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For Petitioner California Sportfishing Protection Alliance

BEFORE THE STATE WATER RESOURCES CONTROL BOARD

**In the Matter of Waste Discharge Requirements)
For City of Sacramento, Combined Wastewater)
Collection and Treatment System; California)
Regional Water Quality Control Board – Central)
Valley Region Order No. R5-2010-0004)
NPDES No. CA0079111)**

PETITION FOR REVIEW

Pursuant to Section 13320 of California Water Code and Section 2050 of Title 23 of the California Code of Regulations (CCR), California Sportfishing Protection Alliance (“CSPA” or “petitioner”) petitions the State Water Resources Control Board (State Board) to review and vacate the final decision of the California Regional Water Quality Control Board for the Central Valley Region (“Regional Board”) in adopting Waste

Discharge Requirements (NPDES No. CA0079111) for City of Sacramento, Combined Wastewater Collection and Treatment System, on 28 January 2010. See Order No. R5-2010-0004. The issues raised in this petition were raised in timely written comments.

1. NAME AND ADDRESS OF THE PETITIONERS:

California Sportfishing Protection Alliance
3536 Rainier Avenue
Stockton, California 95204
Attention: Bill Jennings, Executive Director

2. THE SPECIFIC ACTION OR INACTION OF THE REGIONAL BOARD WHICH THE STATE BOARD IS REQUESTED TO REVIEW AND A COPY OF ANY ORDER OR RESOLUTION OF THE REGIONAL BOARD WHICH IS REFERRED TO IN THE PETITION:

Petitioner seeks review of Order No. R5-2010-0004, Waste Discharge Requirements (NPDES No. CA0079111) for the City of Sacramento, Combined Wastewater Collection and Treatment System. A copy of the adopted Order is attached as Attachment No. 1.

3. THE DATE ON WHICH THE REGIONAL BOARD ACTED OR REFUSED TO ACT OR ON WHICH THE REGIONAL BOARD WAS REQUESTED TO ACT:

28 January 2010

4. A FULL AND COMPLETE STATEMENT OF THE REASONS THE ACTION OR FAILURE TO ACT WAS INAPPROPRIATE OR IMPROPER:

CSPA submitted a detailed comment letter on 4 January 2010. That letter and the following comments set forth in detail the reasons and points and authorities why CSPA believes the Order fails to comport with statutory and regulatory requirements. The specific reasons the adopted Orders are improper are:

The City of Sacramento owns and operates a combined sewer system (CSS) that conveys domestic and commercial wastewater and storm water runoff from 7,510 acres (approximately 334 miles of sewer pipe) in downtown Sacramento, East Sacramento, and Land Park areas. The Discharger also owns and operates a separate sanitary sewer system that conveys domestic and commercial wastewater from 3,690 acres (approximately 566 miles of sewer pipe) from parts of the City surrounding the CSS to the north, east, and south. A portion of the flow from the separate sanitary sewer system flows into the CSS; the remainder flows by gravity or is pumped to the Regional Interceptors to the Sacramento Regional County Sanitation District's regional

wastewater treatment plant (SRWTP). The entire collection system serves approximately 300,000 people.

A. The City of Sacramento has established a Dismal Record of Compliance with the Clean Water Act and US EPA's Combined Sewer Overflow Policy.

On April 19th 1994 US EPA published (Federal Register (Vol. 59. No. 75)) a "Combined Sewer Overflow (CSO) Control Policy." The Policy requires that permittees with combined sewer systems (CSSs) that have CSOs should immediately undertake a process to accurately characterize their CSS and CSO discharges, demonstrate implementation of minimum technology-based controls identified in the Policy, and develop long-term CSO control plans which evaluate alternatives for attaining compliance with the CWA, including compliance with water quality standards and protection of designated uses. Once the long-term CSO control plans are completed, permittees will be responsible to implement the plans' recommendations as soon as practicable. Permittees with CSOs should submit appropriate documentation demonstrating implementation of nine minimum controls including any proposed schedules for completing minor construction activities. CSS permits must contain monitoring for compliance with water quality standards and a reopener clause authorizing the NPDES authority to reopen and modify the permit if it is determined that the CSO controls fail to meet water quality standards or protect designated uses. The nine minimum controls are:

