER, SLUDGE, TOT, DRY WEIGHT (AS CU)
DIGESTER SOLIDS CONTENT, PERCENT
DITHIOCARBAMATE, RPTD AS DITHIOCARBONATE
DRILLED SOLIDS IN DRILLING FLUIDS
ENDRIN KETONE, IN WATER
FERROCHROME LIGNO- SULFONATED FRWTR MUD
FERROCYANIDE
FERROUS SULFATE
FIRST STAGE OXYGEN DEMAND, % REMOVAL
FLUORIDE - FREE
FLUORIDE, DISSOLVED (AS F)
FLUORIDE, TOTAL (AS F)
FLUOROBORATES
FREE ACID, TOTAL
HARDNESS, TOTAL (AS CACO3)
HYDROCHLORIC ACID
HYDROCHLORIC ACID
HYDROGEN PEROXIDE
HYDROGEN PEROXIDE(T) DILUTION RATIO
HYDROGEN SULFIDE
HYDROGEN SULFIDE UNIONIZED
IODIDE (AS I)
IRON
IRON AND MANGANESE -SOLUBLE
IRON AND MANGANESE -TOTAL
IRON, DISSOLVED (AS FE)
IRON, DISSOLVED FROM DRY DEPOSITION
IRON, FERROUS
IRON, POTENTIALLY DISSOLVD
IRON, SLUDGE, TOTAL, DRY WEIGHT (AS FE)
IRON, SUSPENDED
IRON, TOTAL (AS FE)
IRON, TOTAL PER BATCH
IRON, TOTAL PER PRODUCTION
IRON, TOTAL PERCENT REMOVAL
IRON, TOTAL_(AS FE)

LIGHTLY TREATED LIG-NOSULFONATED MUD
LITHIUM, DISSOLVED (AS LI)
LITHIUM, TOTAL (AS LI)
MACROINVERTEBRATE ASSESSMENT
MAGNESIUM, DISSOLVED (AS MG)
MAGNESIUM, IN BOTTOM DEPOSITS
MAGNESIUM, PCT EXCHANGE
MAGNESIUM, TOTAL RECOVERABLE
MANGANESE IN BOTTOM DEPOSITS (DRY WGT)
MANGANESE, DISSOLVED (AS MN)
MANGANESE, POTENTIALLY DISSOLVD
MANGANESE, SUSPENDED
MANGANESE, TOTAL
MANGANESE, TOTAL (AS MN)
MANGANESE, TOTAL RECOVERABLE
METHYLENE BLUE ACTIVE SUBSTANCES
MICROSCOPIC ANALYSIS
MOLYBDENUM, DRY WEIGHT
MONOBORO CHLORATE
NICKEL, DRY WEIGHT
NITRILOTRIACETIC ACID (NTA)
NITRITE NITROGEN, DISSOLVED (AS N)
NITRITE PLUS NITRATE DISSOLVED 1 DET.
NITRITE PLUS NITRATE IN BOTTOM DEPOSITS
NITRITE PLUS NITRATE TOTAL 1 DET. (AS N)
NITROGEN (AS NO3) SLUDGE SOLID
NITROGEN OXIDES (AS N)
NITROGEN SLUDGE SOLID
NITROGEN SLUDGE TOTAL
NITROGEN, AMMONIA DISSOLVED
NITROGEN, AMMONIA IN BOTTOM DEPOSITS
NITROGEN, AMMONIA PER CFS OF STREAMFLW
NITROGEN, AMMONIA TOTAL (AS N)
NITROGEN, AMMONIA TOTAL (AS NH4)
NITROGEN, AMMONIA, PERCENT REMOVAL
NITROGEN, AMMONIA, SLUDGE, TOT DRY WGT
NITROGEN, AMMONIA, TOT UNIONIZED (AS N)
NITROGEN, KJELDAHL DISSOLVED (AS N)
NITROGEN, KJELDAHL TOTAL (AS N)
NITROGEN, NITRATE DISSOLVED
NITROGEN, NITRATE TOTAL (AS N)
NITROGEN, NITRATE TOTAL (AS NO3)
NITROGEN, NITRITE TOTAL (AS N)
NITROGEN, NITRITE TOTAL (AS NO2)
NITROGEN, ORGANIC TOTAL (AS N)
NITROGEN, SLUDGE, TOT, DRY WT. (AS N)
NITROGEN, TOTAL AS NO3 + NH3
NITROGEN, TOTAL KJELDAHL, % REMOVAL
NITROGEN,INORGANIC TOTAL
NITROGEN,OXIDIZED
NITROGEN-NITRATE IN WATER, (PCT)
NITROGEN-NITRITE IN WATER, (PCT)
NITROGENOUS OXYGEN DEMAND (20-DAY, 20C)
NITROGENOUS OXYGEN DEMAND, % REMOVAL
NON-IONIC DISPERSANT (NALSPERSE 7348)
NON-NITROGENOUS BOD
OIL & GREASE
OIL & GREASE % REMOVAL
OIL & GREASE (FREON EXTR.-IR METH)TOT,RC
OIL & GREASE (POLAR)
OIL & GREASE AROMATIC
OIL & GREASE, NON POLAR MATERIAL
OIL AND GREASE
OIL AND GREASE
OIL AND GREASE (SOXHLET EXTR.) TOT.
OIL AND GREASE PER CFS OF STREAMFLW
OIL AND GREASE PER PRODUCTION
OIL AND GREASE VISUAL
OIL AND GREASE, HEXANE EXTR METHOD
OIL AND GREASE, PER 1000 GALLONS
OXYGEN DEMAND FIRST STAGE
OXYGEN DEMAND, CHEM. (COD), DISSOLVED
OXYGEN DEMAND, CHEM. (HIGH LEVEL) (COD)
OXYGEN DEMAND, CHEM. (LOW LEVEL) (COD)
OXYGEN DEMAND, DISSOLVED
OXYGEN DEMAND, NITROGENOUS, ULTIMAT
OXYGEN DEMAND, SUM PRODUCT
OXYGEN DEMAND, TOTAL
OXYGEN DEMAND, TOTAL (TOD)
OXYGEN DEMAND, ULT. CARBONACEOUS (UCOD)
OXYGEN DEMAND, ULT.,PERCENT REMOVAL
OXYGEN DEMAND, ULTIMATE
OZONE
OZONE - RESIDUAL
PENTACHLOROPHENOL, REMOVAL EFFICIENCY
PHOSPHATE TOTAL SOLUBLE
PHOSPHATE, DISSOLVED COLOR METHOD (AS P)
PHOSPHATE, ORTHO (AS P)
PHOSPHATE, ORTHO (AS PO4)
PHOSPHATE, TOTAL (AS PO4)
PHOSPHATE, TOTAL COLOR. METHOD (AS P)
PHOSPHATE,DISSOLVED/ORTHOPHOSPHATE(AS P)