1. Proper operation and regular maintenance programs for the sewer system and the CSUs;
2. Maximum use of the collection system for storage;
3. Review and modification of pretreatment requirements to assure CSO impacts are minimized;
4. Maximization of flow to the POTW for treatment;
5. Prohibition of CSOs during dry weather;
6. Control of solid and floatable materials in CSOs;
7. Pollution prevention:
8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts, and
9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

Beginning on page F-8 of the Permit is a Compliance Summary. The Compliance Summary is heavily reliant on a 13 December 2005 Final Draft Clean Water Act Compliance Evaluation Report prepared by US EPA. US EPA's report documented that the Discharger failed to comply with several of the USEPA CSO Control Policy Nine Minimum Controls, as specified in Attachment C to Order No. 5-01-258. USEPA found deficiencies in the City's programs and practices under control measure #1 (proper operations and maintenance), measure #2 (maximize use of the collection system for storage), measure #3 (pretreatment program), measure #6 (control solid and floatable material), measure #8 (public notification), and measure #9 (measuring the efficacy of CSO controls). Other findings by US EPA include:

- The Discharger had 10 CSO discharge events to the Sacramento River over the last 3 years. In storm year 2002/2003, the City exceeded the total suspended solids effluent limit at CSO Discharge Point No. 006.
- The Discharger's hydraulic model estimates that many parts of the CSS service area remain at risk for outflows and flooding from a 10-year storm. It is likely that outflows and flooding will result from smaller storms, but it not known how small of a storm will cause CSS outflows.
- The Discharger has not adequately documented its progress towards attaining the LTCP goals related to outflows and street flooding. It is not known how many CSS outflows have occurred or if outflows are decreased because the Discharger does not keep records of outflows.
- The Discharger has not identified all of the additional projects needed to meet the interim or final LTCP goals of controlling outflows resulting from 5-year and 10- year storms.
- The Discharger's spill response plan does not include adequate procedures for many important spill response activities.
- In fiscal year 2004/2005, the Discharger recorded 102 sewage spills totaling 7,435 gallons (these figures do not include the outflows on September 19, 2004).
- The Discharger does not have a program to regulate restaurant grease discharges to the sewer system. The Discharger has not evaluated what impact restaurant grease is having on the Discharger's sewer system.
- The Discharger lacks data on the condition of its sewers. Fiscal Year 2004/2005, when the Discharger inspected 31 miles of sewer pipes, was the first year that the Discharger

had an established procedure for documenting pipe condition findings.

- The Discharger has rehabilitated or replaced about 3 percent of its collection system over the last 10 to 20 years. At this rate, it will take several hundred years to renew the Discharger's sewer infrastructure compared to a useful life expectancy of about 100 years.

On 25 August 2008 the Regional Water Board issued a Record of Violations (ROV) to the Discharger for periodic violations of effluent limitations for chlorine residual, TSS, and pH for the period January 2001 through January 2008. On 10 November 2008 the Regional Water Board issued an Administrative Civil Liability Complaint (R5-2008-0609) based on the ROV.

Beginning on page F-12 of the Permit, Planned Changes, it is documented that: "The most recent City Utilities Capital Improvement Program (CIP) provides the projected expenditures for the CSS Improvement Plan (i.e., the July 1995 Combined Sewer System Improvement Plan) for 2008 through 2013. The CIP acknowledges the total cost for the CSS Improvement Plan is \$132 million; the total budget for sewer programs for 2008/2009 was \$4.1 million (which includes budgets for the combined system; however, it is uncertain what the total funding is specifically for the combined systems). The CIP also described \$63.5 million in additional funding for the CSS Improvement Plan, including \$10.5 million in federal grants and \$53 million in loans from the State Revolving Fund. Finally, the CIP budget includes additional funding for the Combined System Improvement Plan Update."

B. The Combined Sewer Overflows from the City of Sacramento degrade the Beneficial Uses of the Sacramento River and Exceed Water Quality Standards contrary to US EPA's Combined Sewer Overflow Control Policy.

The Permit, page 6 states that: "According to the CSO Control Policy, a permittee is required to develop and implement a long-term CSO control plan which evaluates alternatives for attaining compliance with the CWA, including compliance with applicable water quality standards and protection of designated uses. It further states that once long-term CSO control plans are completed, permittees are responsible for implementing the plan to ensure compliance with applicable water quality standards."

The Permit identifies the designated beneficial uses of the Sacramento river as Municipal and domestic supply (MUN); agricultural supply, including stock watering (AGR); industrial process (PROC) and service supply (IND); water contact recreation (REC-1); non-contact water recreation (REC-2); warm freshwater aquatic habitat (WARM), cold freshwater aquatic habitat (COLD); warm migration, cold migration (MIGR); warm spawning habitat (SPWN), wildlife habitat (WILD); and navigation (NAV).

The Permit contains a summary, Table F-7, of toxic pollutant monitoring for storm water years 2002 through 2008 for dissolved copper, lead, zinc and the pesticides diazinon, chlorpyrifos and diuron.

- The discharge is toxic to aquatic life.
 - Dissolved copper was sampled in the discharge at a maximum of 99 ug/l (at discharge point 002), 22 ug/l (at discharge point 006) and 13 ug/l (at discharge points 004 and 005). The water quality standard for copper to protect aquatic life is 5.0 ug/l, assuming a hardness of 50 mg/l. The discharge clearly exceeds toxic levels.
 - Dissolved lead was sampled in the discharge at a maximum of 5.1 ug/l (at discharge point 006). The water quality standard for lead is 1.8 ug/l assuming a hardness of 50 mg/l. The discharge clearly exceeds toxic levels.
 - The minimum detection levels for sampling of lead was 5.0 ug/l which exceeds the toxic standard of 1.8. The discharge could have exceeded toxic levels at the other discharge points but would not be documented due to the elevated detection levels.
 - Dissolved zinc was sampled in the discharge at a maximum of 360 ug/l (at discharge point 002) and 200 ug/l (at discharge point 006). The water quality standard for zinc to protect aquatic life is 65.7.0 ug/l, assuming a hardness of 50 mg/l. The discharge clearly exceeds toxic levels.
 - The pesticide diuron was detected at 4.1 (at discharge point 002) and 1.8 ug/l (at discharge point 006). The Basin Plan water quality objective is for non-detectable concentrations.
 - The documented discharge of diuron exceeds the Permit Receiving Water Limitation, No. 9 for Pesticides which prohibits total identifiable persistent chlorinated hydrocarbon pesticides to be present in the water column at concentrations detectable within the accuracy of analytical methods approved by USEPA or the Executive Officer
 - The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) exempts combined sewer systems from compliance with the California Toxics Rule (CTR). The CTR contains water quality standards, many of which are for toxic pollutants. Copper, lead and zinc are CTR regulated constituents. Although the SIP exempts the

discharge from compliance with the CTR, the discharge may not degrade the aquatic life beneficial uses and cause toxicity. Section 122.44(d) of 40 CFR requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. The Permit must contain effluent Limitations for copper, lead, zinc and pesticides.