PHOSPHATE, POLY (AS PO4)
PHOSPHOROUS 32, TOTAL
PHOSPHOROUS, IN TOTAL ORTHOPHOSPHATE
PHOSPHOROUS, TOTAL ELEMENTAL
PHOSPHOROUS, TOTAL ORGANIC (AS P)
PHOSPHOROUS, TOTAL, IN BOTTOM DEPOSITS
PHOSPHORUS (REACTIVE AS P)
PHOSPHORUS, DISSOLVED
PHOSPHORUS, DISSOLVED REATIVE (DRP AS P)
PHOSPHORUS, TOTAL (AS P)
PHOSPHORUS, TOTAL PERCENT REMOVAL
PHOSPHORUS, TOTAL SOLUBLE (AS PO4)
POTASSIUM, DISSOLVED (AS K)
POTASSIUM, IN BOTTOM DEPOSITS
POTASSIUM, PCT EXCHANGE
POTASSIUM, TOTAL PCTIN WATER, (PCT)
POTASSIUM, TOTAL RECOVERABLE
PROPARGITE
RADIATION, GROSS BETA PARTICLE ACTIVITY
RATIO FECAL COLIFORM & STREPTOCOCCI
RESIDUE, SETTLEABLE
RESIDUE, TOTAL FILTERABLE
RESIDUE, TOTAL FILTERABLE
RESIDUE, TOTAL NON- SETTLEABLE
RESIDUE, TOTAL VOLATILE
RESIDUE, VOLATILE NONFILTERABLE
SEAWATER GEL MUD
SETTLEABLE SOLIDS PERCENT REMOVAL
SILICA, DISSOLVED (AS SIO2)
SILICA, TOTAL (AS SIO2)
SILICON, TOTAL
SLUDGE BUILD-UP IN WATER
SLUDGE SETTLEABILITY 30 MINUTE
SLUDGE VOLUME DAILY INTO A WELL
SLUDGE, RATE OF WASTING
SODIUM ADSORPTION RATIO
SODIUM ARSENITE
SODIUM CHLORIDE (SALT)
SODIUM HEXAMETA- PHOSPHATE
SODIUM IN BOTTOM DEP (AS NA) (DRY WGT)
SODIUM NITRITE
SODIUM SULFATE, TOTAL
SODIUM, %
SODIUM, % EXCHANGE- ABLE SOIL, TOTAL
SODIUM, DISSOLVED (AS NA)
SODIUM, SLUDGE, TOT, DRY WEIGHT (AS NA)
SODIUM, TOTAL (AS NA)
SODIUM, TOTAL (AS NA)
SODIUM, TOTAL RECOVERABLE
SOLIDS ACCUMULATION RATE TOT DRY WEIGHT
SOLIDS, FIXED DISSOLVED
SOLIDS, FIXED SUSPENDED
SOLIDS, SETTLEABLE
SOLIDS, SETTLEABLE, NET VALUE
SOLIDS, SLUDGE, TOT, DRY WEIGHT
SOLIDS, SUSPENDED PERCENT REMOVAL
SOLIDS, TOTAL
SOLIDS, TOTAL DISS., PERCENT BY WEIGHT
SOLIDS, TOTAL DISSOLVED
SOLIDS, TOTAL DISSOLVED (INORGANIC)
SOLIDS, TOTAL DISSOLVED (TDS)
SOLIDS, TOTAL DISSOLVED- 180 DEG.C
SOLIDS, TOTAL DISSOLVED, TOTAL TONS
SOLIDS, TOTAL FIXED
SOLIDS, TOTAL NON- VOLATILE, NON-FIXED
SOLIDS, TOTAL SUSP PER PRODUCTION
SOLIDS, TOTAL SUSP. PER 1000 GALLONS
SOLIDS, TOTAL SUSP. PER BATCH
SOLIDS, TOTAL SUSP. PER CFS OF STREAMFLW
SOLIDS, TOTAL SUSPD. NON-VOLATILE
SOLIDS, TOTAL SUSPENDED
SOLIDS, TOTAL SUSPENDED, LOADING RATE
SOLIDS, TOTAL SUSPENDED, NET VALUE
SOLIDS, TOTAL VOLATILE
SOLIDS, VOLATILE DISSOLVED
SOLIDS, VOLATILE SUSP., IN MIXED LIQUOR
SOLIDS, VOLATILE SUSPENDED
SOLIDS, VOLATILE SUSPENDED, % REMOVAL
SOLIDS, DRY, DISCHARGE TO SOL. HANDLING SYS.
SOLIDS, DRY, INCIN. AS % OF DRY SOL. FROM TRMTPLT
SOLIDS, DRY, REMOVED FROM SOL. HANDLING SYS.
SOLIDS, TOT. VOLATILE PERCENT REMOVAL
SOLIDS, VOLATILE % OF TOTAL SOLIDS
SOLIDS-FLOTNG-VISUAL DETRMNTN-# DAYS OBS
SULFATE
SULFATE (AS S)
SULFATE IN SEDIMENT
SULFATE, DISSOLVED (AS SO4)
SULFATE, TOTAL (AS SO4)
SULFIDE, DISSOLVED, (AS S)
SULFIDE, TOTAL
SULFIDE, TOTAL (AS S)
SULFITE (AS S)
SULFITE (AS SO3)
SULFITE WASTE LIQUOR PEARL BENSON INDEX

SULFUR DIOXIDE TOTAL
SULFUR, TOTAL
SULPHUR, TOTAL ELEMENTAL
SUM BOD AND AMMONIA, WATER
SURFACTANTS (LINEAR ALKYLATE SULFONATE)
SURFACTANTS (MBAS)
SURFACTANTS, AS CTAS
SUSPENDED SOLIDS
SUSPENDED SOLIDS, TOTAL ANNUAL
SUSPENDED SOLIDS, TOTAL DISCHARGE
TOTAL CHLORIDE RESIDUAL, BROMINE
TOTAL SUSP. SOLIDS - LB/CU FT PROCESS
TRIARYL PHOSPHATE
TURBIDITY, HCH TURBIDIMITER
ULTRAVIOLET LIGHT TRANSMITTANCE
VANADIUM, DISSOLVED (AS V)
VANADIUM, SUSPENDED (AS V)
VANADIUM, TOTAL
VANADIUM, TOTAL (AS V)
VANADIUM, TOTAL DRY WEIGHT (AS V)
VANADIUM, TOTAL RECOVERABLE
VEGETATIVE COVER
WLA BOD-5 DAY VALUE

Appendix B. Group 2 Pollutants

Group 2 Pollutants. This list of pollutants is based on Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations.

Metals
All metals not specifically listed under Group 1.

Inorganics
Cyanide
Total Residual Chlorine

Organics
All organics not specifically listed under Group 1.

Other*

---

* The following list of pollutants are hereby included as Group 2 pollutants (pursuant to Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations) under the classifications of "other."

1, 2, 4-TRIMETHYL- BENZENE
1, 3, 5-TRIMETHYL- BENZENE
1,1 DICHLORO 1,2,2,2 TETRAFLUOROETHANE
1,1 DICHLORO 2,2,2- TRIFLUOROETHANE
1,1,1 TRICHLORO- 2,2,2TRIFLUOROETHANE
1,1,1,2,2-PENTA- FLUOROETHANE
1,1,1,3,3-PENTA- FLUOROBUTANE
1,1,1-TRICHLORO- ETHANE
1,1,1-TRICHLOROETHANE, DRY WEIGHT
1,1,1-TRIFLUORO- ETHANE
1,1,2,2-TETRACHLORO-ETHANE
1,1,2,2-TETRACHLOROETHANE, DRY WEIGHT
1,1,2,2-TETRACHLOROETHYLENE
1,1,2-TRICHLORO- ETHANE
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
1,1,2-TRICHLOROETHANE, DRY WEIGHT
1,1-DICHLORO-1- FLUOROETHANE
1,1-DICHLOROETHANE
1,1-DICHLOROETHANE, DRY WEIGHT
1,1-DICHLOROETHENE
1,1-DICHLOROETHYLENE
1,1-DICHLOROETHYLENE, DRY WEIGHT
1,1-DIMETHYL- HYDRAZINE
1,2,3-TRICHLORO- BENZENE
1,2,3-TRICHLORO- ETHANE
1,2,3,4,6,7,8,9-OCTACHLORODIBENZOFURAN
1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-P-DIOX
1,2,3,4,6,7,8-HEPTA CHLORODIBENZOFURAN
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXN
1,2,3,4,7,8,9-HEPTA CHLORODIBENZOFURAN
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN
1,2,3,7,8-PENTACHLORODIBENZOFURAN
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN
1,2,3-TRICHLOROPROPANE
1,2,4,5-TETRACHLORO-BENZENE
1,2,4,5-TETRAMETHYL-BENZENE
1,2,4-TRICHLORO- BENZENE
1,2,4-TRICHLOROBENZENE, DRY WEIGHT
1,2-BIS(2-CHLOROETH-ONY) ETHANE
1,2-CIS-DICHLORO-ETHYLENE
1,2-DICHLORO-1,1,2-T
1,2-DICHLOROBENZENE
1,2-DICHLOROBENZENE, DRY WEIGHT

1,2-DICHLOROETHANE
1,2-DICHLOROETHANE, DRY WEIGHT
1,2-DICHLOROETHANE, TOTAL WEIGHT
1,2-DICHLOROPROPANE
1,2-DICHLOROPROPANE, DRY WEIGHT
1,2-DICHLOROPROPENE
1,2-DIPHENYL- HYDRAZINE
1,2-DIPHENYL-HYDRAZINE, DRY WEIGHT
1,2-PROPANEDIOL
1,2-TRANS-DICHLORO- ETHYLENE
1,2-TRANS-DICHLOROETHYLENE, DRY WEIGHT
1,3 DICHLOROPROPANE
1,3 DICHLOROPROPYLENE
1,3-DIAMINOUREA
1,3-DICHLOROBENZENE
1,3-DICHLOROBENZENE, DRY WEIGHT
1,3-DICHLOROPROPENE, TOTAL WEIGHT
1,4-DICHLOROBUTANE
1,4_____DIOXANE
1,4-DDT (O,P-DDT)
1,4-DICHLOROBENZENE
1,4-DICHLOROBENZENE, DRY WEIGHT
1,4-XYLENE
1-BROMO-2-CHLOROETHANE
1-CHLORO-1,1- DIFLUOROETHANE
1-ETHOXY-2-METHYLPROPANE
1-HYDROXY-ETHYLIDENE
1-METHYLNAPHTHALENE
1-NITROSOPIPERIDINE
2,2-DIBROMO-3-NITRILOPROPIONAMIDE
2,2-DICHLOROPROPANE
2,2-DICHLOROVINYL DIMETHYLPHOSPHATE
2,2-DIMETHYL-2,3-DI-HYDRO-7-BENZOFURANOL
2,3 DICHLOROPROPYLENE
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN
2,3,4,6-TETRACHLORO-PHENOL
2,3,4,7,8-PENTACHLORODIBENZOFURAN
2,3,7,8 CHLORO- DIBENZOFURAN
2,3,7,8 TETRACHLORO-DIBENZO FURAN (TCDF)
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN SED,
2,3,7,8-TETRACHLORO-DIBENZO-P-DIOXIN
2,4,5 - T
2,4,5 - TRICHLORO- PHENOL
2,4,5, TP(SILVEX)
2,4,5-TP(SILVEX) ACIDS/SALTS WHOLE WATER SAMPLE
2,4,5-TRICHLOROPHENOXYPROPIONIC ACID
2,4,6 TRICHLOROPHENOL, DRY WEIGHT
2,4,6-TRICHLORO- PHENOL
2,4-D SALTS AND ESTERS
2,4-DB
2,4-DICHLOROPHENOL
2,4-DICHLOROPHENOXYACETIC ACID
2,4-DIMETHYLPHENOL
2,4-DINITROPHENOL
2,4-DINITROTOLUENE
2,4-DINITROTOLUENE, DRY WEIGHT
2,4-TOLUENEDIAMINE
2,5-TOLUENEDIAMINE
2,6-DINITROTOLUENE
2,6-DINITROTOLUENE, DRY WEIGHT
2-ACETYL AMINO- FLOURCENE
2-BUTANONE
2-BUTANONE PEROXIDE
2-CHLOROANILINE
2-CHLOROETHANOL
2-CHLOROETHYL VINYL ETHER (MIXED)
2-CHLOROETHYL VINYL ETHER, DRY WEIGHT
2-CHLORONAPHTHALENE
2-CHLOROPHENOL
2-ETHYL-1-HEXANOL
2-ETHYL-2-METHYL- DIOXOLANE
2-HEXANONE
2-HEXANONE
2-METHYL-2-PROPANOL
2-METHYL-4,6-DINITROPHENOL
2-METHYL-4-CHLOROPHENOL
2-METHYLNAPHTHALENE
2-METHYLNAPHTHALENE
2-METHYLPENTANE
2-METHYLPHENOL
2-METHYLPYRIDINE
2-NAPHTHYLAMINE
2-NITROANILINE
2-NITROPHENOL
2-PROPANONE
2-SECONDARY BUTYL- 4,6-DINITROPHENOL
3,3-DICHLORO- BENZIDINE
3,3-DICHLOROBENZIDINE, DRY WEIGHT
3,4 BENZOFLUORAN- THENE
3,4,5 TRICHLORO- GUACACOL
3,4,6-TRICHLORO- CATECHOL
3,4,6-TRICHLORO- GUAIACOL
3-CHLOROPHENOL
3-METHYLHEXANE
3-METHYLPENTANE
3-METHYLPYRIDINE
3-NITROANILINE, TOTAL IN WATER
4,4-BUTYLDENEBIS- (6-T-BUTYL-M-CRESOL)
4,4-DDD (P,P-DDD)
4,4-DDE (P,P-DDE)
4,4-DDT (P,P-DDT)
4,6-DINITRO-O-CRESOL
4-BROMOPHENYL PHENYL ETHER
4-CHLORO-3, 5-DIMETHYLPHENOL

4-CHLORO-3-METHYL PHENOL
4-CHLOROPHENYL PHENYL ETHER
4-METHYLPHENOL
4-METHYLPHENOL
4-NITRO-M-CRESOL
4-NITRO-N-METHYLPHTHALIMIDE, TOTAL
4-NITROPHENOL
9,10 DICHLOROSTEARIC ACID
9,10 EPOXYSTEARIC ACID
A-BHC-ALPHA
ABIETIC ACID
ACENAPHTHENE
ACENAPHTHENE, SED (DRY WEIGHT)
ACENAPHTHYLENE
ACEPHATE (ORTHENE, ORTRAN)
ACETALDEHYDE
ACETAMINOPHEN
ACETIC ACID
ACETONE
ACETONE IN WASTE
ACETONE, DRY WEIGHT
ACETOPHENONE
ACID COMPOUNDS
ACIDS,TOTAL VOLATILE (AS ACETIC ACID)
ACROLEIN
ACROLEIN, DRY WEIGHT
ACRYLAMIDE MONOMER
ACRYLIC ACID
ACRYLONITRILE
ACRYLONITRILE, DRY WEIGHT
ACTINIUM 228
A-ENDOSULFAN-ALPHA
ALACHLOR (BRAND NAME-LASSO)
ALACHLOR, DISSOLVED
ALDICARB
ALDICARB SULFONE
ALDICARB SULFOXIDE
ALDRIN
ALDRIN + DIELDRIN
ALDRIN, DRY WEIGHT
ALKYL BENZENE SULFONATED (ABS)
ALKYLDIMETHYL ETHYL AMMONIUM BROMIDE
ALKYLDIMETHYLBENZYL AMMONIUM CHLORIDE
ALPHA ACTIVITY
ALPHA EMITTING RADI-UM ISOTOPES, DISSOL.
ALPHA GROSS RADIOACTIVITY
ALPHA, DISSOLVED
ALPHA, SUSPENDED
ALPHA, TOTAL
ALPHA, TOTAL, COUNTING ERROR
ALPHABHC DISSOLVED
ALPHA-ENDOSULFAN
AMETRYN ORGANIC PESTICIDE
AMIBEN (CHLORAMBEN)
AMINES, ORGANIC TOTAL
AMINOTROL - METHYLENE PHOSPHATE
AMYL ALCOHOL
ANILINE
ANTHRACENE
ANTIMONY IN BOTTOM DEPOSITS (DRY WGT)
ANTIMONY, DISSOLVED (AS SB)
ANTIMONY, TOTAL (AS SB)
ANTIMONY, TOTAL RECOVERABLE
AROMATICS, SUBSTITUTED
AROMATICS, TOTAL PURGEABLE
ARSENIC, DISSOLVED (AS AS)
ARSENIC, DRY WEIGHT
ARSENIC, POTENTIALLY DISSOLVD
ARSENIC, TOTAL (AS AS)
ARSENIC, TOTAL RECOVERABLE
ASANA
ASBESTOS
ASBESTOS (FIBROUS)
A-TERPINEOL
ATRAZINE
ATRAZINE, DISSOLVED
AZIDE
AZOBENZENE
BALAN (BENEFIN)
BARIUM IN BOTTOM DEPOSITS (DRY WGT)
BARIUM, DISSOLVED (AS BA)
BARIUM, POTENTIALLY DISSOLVD
BARIUM, TOTAL (AS BA)
BARIUM, TOTAL RECOVERABLE
BASE NEUTRALS & ACID (METHOD 625), TOTAL
BASE NEUTRALS & ACID (METHOD 625), EFFLNT
BASE/NEUTRAL COMPOUNDS
BAYER 73 LAMPREYCIDE IN WATER
B-BHC-BETA
B-BHC-BETA DISSOLVED
B-ENDOSULFAN-BETA
BENFLURALIN, (ORG. PESTICIDE ACT. INGD)
BENOMYL & CARBEND. ORGANIC PESTICIDE
BENTAZON, TOTAL
BENZENE
BENZENE (VOLATILE ANALYSIS)
BENZENE HEXACHLORIDE
BENZENE SULPHONIC ACID
BENZENE, DISSOLVED
BENZENE, DRY WEIGHT
BENZENE, HALOGENATED
BENZENE, TOLUENE, XYLENE IN COMBINATN
BENZENE, ETHYLBENZENETOLUENE, XYLENE COMBN