- The discharge of toxic constituents in toxic concentrations exceeds the Permit Receiving Water Limitation, No. 16 for Toxicity which prohibits the discharge of toxic substances to be present, individually or in combination, in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.
- The CTR contains a long list of toxic pollutants that are common to wastewater discharges. The City of Sacramento has apparently not, and has not been required to, characterized the discharge for other toxic constituents that are common to wastewater discharges. Although exempted by the SIP for compliance with CTR toxic water quality standards, the toxic standards are applicable if the discharge is toxic to aquatic life. The Permit does not contain sufficient information regarding potential toxic pollutants to adequately regulate the discharge.
- The Regional Board is “uncertain” whether the discharge is toxic and therefore cannot state that the aquatic life beneficial use of the Sacramento River is protected. The Permit states that: “The Basin Plan contains a narrative toxicity objective that states, “All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.” (Basin Plan at page III-8.00) The Basin Plan also states that, “...effluent limits based upon acute biotoxicity tests of effluents will be prescribed where appropriate...”. USEPA Region 9 provided guidance for the development of acute toxicity effluent limitations in the absence of numeric water quality objectives for toxicity in its document titled "Guidance for NPDES Permit Issuance", dated February 1994. In section B.2. "Toxicity Requirements" (pgs. 14-15) it states that, "In the absence of specific numeric water quality objectives for acute and chronic toxicity, the narrative criterion 'no toxics in toxic amounts' applies. Achievement of the narrative criterion, as applied herein, means that ambient waters shall not demonstrate for acute toxicity: 1) less than 90% survival, 50% of the time, based on the monthly median, or 2) less than 70% survival, 10% of the time, based on any monthly median. For chronic toxicity, ambient waters shall not demonstrate a test result of greater than 1 TUc." No WET data exists for any of the CSO discharges from the Facility. Therefore, it is uncertain whether

reasonable potential exists to exceed the Basin Plan narrative toxicity objective. Also due to the short-term, periodic nature of the discharges, the Regional Water Board is primarily concerned with the potential short-term, acute, toxicity in the CSO discharges. As part of the CSO Water Quality Assessment required in Section VI.C.2.a. of the Order, the Discharger will propose and implement a monitoring plan that will include an appropriate schedule for WET monitoring to assess the potential for the CSO discharges to exceed the narrative toxicity objective.” (Emphasis added)

- Ammonia is present in domestic wastewater. The City of Sacramento’s wastewater system contains no means of removing ammonia. Ammonia is toxic to aquatic life. Ammonia concentrations will be diluted by the stormwater in the combined system. However, the Regional Board has no knowledge whether ammonia is present in the discharge at toxic concentrations. It is reasonable to assume that ammonia concentrations in the discharge will be present exceeding toxic levels. The Permit fails to protect the aquatic life beneficial use of the receiving water by failing to include an effluent Limitation for ammonia.
- The Permit contains Effluent Limitations for fecal coliform organisms that are not protective of the contact recreational (REC-1) beneficial uses of the Sacramento River. The Permit contains Effluent Limitation for:

“d. Fecal Coliform Organisms. Effluent total coliform organisms shall not exceed: i. 1,000 MPN/100 mL in any three consecutive samples; and ii. 200 MPN/100 mL, as a storm year (1 October through 30 September) median.”

Since the title “fecal coliform organisms” conflicts with the following sentence for “total coliform organisms” it is assumed that the title is correct and the intent is to regulate fecal coliform organisms.

There is no technical basis for the Permit bacteria (coliform organisms) limitation. The Basin Plan contains a water quality standard for Bacteria of: “In waters designated for contact recreation (REC-1), the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200/100 ml, nor shall more than ten percent of the total number of samples taken during any 30-day period exceed 400/100 ml.” The Permit limitation is significantly less stringent than the Basin Plan water quality objective.

The Basin Plan bacteria objective was based on the coliform water quality index used during a USPHS epidemiological study that was translated into a fecal coliform index in

the mid- '60s by using the ratio of fecal coliforms to total coliforms at the location on the Ohio River where the original study had been conducted in 1949. In 1986 US EPA developed (EPA 440/5-86-001) Quality Criteria for Water. EPA's evaluation of the bacteriological data indicated that using the fecal coliform indicator group at the maximum geometric mean of 200 per 100 ml, recommended in Quality Criteria for water would cause an estimated 8 illnesses per 1,000 swimmers at freshwater beaches. EPA then recommended that: "Based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period), the geometric mean of the indicated bacterial densities should not exceed one or the other of the following: (1) E. coli 126 per 100 ml; or enterococci 33 per 100 ml; no sample should exceed a one sided confidence limit (C.L.) calculated using the following as guidance: designated bathing beach 75% C.L., moderate use for bathing 82% C.L., light use for bathing 90% C.L. infrequent use for bathing 95% C.L., based on a site-specific log standard deviation, or if site data are insufficient to establish a log standard deviation, then using 0.4 as the log standard deviation for both indicators." The US EPA criteria were not based on sewage discharges.