BENZENEHEXACHLORIDE
BENZIDINE
BENZIDINE, DRY WEIGHT
BENZISOTHIAZOLE
BENZO(A) FLUORANTHENE
BENZO(A)ANTHRACENE
BENZO(A)PYRENE
BENZO(A)PYRENE, DRY WEIGHT
BENZO(B)FLUORANTHENE (3,4-BENZO)
BENZO(GHI)PERYLENE
BENZO(K)FLUORANTHENE
BENZOFURAN
BENZY CHLORIDE
BENZYL ALCOHOL
BENZYL CHLORIDE
BERYLLIUM IN BOTTOM DEPOSITS (DRY WGT)
BERYLLIUM, DISSOLVED (AS BE)
BERYLLIUM, POTENTIALLY DISSOLVD
BERYLLIUM, TOTAL (AS BE)
BERYLLIUM, TOTAL RECOVERABLE (AS BE)
BETA, DISSOLVED
BETA, SUSPENDED
BETA, TOTAL
BETA, TOTAL, COUNTING ERROR
BETASAN (N-2-MERCAPTOETHYLBENZENESULFAMID
BEZONITRILE (CYANOBENZENE)
BHC, TOTAL
BHC-ALPHA
BHC-BETA
BHC-DELTA
BHC-GAMMA
BIFENTHRIN
BIS -- PHENOL-A (ALPHA)
BIS (2-CHLORO- ISOPROPYL) ETHER
BIS (2-CHLOROETHOXY) METHANE
BIS (2-CHLOROETHOXY) METHANE, DRY WT.
BIS (2-CHLOROETHYL) ETHER
BIS (2-ETHYLHEXYL) PHTHALATE
BIS (2-ETHYLHEXYL) PHTHALATE, DRY WGT
BIS (CHLOROMETHYL) ETHER
BIS (TRICHLOROMETHYL) SULFONE
BIS ETHER
BISMUTH 214
BISMUTH, TOTAL (AS BI)
BISPHENOL-A
BROMACIL
BROMACIL (HYVAR)
BROMACIL, LITHIUM
BROMOCHLOROMETHANE
BROMODICHLOROETHANE
BROMOFORM
BROMOFORM, DRY WEIGHT
BROMOMETHANE
BROMOXYNIL OCTANOATE
BROMOXYNIL ORGANIC PESTICIDE
BUSAN 40 ORGANIC PESTICIDE
BUSAN 85 ORGANIC PESTICIDE
BUTACHLOR
BUTANE
BUTANOIC ACID
BUTANOL
BUTANONE
BUTHDIENE TOTAL
BUTOXY ETHOXY ETHANOL TOTAL
BUTYL ACETATE
BUTYL BENZYL PHTHALATE
BUTYLATE (SUTAN)
CADMIUM
CADMIUM IN BOTTOM DEPOSITS (DRY WGT)
CADMIUM SLUDGE SOLID
CADMIUM SLUDGE TOTAL
CADMIUM TOTAL RECOVERABLE
CADMIUM, DISSOLVED (AS CD)
CADMIUM, PERCENT REMOVAL
CADMIUM, POTENTIALLY DISSOLVD
CADMIUM, SLUDGE, TOT DRY WEIGHT (AS CD)
CADMIUM, TOTAL (AS CD)
CAFFEINE
CAPTAFOL
CAPTAN
CARBAMATES
CARBARYL TOTAL
CARBN CHLOROFRM EXT-RACTS, ETHER INSOLUBL
CARBOFURAN
CARBON DISULFIDE (CS2)
CARBON TETRACHLORIDE
CARBON TETRACHLORIDE, DRY WEIGHT
CARBON, CHLOROFORM EXTRACTABLES
CARBON, DISSOLVED ORGANIC (AS C)
CARBONATE ION (AS CACO3)
CARBOSULFAN, TOTAL
CERIUM, TOTAL
CESIUM 137
CESIUM, TOTAL (AS CS)
CHIRAL
CHLOR, PHENOXY ACID GP, NONE FOUND
CHLORAL
CHLORAL HYDRATE
CHLORAMINE RESIDUAL
CHLORDANE (CA OCEAN PLAN DEFINITION)
CHLORDANE (TECH MIX & METABS), DRY WGT
CHLORDANE (TECH MIX. AND METABOLITES)
CHLORDANE, ALPHA, WHOLE WATER
CHLORDANE, GAMMA, WHOLE WATER

CHLORENDIC ACID
CHLORETHOXYFOS
CHLORIDE, ORGANIC, TOTAL
CHLORINATED DIBENZO-FURANS, EFFLUENT
CHLORINATED DIBENZO-FURANS, SLUDGE
CHLORINATED DIBENZO-P-DIOXINS, EFFLUENT
CHLORINATED DIBENZO-P-DIOXINS, SLUDGE
CHLORINATED ETHANES
CHLORINATED HYDRO- CARBONS, GENERAL
CHLORINATED METHANES
CHLORINATED ORGANIC COMPOUNDS
CHLORINATED PESTI- CIDES, TOT & PCBS
CHLORINATED PESTI- CIDES, TOTAL
CHLORINATED PHENOLS
CHLORINATION
CHLORINE DIOXIDE
CHLORINE DOSE
CHLORINE RATE
CHLORINE USAGE
CHLORINE, COMBINED AVAILABLE
CHLORINE, FREE AVAILABLE
CHLORINE, FREE RESIDUAL, TOTAL EFFLUENT
CHLORINE, TOTAL RES.DURATION OFVIOLATION
CHLORINE, TOTAL RESIDUAL
CHLORINE, TOTAL RESIDUAL (DSG. TIME)
CHLOROBENZENE
CHLOROBENZENE, DRY WEIGHT
CHLOROBENZILATE
CHLOROBUTADIENE (CHLOROPRENE)
CHLORODIBROMOMETHANE
CHLORODIBROMOMETHANE, DRY WEIGHT
CHLORODIFLUORO- METHANE
CHLORODIMEFORM
CHLOROETHANE
CHLOROETHANE, TOTAL WEIGHT
CHLOROETHYLENE BISTHIOCYANATE
CHLOROFORM
CHLOROFORM EXTRACTABLES, TOTAL
CHLOROFORM, DISSOLVED
CHLOROFORM, DRY WEIGHT
CHLOROHEXANE, TOTAL
CHLOROMETHANE
CHLOROMETHYL BENZENE
CHLORONEB ORGANIC PESTICIDE
CHLORONITROBENZENE
CHLOROPHENOXY PROPANANOL
CHLOROSYRINGEALDEHYDE, EFFLUENT
CHLOROTHALONIL ORGANIC PESTICIDE
CHLOROTOLUENE
CHLOROXAZONE
CHLORPHENIRAMINE
CHLORPYRIFOS
CHROMIUM
CHROMIUM SLUDGE SOLID
CHROMIUM SLUDGE TOTAL
CHROMIUM TOTAL RECOVERABLE
CHROMIUM TRIVALENT IN BOTTOM DEPOSITS
CHROMIUM, DISSOLVED (AS CR)
CHROMIUM, DRY WEIGHT
CHROMIUM, HEXAVALENT
CHROMIUM, HEXAVALENT
CHROMIUM, HEXAVALENT (AS CR)
CHROMIUM, HEXAVALENT DISSOLVED (AS CR)
CHROMIUM, HEXAVALENT IN BOT DEP (DRY WT)
CHROMIUM, HEXAVALENT POTENTIALLY DISOLVD
CHROMIUM, HEXAVALENT TOT RECOVERABLE
CHROMIUM, SUSPENDED (AS CR)
CHROMIUM, TOTAL
CHROMIUM, TOTAL (AS CR)
CHROMIUM, TOTAL DRY WEIGHT (AS CR)
CHROMIUM, TOTAL IN BOT DEP (WET WGT)
CHROMIUM, TOTAL PERCENT REMOVAL
CHROMIUM, TRIVALENT (AS CR)
CHROMIUM, TRIVALENT, POTENTIALLY DISSOLVD
CHRYSENE
CIS-1,3-DICHLORO PROPENE
CITRIC ACID
CN, FREE (AMENABLE TO CHLORINE)
COBALT, TOTAL RECOVERABLE
COLUMBIUM, TOTAL
COMBINED METALS SUM
COPPER
COPPER AS SUSPENDED BLACK OXIDE
COPPER IN BOTTOM DEPOSITS (DRY WGT)
COPPER SLUDGE SOLID
COPPER SLUDGE TOTAL
COPPER TOTAL RECOVERABLE
COPPER, DISSOLVED (AS CU)
COPPER, PERCENT REMOVAL
COPPER, POTENTIALLY DISSOLVED
COPPER, SUSPENDED (AS CU)
COPPER, TOTAL (AS CU)
COPPER, TOTAL PER BATCH
COUMAPHOS
CRESOL
CYANATE (AS OCN)
CYANAZINE
CYANIDE (A)
CYANIDE AND THIOCYANATE - TOTAL