The California Department of Public Health (DPH) has developed reclamation criteria, California Code of Regulations, Title 22, Division 4, Chapter 3 (Title 22), for the reuse of wastewater. Title 22 requires that for recreational impoundments, spray irrigation of food crops, parks, playgrounds, schoolyards, and other areas of similar public access, wastewater be adequately disinfected, oxidized, coagulated, clarified, and filtered, and that the effluent total coliform levels not exceed 2.2 MPN/100 ml as a 7-day median. Title 22 specifically requires that recycled water used as a source of water supply for nonrestricted recreational impoundments be disinfected tertiary recycled water that has been subjected to conventional treatment. A nonrestricted recreational impoundment is defined as "...an impoundment of recycled water, in which no limitations are imposed on body-contact water recreational activities." Title 22 is not directly applicable to surface waters; however, an equivalent level of treatment to that required by DHS's reclamation criteria because would be necessary to protect the non-restricted recreational use of the Sacramento River. The science behind DPH's is to protect contact recreation uses regardless of whether discharging to the Sacramento River or another recreational impoundment. The Permit limitation for coliform organisms is not protective of the contact recreational (REC-1) beneficial use of the receiving stream.

- The Permit contains an erroneous statement that the effluent Limitations for coliform organisms are protective of the municipal (MUN) beneficial use of the Sacramento River. Pages F-30 and F-31 discuss pathogens with regard to protecting beneficial uses, stating that: "Because CSO discharges typically occur for relatively short durations and only during extreme storm events, it is unlikely that recreational activities will occur

concurrently with the CSO discharges. However, protection of the MUN use will be provided by carrying over the existing effluent limitations and discharge requirements to control the discharge of coliform bacteria. These coliform limits are imposed to protect the beneficial uses of the receiving water. These effluent limitations will apply to the Pioneer Reservoir and CWTP discharge points.” The letter cited by the Regional Board from DPH regarding 20-to-1 dilution only applies to contact recreation and irrigation of food crops. Despite the Regional Board’s contention, there is no recommendation presented by the DPH regarding what level of pathogens from wastewater treatment plants will protect the municipal (MUN) beneficial use of the Sacramento River. The discharge of primary treated sewage is not equivalent to secondary treated wastewater and any recommendation by DPH regarding protection of recreational and irrigation uses does not apply to drinking water. There is no information in the Permit that the drinking water beneficial use is protected.

Also with regard to drinking water uses: “The Basin Plan states that material and relevant information, including numeric criteria, and recommendations from other agencies and scientific literature will be utilized in evaluating compliance with the narrative toxicity objective. The narrative chemical constituents objective states that waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses. At a minimum, “...water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs)” in Title 22 of CCR.” The Permit does not contain an assessment of drinking water maximum contaminant levels to show that the drinking water beneficial use of the Sacramento River is protected.

- There is no information in the Permit regarding constituents of concern, such as salts or boron, regarding the irrigated agricultural beneficial of the Sacramento River. Absent any data the Regional Board cannot conclude that the agricultural beneficial use is protected.
- C. The Sacramento River is 303(d) listed (impaired) for unknown toxicity. As cited above copper, lead, zinc and pesticides were sampled above toxic levels. The Permit cites that WET sampling has not been conducted and the Regional Board “is uncertain” whether reasonable potential exists for the discharge to exceed the Basin Plan water quality objective for toxicity. The discharge at a minimum contributes to the unknown toxicity in the Sacramento River.**
- D. The Permit contains an inadequate antidegradation analysis that does not comply with the requirements of Section 101(a) of the Clean Water Act, Federal Regulations 40 CFR § 131.12, the State Board’s Antidegradation Policy (Resolution 68-16) and California Water Code (CWC) Sections 13146 and 13247.**

The construction of each and any new structure within the service area brings additional domestic wastewater flow. Each expansion of impermeable surfaces brings more stormwater flow. Therefore it can be concluded that the flows are continuously expanding. The Permit has no flow limitation. Contrary to this, the Permit Fact Sheet states that: "4. Satisfaction of Antidegradation Policy, This Order does not allow for an increase in flow or mass of pollutants to the receiving water. Therefore, a complete antidegradation analysis is not necessary." The Regional Board has no record of flow rate or mass of discharges from the City of Sacramento combined sewer system. The Regional Board assessment that flows are not increasing is not based on substance and contrary to the fact that Sacramento is a growing community. The Permit contains no antidegradation analysis.

CWC Sections 13146 and 13247 require that the Board in carrying out activities which affect water quality shall comply with state policy for water quality control unless otherwise directed by statute, in which case they shall indicate to the State Board in writing their authority for not complying with such policy. The State Board has adopted the Antidegradation Policy (Resolution 68-16), which the Regional Board has incorporated into its Basin Plan. The Regional Board is required by the CWC to comply with the Antidegradation Policy.

Section 101(a) of the Clean Water Act (CWA), the basis for the antidegradation policy, states that the objective of the Act is to "restore and maintain the chemical, biological and physical integrity of the nation's waters." Section 303(d)(4) of the CWA carries this further, referring explicitly to the need for states to satisfy the antidegradation regulations at 40 CFR § 131.12 before taking action to lower water quality. These regulations (40 CFR § 131.12(a)) describe the federal antidegradation policy and dictate that states must adopt both a policy at least as stringent as the federal policy as well as implementing procedures.

California's antidegradation policy is composed of both the federal antidegradation policy and the State Board's Resolution 68-16 (State Water Resources Control Board, Water Quality Order 86-17, p. 20 (1986) ("Order 86-17"); Memorandum from Chief Counsel William Attwater, SWRCB to Regional Board Executive Officers, "federal Antidegradation Policy," pp. 2, 18 (Oct. 7, 1987) ("State Antidegradation Guidance")). As a state policy, with inclusion in the Water Quality Control Plan (Basin Plan), the antidegradation policy is binding on all of the Regional Boards (Water Quality Order 86-17, pp. 17-18).

Implementation of the state's antidegradation policy is guided by the State Antidegradation Guidance, SWRCB Administrative Procedures Update 90-004, 2 July 1990 ("APU 90-004") and USEPA Region IX, "Guidance on Implementing the Antidegradation Provisions of 40 CFR 131.12" (3 June 1987) ("Region IX Guidance"), as well as Water Quality Order 86-17.

The Regional Board must apply the antidegradation policy whenever it takes an action that will lower water quality (State Antidegradation Guidance, pp. 3, 5, 18, and Region IX Guidance, p. 1). Application of the policy does not depend on whether the action will actually impair beneficial uses (State Antidegradation Guidance, p. 6). Actions that trigger use of the antidegradation policy include issuance, re-issuance, and modification of NPDES and Section 404 permits and waste discharge requirements, waiver of waste discharge requirements, issuance of variances, relocation of discharges, issuance of cleanup and abatement orders, increases in discharges due to industrial production and/or municipal growth and/or other sources, exceptions from otherwise applicable water quality objectives, etc. (State Antidegradation Guidance, pp. 7-10, Region IX Guidance, pp. 2-3). Both the state and federal policies apply to point and nonpoint source pollution (State Antidegradation Guidance p. 6, Region IX Guidance, p. 4).

The federal antidegradation regulations delineate three tiers of protection for waterbodies. Tier 1, described in 40 CFR § 131.12(a)(1), is the floor for protection of all waters of the United States (48 Fed. Reg. 51400, 51403 (8 Nov. 1983); Region IX Guidance, pp. 1-2; APU 90-004, pp. 11-12). It states that “[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.” Uses are “existing” if they were actually attained in the water body on or after November 28, 1975, or if the water quality is suitable to allow the use to occur, regardless of whether the use was actually designated (40 CFR § 131.3(e)). Tier 1 protections apply even to those waters already impacted by pollution and identified as impaired. In other words, already impaired waters cannot be further impaired.