CYANIDE COMPLEXED TO RANGE OF COMPOUND
CYANIDE FREE NOT AMENABLE TO CHLORIN.
CYANIDE IN BOTTOM DEPOSITS (DRY WGT)
CYANIDE SLUDGE SOLID
CYANIDE, FILTERABLE, TOTAL
CYANIDE, FREE AVAILABLE
CYANIDE, FREE-WATER PLUS WASTEWATERS
CYANIDE, TOTAL (AS CN)
CYANIDE, TOTAL RECOVERABLE
CYANIDE, WEAK ACID, DISSOCIABLE
CYANIDE, DISSOLVED STD METHOD
CYANIDE, FREE (AMEN. TO CHLORINATION)
CYCLOATE (RONEET)
CYCLOHEXANE
CYCLOHEXANONE
CYCLOHEXYL AMINE (AMINO HEXAHYDRO)
CYCOHEXANONE
CYFLUTHRIN
DACONIL (C8CL4N2)
DACTHAL
DAZOMET
DCPA, ORGANIC PESTICIDE
DDD IN WHOLE WATER SAMPLE
DDE
DDT
DDT/DDD/DDE, SUM OF P,P & O,P ISOMERS
DECACHLOROBIPHENYL (DCBP) TOTAL
DECHLORANE PLUS
DEF, ORGANIC PESTICIDE
DEHYDROABIETIC ACID
DELNAV
DELTA BENZENE HEXACHLORIDE
DELTAMETHRIN
DEMETON
DIAZINON
DIBENZO (A,H) ANTHRACENE
DIBENZO (A,H) ANTHRACENE, DRY WEIGHT
DIBENZOFURAN
DIBROMOCHLORO- METHANE
DIBROMODICHLOROMETHANE
DIBROMOMETHANE
DICHLONE
DICHLORAN, TOTAL
DICHLOROBENZENE
DICHLOROBENZENE, ISOMER
DICHLOROBENZYLTRIFLUORIDE
DICHLOROBROMOMETHANE
DICHLOROBROMOMETHANE, DRY WEIGHT
DICHLOROBUTADIENE
DICHLOROBUTENE- (ISOMERS)
DICHLORODEHYDRO- ABEIETIC ACID
DICHLORODIBROMOMETHANE
DICHLORODIFLUORO- METHANE
DICHLOROETHENE, TOTAL
DICHLOROFLUORO METHANE
DICHLOROMETHANE
DICHLOROPROPYLENE, 1,2
DICHLOROTOLUENE
DICHLOROTRIFLUORO- ETHANE
DICHLORVOS, TOTAL
DICHLORVOS, TOTAL DISSOLVED
DICHLORVOS, TOTAL SED DRY WEIGHT
DICHLORVOS, TOTAL SUSPENDED
DICYCLOHEXYLAMINE, TOTAL
DICYCLOPENTADIENE
DIDECYLDIMETHYL AMMONIUM CHLORIDE
DIDROMOMETHANE, 1-2
DIELDRIN
DIELDRIN, DRY WEIGHT
DIETHL METHYL BENZENESULFONAMIDE
DIETHYL PHTHALATE
DIETHYL PHTHALATE, DRY WEIGHT
DIETHYLAMINE
DIETHYLAMINOETHANOL
DIETHYLBENZENE
DIETHYLENE GLYCOL DINITRATE, TOTAL
DIETHYLHEXYL- PHTHALATE
DIETHYLHEXYL PHTHALATE ISOMER
DIETHYLSTILBESTEROL
DIFOLATAN
DIISOPROPYL ETHER
DIMETHOXYBENZIDINE
DIMETHYL BENZIDINE
DIMETHYL DISULFIDE TOTAL
DIMETHYL NAPHTHALENE
DIMETHYL PHTHALATE
DIMETHYL PHTHALATE
DIMETHYL PHTHALATE, DRY WEIGHT
DIMETHYL SULFIDE TOTAL
DIMETHYLAMINE
DIMETHYLANILINE
DI-N-BUTYL PHTHALATE
DI-N-BUTYL PHTHALATE, DRY WEIGHT
DI-NITRO BUTYL PHENOL (DNBP)
DINITROTOLUENE
DI-N-OCTYL PHTHALATE
DI-N-OCTYL PHTHALATE, DRY WEIGHT
DINOSEB
DINOSEB (DNBP)
DIOXANE
DIOXATHION ORGANIC PESTICIDE
DIOXIN
DIOXIN (TCDD) SUSPENDED
DISSOLVED RADIOACTIVE GASSES
DISULFOTON
DIURON
DMDS
DOCOSANE
DODECYLGUANIDINE SALTS

DYPHYLLINE
EDTA
EDTA AMMONIATED
ENDOSULFAN SULFATE
ENDOSULFAN, ALPHA, IN WASTE
ENDOSULFAN, BETA, INWASTE
ENDOSULFAN, TOTAL
ENDOTHALL SALTS & ESTERS, ORG. PEST.
ENDRIN
ENDRIN + ENDRIN ALDEHYDE (SUM)
ENDRIN ALDEHYDE
EPHEDRINE SULFATE
EPICHLOROHYDRIN
EPTC (EPTAM)
ESTRADIOL
ETHALFLURALIN WATER, TOTAL
ETHANE, 1,2-BIS (2- CLRETHXY), HOMLG SUM
ETHION
ETHOXYQUIN
ETHYL ACETATE
ETHYL BENZENE
ETHYL BENZENE
ETHYL ETHER BY GAS CHROMATOGRAPH
ETHYL METHANESULFONATE
ETHYL METHYL- DIOXOLANE
ETHYL PARATHION
ETHYLBENZENE
ETHYLBENZENE, DRY WEIGHT
ETHYLENE
ETHYLENE CHLOROHYDRIN
ETHYLENE DIBROMIDE (1,2 DIBROMOETHANE)
ETHYLENE GLYCOL
ETHYLENE GLYCOL
ETHYLENE GLYCOL DINITRATE
ETHYLENE OXIDE
ETHYLENE THIOUREA (ETU)
ETHYLENE, DISSOLVED (C2H4)
EXPLOSIVE LIMIT, LOWER
EXPLOSIVES, COMBINED TNT + RDX + TETRYL
FENARIMOL ORGANIC PESTICIDE
FENVALERATE ORGANIC PESTICIDE
FERRICYANIDE
FLUORANTHENE
FLUORANTHENE, DRY WEIGHT
FLUORENE
FLUORENE, DRY WEIGHT
FLUORIDE - COMPLEX
FLUSILAZOLE
FOAMING AGENTS
FOLPET WATER TOTAL
FORMALDEHYDE
FORMIC ACID
FREON 113 (1,1,1-TRIFLOURO-2,2-
FREON, TOTAL
FUEL, DIESEL, #1
FURANS
FURFURAL
GALLIUM, TOTAL (AS GA)
GAMMA, TOTAL
GAMMA, TOTAL COUNTING ERROR
GAMMA-BHC
GASOLINE, REGULAR
GERMANIUM, TOTAL (AS GE)
GLYPHOSATE, TOTAL
GOLD, TOTAL (AS AU)
GROSS BETA
GUAFENSIN
GUANIDINE NITRATE
GUTHION
HALOGEN, TOTAL ORGANIC
HALOGEN, TOTAL RESIDUAL
HALOGENATED HYDRO- CARBONS, TOTAL
HALOGENATED ORGANICS
HALOGENATED TOLUENE
HALOGENS, ADSORBABLEORGANIC
HALOGENS, TOT ORGAN-ICS BOTTOM SEDIMENT
HALOGENS, TOTAL COMBINED
HALOMETHANES, SUM
HEPTACHLOR
HEPTACHLOR + HEPTACHLOR EPOXIDE
HEPTACHLOR EPOXIDE
HEPTACHLOR, DRY WEIGHT
HEPTANE
HERBICIDES, TOTAL
HEXACHLOROBENZENE
HEXACHLOROBENZENE, DRY WEIGHT
HEXACHLOROBIPHENYL
HEXACHLOROBUTADIENE
HEXACHLOROBUTADIENE
HEXACHLOROBUTADIENE, DRY WEIGHT
HEXACHLOROCYCLO- PENTADIENE
HEXACHLOROCYCLOHEXANE (BHC) TOTAL
HEXACHLOROCYCLOPENTADIENE, DRY WEIGHT
HEXACHLOROETHANE
HEXACHLOROETHANE, DRY WEIGHT
HEXACHLOROPENTADIENE
HEXACHLOROPHENE
HEXADECANE
HEXAHYDROAZEPINONE
HEXAMETHYL- PHOSPHORAMINE(HMPA)
HEXAMETHYLBENZENE
HEXANE
HEXAZIMONE
HMX-1,3,5,7-TETRA ZOCINE (OCTOGEN)
HYDRAZINE
HYDRAZINES, TOTAL
HYDROCARBON, TOTAL RECOVERABLE

HYDROCARBONS NITRATED
HYDROCARBONS NITRATED, TOTAL
HYDROCARBONS, AROMATIC
HYDROCARBONS, TOTAL GAS CHROMATOGRAPH
HYDROCARBONS, IN H2O,IR,CC14 EXT. CHROMAT
HYDROGEN CYANIDE
HYDROQUINONE
HYDROXYACETOPHENONE
HYDROXYQUINOLINE TOTAL
HYDROXYZINE
INDENE
INDENO (1,2,3-CD) PYRENE
INDENO (1,2,3-CD) PYRENE, DRY WEIGHT
INDIUM
IODINE 129
IODINE RESIDUAL
IODINE TOTAL
ISOBUTYL ACETATE
ISOBUTYL ALCOHOL
ISOBUTYRALDEHYDE
ISODECYLDIPHENYL- PHOSPHATE
ISODRIN
ISO-OCTANE
ISOOCTYL 2,4,5-T
ISOOCTYL SILVEX
ISOPHORONE
ISOPHORONE, DRY WEIGHT
ISOPIMARIC ACID
ISOPRENE
ISOPROPALIN WATER, TOTAL
ISOPROPANOL
ISOPROPYL ACETATE
ISOPROPYL ALCOHOL (C3H8O), SED.
ISOPROPYL ETHER
ISOPROPYLBENZENE
ISOPROPYLBIPHENYL, TOTAL
ISOPROPYLIDINE DIOXYPHENOL
ISOTHIAZOLONE
ISOTHIOZOLINE, TOTAL
ISOXSUPRINE
KELTHANE
KEPONE
KN METHYL ORGANIC PESTICIDE
LANTHANUM, TOTAL
LEAD
LEAD 210
LEAD 210, TOTAL
LEAD 212
LEAD 214
LEAD SLUDGE SOLID
LEAD SLUDGE TOTAL
LEAD TOTAL RECOVERABLE
LEAD, DISSOLVED (AS PB)
LEAD, DRY WEIGHT
LEAD, POTENTIALLY DISSOLVD
LEAD, TOTAL (AS PB)
LEAD, TOTAL DRY WEIGHT (AS PB)
LINDANE
LINOLEIC ACID
LINOLENIC ACID
LINURON ORGANIC PESTICIDE
M - ALKYLDIMETHLBENZYLAMCL
MALATHION
MB 121
MCPA 2-ETHYLHEXYL ESTER
MERCAPTANS, TOTAL
MERCAPTOBENZOTHIAZOLE
MERCURY
MERCURY (HG), IN BARITE, DRY WEIGHT
MERCURY TOTAL RECOVERABLE
MERCURY, DISSOLVED (AS HG)
MERCURY, DRY WEIGHT
MERCURY, POTENTIALLY DISSOLVD
MERCURY, TOT IN BOT DEPOSITS (DRY WGT)
MERCURY, TOTAL (AS HG)
MERCURY, TOTAL (LOW LEVEL)
MERCURY, TOTAL LOW LEVEL
METALS TOXICITY RATIO
METALS, TOTAL
METALS, TOX PRIORITY POLLUTANTS, TOTAL
METAM POTASSIUM
META-XYLENE
METHAM SODIUM (VAPAM)
METHAMIDOPHOS ORGANIC PESTICIDE
METHANE
METHANOL, TOTAL
METHOCARBAMOL
METHOMYL
METHOXYCHLOR
METHOXYPROPYLAMINE
METHYL ACETATE
METHYL BROMIDE
METHYL BROMIDE, DRY WEIGHT
METHYL CHLORIDE
METHYL CHLORIDE, DRY WEIGHT
METHYL CYANIDE (ACETONITRILE)
METHYL ETHYL BENZENE
METHYL ETHYL KETONE
METHYL ETHYL SULFIDE
METHYL FORMATE
METHYL ISOBUTYL KETONE (MIBK)
METHYL MERCAPTAN
METHYL METHACRYLATE
METHYL METHANESULFONATE
METHYL NAPHTHALENE
METHYL PARATHION
METHYL STYRENE
METHYLAMINE