Tier 2 waters are provided additional protections against unnecessary degradation in places where the levels of water quality are better than necessary to support existing uses. Tier 2 protections strictly prohibit degradation unless the state finds that a degrading activity is: 1) necessary to accommodate important economic or social development in the area, 2) water quality is adequate to protect and maintain existing beneficial uses and 3) the highest statutory and regulatory requirements and best management practices for pollution control are achieved (40 CFR § 131.12(a)(2)). Cost savings to a discharger alone, absent a demonstration by the project proponent as to how these savings are “necessary to accommodate important economic or social development in the area,” are not adequate justification for allowing reductions in water quality (Water Quality Order 86-17, p. 22; State Antidegradation Guidance, p. 13). If the waterbody passes this test and the degradation is allowed, degradation must not impair existing uses of the waterbody (48 Fed. Reg. 51403). Virtually all waterbodies in California may be Tier 2 waters since the state, like most states, applies the antidegradation policy on a parameter-by-parameter basis, rather than on a waterbody basis (APU 90-004, p. 4). Consequently, a request to discharge a particular chemical to a river, whose level of that chemical was better than the state standards, would trigger a Tier 2 antidegradation review even if the river was already impaired by other chemicals.

Tier 3 of the federal antidegradation policy states “[w]here high quality waters constitute an outstanding national resource, such as waters of national and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water shall be maintained and protected (40 CFR § 131.12(a)(3)). These Outstanding National Resource Waters (ONRW) are designated either because of their high quality or because they are important for another reason (48 Fed. Reg. 51403; State Antidegradation Guidance, p. 15). No degradation of water quality is allowed in these waters other than short-term, temporary changes (Id.). Accordingly, no new or increased discharges are allowed in either ONRW or tributaries to ONRW that would result in lower water quality in the ONRW (EPA Handbook, p. 4-10; State Antidegradation Guidance, p. 15). Existing antidegradation policy already dictates that if a waterbody “should be” an ONRW, or “if it can be argued that the waterbody in question deserves the same treatment [as a formally designated ONRW],” then it must be treated as such, regardless of formal designation (State Antidegradation Guidance, pp. 15-16; APU 90-004, p. 4). Thus the Regional Board is required in each antidegradation analysis to consider whether the waterbody at issue should be treated as an ONRW. It should be reiterated that waters cannot be excluded from consideration as an ONRW simply because they are already “impaired” by some constituents. By definition, waters may be “outstanding” not only because of pristine quality, but also because of recreational significance, ecological significance or other reasons (40 CFR §131.12(a)(3)). Waters need not be “high quality” for every parameter to be an ONRW (APU 90-004, p. 4). For example, Lake Tahoe is on the 303(d) list due to sediments/siltation and nutrients, and Mono Lake is listed for salinity/TDC/chlorides but both are listed as ONRW.

The State Board’s APU 90-004 specifies guidance to the Regional Boards for implementing the state and federal antidegradation policies and guidance. The guidance establishes a two-tiered process for addressing these policies and sets forth two levels of analysis: a simple analysis and a complete analysis. A simple analysis may be employed where a Regional Board determines that: 1) a reduction in water quality will be spatially localized or limited with respect to the waterbody, e.g. confined to the mixing zone; 2) a reduction in water quality is temporally limited; 3) a proposed action will produce minor effects which will not result in a significant reduction of water quality; and 4) a proposed activity has been approved in a General Plan and has been adequately subjected to the environmental and economic analysis required in an EIR. A complete antidegradation analysis is required if discharges would result in: 1) a substantial increase in mass emissions of a constituent; or 2) significant mortality, growth impairment, or reproductive impairment of resident species. Regional Boards are advised to apply stricter scrutiny to non-threshold constituents, i.e., carcinogens and other constituents that are deemed to present a risk of source magnitude at all non-zero concentrations. If a Regional Board cannot find that the above determinations can be reached, a complete analysis is required.