METHYLCYCLOPENTANE
METHYLENE BIS-THIOCYANATE
METHYLENE CHLORIDE
METHYLENE CHLORIDE, DRY WEIGHT
METHYLENE CHLORIDE, SUSPENDED
METHYLHYDRAZINE
METRIBUZIN (SENCOR), WATER, DISSOLVED
METRIOL TRINITRATE, TOTAL
MIREX
MOLYBDENUM DISSOLVED (AS MO)
MOLYBDENUM, TOTAL (AS MO)
MONOCHLOROACETIC ACID
MONO-CHLORO-BENZENES
MONOCHLOROBENZYLTRIFLUORIDE
MONOCHLORODEHYDRO- ABIETIC ACID
MONOCHLOROTOLUENE
MP062 (STEWARD)
N PENTANE
N,N- DIMETHYLFORMAMIDE
N,NDIETHYL CARBANILIDE
N,N-DIMETHYL FORMAMIDE
NABAM, ORGANIC PESTICIDE
NABONATE
N-AMYL ACETATE
NAPHTHALENE
NAPHTHALENE, DRY WEIGHT
NAPHTHENIC ACID
NAPROPAMIDE (DEVRINOL)
N-BUTYL ACETATE
N-BUTYLBENZENE (WHOLE WATER, UG/L
N-BUTYL-BENZENE SULFONAMIDE (IN WAT)
NEPTUNE BLUE
N-HEPTADECANE
NIACINAMIDE
NICKEL
NICKEL SLUDGE SOLID
NICKEL SLUDGE TOTAL
NICKEL TOTAL RECOVERABLE
NICKEL, DISSOLVED (AS NI)
NICKEL, POTENTIALLY DISSOLVD
NICKEL, SUSPENDED (AS NI)
NICKEL, TOTAL (AS NI)
NICKEL, TOTAL PER BATCH
NICKEL,TOT IN BOTTOM DEPOSITS (DRY WGT)
NICOTINE SULFATE
NITROBENZENE
NITROBENZENE, DRY WEIGHT
NITROCELLULOSE
NITROFURANS
NITROGEN, ORGANIC, DISSOLVED (AS N)
NITROGLYCERIN BY GAS CHROMATOGRAPHY
NITROGUANIDINE
NITROSODIPHENYLAMINE
NITROSTYRENE
N-METHYL-2-PYRROLIDONE
N-NITROSO COMPOUNDS, VOLATILE
N-NITROSO COMPOUNDS, VOLATILE
N-NITROSODIBUTYL- AMINE
N-NITROSODIETHYL- AMINE
N-NITROSODIMETHYL- AMINE
N-NITROSODIMETHYLAMINE, DRY WEIGHT
N-NITROSODI-N- PROPYLAMINE
N-NITROSODI-N-BUTYLAMINE
N-NITROSODI-N-PROPYLAMINE, DRY WEIGHT
N-NITROSODIPHENYL- AMINE
N-NITROSODIPHENYLAMINE, DRY WEIGHT
N-NITROSOPYRROLIDINE
NONHALOGENATED VOLATILE ORGANICS
NONPURGEABLE ORGANIC HALIDES
NORFLURAZON ORGANIC PESTICIDE
N-PROPYLBENZENE
O - CHLOROBENZYL CHLORIDE
OCTACHLORO- CYCLOPENTENE
OCTACHLORODIBENZO P DIOXIN
OCTACHLORODIBENZOFURAN
OCTYLPHENOXY POLYETHOXYETHANOL
OIL, PETROLEUM ETHER EXTRACTABLES
OIL/GREASE CALCULATED LIMIT
OLEIC ACID
ORDRAM (HYDRAM)
ORGANIC ACTIVE IN- GREDIENTS (40CFR455)
ORGANIC COMPOUNDS, CHLOROFORM EXTRACT.
ORGANIC HALIDES, TOTAL
ORGANIC PESTICIDE CHEMICALS (40CFR455)
ORGANICS, GASOLINE RANGE
ORGANICS, TOT PURGE-ABLES (METHOD 624)
ORGANICS, TOTAL
ORGANICS, TOTAL HALOGENS (TOX)
ORGANICS, TOTAL TOXIC (TTO)
ORGANICS, VOLATILE (NJAC REG. 7:23-17E)
ORGANICS-TOT VOLTILE (NJAC REG.7:23-17E)
ORTHENE
ORTHOCHLOROTOLUENE
ORTHO-CRESOL
ORTHO-XYLENE
O-TOLUIDINE
OXALIC ACID
OXYTETRACYCLINE HYDROCHLORIDE
P,P-DDE - DISSOLVED
P,P-DDT - DISSOLVED
PALLADIUM, TOTAL (AS PD)
P-AMINOBIPHENYL
PANTHALIUM, TOTAL

PARABEN (METHYL AND PROPYL)
PARACHLOROMETA CRESOL
PARA-DICHLOROBENZENE
PARAQUAT
PARATHION
PCB - 1262
PCB, TOTAL SLUDGE, SCAN CODE
PCB-1016 (AROCHLOR 1016)
PCB-1221 (AROCHLOR 1221)
PCB-1232 (AROCHLOR 1232)
PCB-1242 (AROCHLOR 1242)
PCB-1248 (AROCHLOR 1248)
PCB-1254 (AROCHLOR 1254)
PCB-1260 (AROCHLOR 1260)
PCBS IN BOTTOM DEPS. (DRY SOLIDS)
PCNB, ORGANIC PEST.
P-CRESOL
P-DIMETHYLAMINO- AZOBENZENE
PEBULATE (TILLAM)
PENDIMETHALIN ORGANIC PESTICIDE
PENTACHLOROBENZENE
PENTACHLOROETHANE
PENTACHLOROPHENOL
PENTANE, TOTAL EFFLUENT
PERFLUOROBUTANE SULFONAMIDE
PERFLUOROBUTANOIC ACID
PERFLUOROBUTANOIC SULFONATE
PERFLUOROOCTANE SULFONAMIDE
PERFLUOROOCTANE SULFONATE
PERFLUOROOCTANOIC ACID
PERMETHRIN, TOTAL
PERTHANE
PESTICIDES, GENERAL
P-ETHYLTOLUENE
PETROL HYDROCARBONS, TOTAL RECOVERABLE
PHENACETIN
PHENANTHRENE
PHENANTHRENE, DRY WEIGHT
PHENOL, SINGLE COMPOUND
PHENOLIC COMPOUNDS, SLUDGE TOTAL, DRY WEIGHT
PHENOLIC COMPOUNDS, UNCHLORINATED
PHENOLICS IN BOTTOM DEPOSITS (DRY WGT)
PHENOLICS, TOTAL RECOVERABLE
PHENOLS
PHENOLS, CHLORINATED
PHENOXY ACETIC ACID
PHENYLPROPANOLAMINE
PHENYLTOLOXAMINE
PHORATE
PHOSMET, ORGANIC PESTICIDE
PHOSPHATED PESTICIDES
PHOSPHOROTHIOIC ACID 0,0,0-TRIETHYL ESTR
PHTHALATE ESTERS
PHTHALATES, TOTAL
PHTHALIC ACID
PHTHALIC ANHYDRIDE
PIRIMICARB
PLATINUM, TOTAL (AS PT)
POLONIUM 210
POLYACRILAMIDE CHLORIDE
POLYBROMINATED BIPHENYLS
POLYBROMINATED DIPHENYL OXIDES
POLYCHLORINATED BIPHENYLS (PCBS)
POLYMETHYLACRYLIC ACID
POLY-NUCLEAR AROMATICS (POLYRAM)
POTASSIUM 40
PRIORITY POLLUTANTS TOTAL EFFLUENT
PROFENOFOS
PROMETON, ORGANIC PESTICIDE
PROMETRYN, ORGANIC PESTICIDE
PRONAMIDE, ORGANIC PESTICIDE
PROPABHLOR (RAMROD) DISSOLVED
PROPACHLOR, ORGANIC PESTICIDE
PROPANE, 2-METHOXY- 2-METHYL
PROPANIL
PROPAZINE, ORGANIC PESTICIDE
PROPRANE, TOTAL
PROPYL ACETATE
PROPYLENE OXIDE
PROPYLENGLYCOL, TOTAL
PROTACTINIUM 234, DRY WEIGHT
PURGEABLE AROMATICS METHOD 602
PURGEABLE HYDRO- CARBONS, METH. 601
PURGEABLE ORGANIC HALIDES
PYMETROZINE
PYRENE
PYRENE, DRY WEIGHT
PYRETHRINS
PYRIDINE
PYRIFENOX
QUARTERNARY AMMONIUM COMPOUNDS
QUINOLINE
RADIATION - GROSS ALPHA TOT DISSOLVED
RADIATION - GROSS ALPHA TOT SUSPENDED
RADIATION, GROSS ALPHA
RADIATION, GROSS BETA
RADIOACTIVITY
RADIOACTIVITY, GROSS
RADIUM 224
RADIUM 226 + RADIUM 228, TOTAL
RADIUM 226, DISSOLVED
RADIUM 228, TOTAL
RARE EARTH METALS, TOTAL
RATIO OF FECAL COLIFORM TO FECAL STREPOC
R-BHC (LINDANE) GAMMA

RDX, DISSOLVED
RDX, TOTAL
RESIN ACIDS, TOTAL
RESORCINOL
RHODIUM, TOTAL
ROTENONE
ROUNDUP
ROVRAL
RUBIDIUM, TOTAL (AS RB)
SAFROLE
SAMARIUM, TOTAL (AS SM IN WATER)
SELENIUM SLUDGE SOLID
SELENIUM, ACID SOLUBLE
SELENIUM, DISSOLVED (AS SE)
SELENIUM, DRY WEIGHT
SELENIUM, POTENTIALLY DISSOLVD
SELENIUM, SLUDGE, TOTAL DRY WEIGHT
SELENIUM, TOTAL (AS SE)
SELENIUM, TOTAL RECOVERABLE
SEVIN (CARBARYL) IN TISSUE
SEVIN (CARBRYL)
SILVER
SILVER IN BOTTOM DEPOSITS (DRY WGT)
SILVER TOTAL RECOVERABLE
SILVER, DISSOLVED (AS AG)
SILVER, IONIC
SILVER, POTENTIALLY DISSOLVED
SILVER, TOTAL (AS AG)
SILVER, TOTAL PER BATCH
SILVEX
SODIUM CHLORATE
SODIUM DICHROMATE
SODIUM DIMETHYL-DITHIOCARBAMATE, TOTAL
SODIUM PENTACHLORO- PHENATE
SODIUM POLYACRYLATE, TOTAL
SODIUM-O-PPTH
SOPP
SOPP, LOADING RATE
STIROFOS
STROBANE
STRONTIUM 90, TOTAL
STRONTIUM, DISSOLVED
STRONTIUM, TOTAL (AS SR)
STYRENE
STYRENE, TOTAL
SULFABENZAMIDE
SULFACETAMIDE
SULFATHIAZOLE
SULFOTEPP (BLADAFUME)
TANNIN AND LIGNIN
TCDD EQUIVALENTS
TCMTB
TEBUCONAZOLE
TEBUPIRIMFOS
TEBUTHIURON ORGANIC PESTICIDE
TECHNETIUM-99
TEFLUTHRIN
TELLURIUM, TOTAL
TEMEPHOS
TERBACIL
TERBUFOS
TERBUFOS (COUNTER) TOTAL
TERBUTHYLAZINE ORGANIC PESTICIDE
TERBUTRYN, ORGANIC PESTICIDE
TETRA SODIUM EDTA
TETRACHLORDIBENZOFURAN, 2378-(TCDF)
SED,
TETRACHLOROBENZENE
TETRACHLOROETHANE, TOTAL
TETRACHLOROETHENE
TETRACHLOROETHYLENE
TETRACHLOROETHYLENE
TETRACHLOROETHYLENE, DRY WEIGHT
TETRACHLOROGUAIACOL (4CG) IN WHOLE WATER
TETRAHYDRO-3,5-DIMETHYL-2-HYDRO-1,3,5-TH
TETRAHYDROFURAN
TETRAMETHYL AMMONIUM HYDROXIDE
TETRAMETHYLBENZENE
THALLIUM 208
THALLIUM IN BOTTOM DEPOSITS (DRY WGT)
THALLIUM, ACID SOLUBLE
THALLIUM, DISSOLVED (AS TL)
THALLIUM, POTENTIALLY DISSOLVD
THALLIUM, TOTAL (AS TL)
THALLIUM, TOTAL RECOVERABLE
THC, DRY & 02
THEOPHYLLINE
THIABENDAZOLE
THIOBENDAZOLE
THIOCARBAMATES
THIOCYANATE (AS SCN)
THIOSULFATE ION (2-)
THORIUM 230
THORIUM 232
THORIUM 232 PCI/G OF DRY SOLIDS
THORIUM 234
TIN
TIN, DISSOLVED (AS SN)
TIN, TOTAL (AS SN)
TIN, TOTAL RECOVERABLE
TIN, TRI-ORGANO-
TITANIUM, DISSOLVED (AS TI)
TITANIUM, TOTAL (AS TI)
TITANIUM, TOTAL DRY WEIGHT (AS TI)
TOLUENE
TOLUENE, DISSOLVED
TOLUENE, DRY WEIGHT
TOLUENE-2,4 -DIISOCYANITE

TOLYTRIAZOLE
TOPSIN
TOTAL ACID PRIORITY POLLUTANTS
TOTAL BASE/NEUTRAL PRIORITY POLLUTANTS
TOTAL PESTICIDES
TOTAL PHENOLS
TOTAL POLONIUM
TOTAL PURGEABLE HALOCARBONS
TOTAL TOXIC ORGANICS (TTO) (40CFR413)
TOTAL TOXIC ORGANICS (TTO) (40CFR433)
TOTAL TOXIC ORGANICS (TTO) (40CFR464A)
TOTAL TOXIC ORGANICS (TTO) (40CFR464B)
TOTAL TOXIC ORGANICS (TTO) (40CFR464C)
TOTAL TOXIC ORGANICS (TTO) (40CFR464D)
TOTAL TOXIC ORGANICS (TTO) (40CFR467)
TOTAL TOXIC ORGANICS (TTO) (40CFR468)
TOTAL TOXIC ORGANICS (TTO) (40CFR469)
TOTAL TOXIC ORGANICS (TTO) (40CFR465)
TOTAL VOLATILE PRIORITY POLLUTANTS
TOXAPHENE
TOXAPHENE, DRY WEIGHT
TOXICS, PERCENT REMOVAL
TRANS-1,2-DICHLORO- ETHYLENE
TRANS-1,3-DICHLORO PROPENE
TREFLAN (TRIFLURALIN)
TRIADIMEFON ORGANIC PESTICIDE
TRIBUTHYLAMINE
TRIBUTYLTIN
TRICHLOROBENZENE
TRICHLOROBENZENE 1,2,4 TOTAL
TRICHLOROETHANE
TRICHLOROETHENE
TRICHLOROETHYLENE
TRICHLOROETHYLENE, DISSOLVED
TRICHLOROETHYLENE, DRY WEIGHT
TRICHLOROFLUORO- METHANE
TRICHLOROGUAIACOL
TRICHLOROMETHANE
TRICHLOROPHENATE- (ISOMERS)
TRICHLOROPHENOL
TRICHLOROTOLUENE
TRICHLOROTRIFLUORO- ETHANE
TRICHOROFON
TRIETHANOLAMINE
TRIETHYLAMINE
TRIFLURALIN (C13H16F3N3O4)
TRIHALOMETHANE, TOT.
TRIMETHYL BENZENE
TRINITROTOLUENE (TNT), DISSOLVED
TRINITROTOLUENE (TNT), TOTAL
TRIPHENYL PHOSPHATE
TRITHION
TRITIUM (1 H3), TOTAL
TRITIUM, TOTAL
TRITIUM, TOTAL COUN-TING ERROR (PC/L)
TRITIUM, TOTAL NET INCREASE H-3 UNITS
TUNGSTEN, DISSOLVED
TUNGSTEN, TOTAL
U-236 TOTAL WTR
URANIUM 235, DRY WEIGHT
URANIUM 238
URANIUM, 235 TOTAL
URANIUM, 238 TOTAL
URANIUM, NATURAL, DISSOLVED
URANIUM, NATURAL, TOTAL
URANIUM, NATURAL, TOTAL (IN PCI/L)
URANIUM, POTENTIALLY DISSOLVD
URANIUM, TOTAL AS U308
URANYL-ION
UREA
VERNAM (S-PROPYLDI-PROPYLTHIOCARBAMATE)
VINYL ACETATE
VINYL CHLORIDE
VINYL CHLORIDE, DRY WEIGHT
VOLATILE COMPOUNDS, (GC/MS)
VOLATILE FRACTION ORGANICS (EPA 624)
VOLATILE HALOGENATED HYDROCARBONS
VOLATILE HALOGENATED ORGANICS (VHO), TOT
VOLATILE HYDROCARBONS
VOLATILE ORGANIC COMPOUND (VOC)
VOLATILE ORGANICS DETECTED
XANTHATES
XC POLYMER IN DRILLING FLUIDS
XYLENE
XYLENE, PARA- TOTAL
ZINC
ZINC IN BOTTOM DEPOSITS (DRY WGT)
ZINC SLUDGE SOLID
ZINC SLUDGE TOTAL
ZINC TOTAL RECOVERABLE
ZINC, DISSOLVED (AS ZN)
ZINC, DRY WEIGHT
ZINC, PERCENT REMOVAL
ZINC, POTENTIALLY DISSOLVED
ZINC, TOTAL
ZINC, TOTAL (AS ZN)
ZIRAM, ORGANIC PESTICIDE
ZIRCONIUM, TOTAL