Even a minimal antidegradation analysis would require an examination of: 1) existing applicable water quality standards; 2) ambient conditions in receiving waters compared to standards; 3)

incremental changes in constituent loading, both concentration and mass; 4) treatability; 5) best practicable treatment and control (BPTC); 6) comparison of the proposed increased loadings relative to other sources; 7) an assessment of the significance of changes in ambient water quality and 8) whether the waterbody was a ONRW. A minimal antidegradation analysis must also analyze whether: 1) such degradation is consistent with the maximum benefit to the people of the state; 2) the activity is necessary to accommodate important economic or social development in the area; 3) the highest statutory and regulatory requirements and best management practices for pollution control are achieved; and 4) resulting water quality is adequate to protect and maintain existing beneficial uses. A BPTC technology analysis must be done on an individual constituent basis.

Any antidegradation analysis must comport with implementation requirements in State Board Water Quality Order 86-17, State Antidegradation Guidance, APU 90-004 and Region IX Guidance. The conclusory, unsupported, undocumented statements in the Permit are no substitute for a defensible antidegradation analysis.

The antidegradation review process is especially important in the context of waters protected by Tier 2. See EPA, Office of Water Quality Regulations and Standards, *Water Quality Standards Handbook*, 2nd ed. Chapter 4 (2nd ed. Aug. 1994). Whenever a person proposes an activity that may degrade a water protected by Tier 2, the antidegradation regulation requires a state to: (1) determine whether the degradation is “necessary to accommodate important economic or social development in the area in which the waters are located”; (2) consider less-degrading alternatives; (3) ensure that the best available pollution control measures are used to limit degradation; and (4) guarantee that, if water quality is lowered, existing uses will be fully protected. 40 CFR § 131.12(a)(2); EPA, Office of Water Quality Regulations and Standards, *Water Quality Standards Handbook*, 2nd ed. 4-1, 4-7 (2nd ed. Aug. 1994). These activity-specific determinations necessarily require that each activity be considered individually.

For example, the APU 90-004 states:

“Factors that should be considered when determining whether the discharge is necessary to accommodate social or economic development and is consistent with maximum public benefit include: a) past, present, and probably beneficial uses of the water, b) economic and social costs, tangible and intangible, of the proposed discharge compared to benefits. The economic impacts to be considered are those incurred in order to maintain existing water quality. The financial impact analysis should focus on the ability of the facility to pay for the necessary treatment. The ability to pay depends on the facility’s source of funds. In addition to demonstrating a financial impact on the publicly – or privately – owned facility, the analysis must show a significant adverse impact on the community. The long-term and short-term socioeconomic impacts of maintaining existing water quality must be considered. Examples of social and economic parameters that could be

affected are employment, housing, community services, income, tax revenues and land value. To accurately assess the impact of the proposed project, the projected baseline socioeconomic profile of the affected community without the project should be compared to the projected profile with the project. . .EPA's Water Quality Standards Handbook (Chapter 5) provides additional guidance in assessing financial and socioeconomic impacts”

There is nothing resembling an economic or socioeconomic analysis in the Permit. There are viable alternatives that have never been analyzed. The evaluation contains no comparative costs. As a rule-of-thumb, USEPA recommends that the cost of compliance should not be considered excessive until it consumes more than 2% of disposable household income in the region. This threshold is meant to suggest more of a floor than a ceiling when evaluating economic impact. In the Water Quality Standards Handbook, USEPA interprets the phrase “necessary to accommodate important economic or social development” with the phrase “substantial and widespread economic and social impact.”

The antidegradation analysis must discuss the relative economic burden as an aggregate impact across the entire region using macroeconomics. Considering the intrinsic value of the Delta to the entire state and the potential effects upon those who rely and use Delta waters, it must also evaluate the economic and social impacts to water supply, recreation, fisheries, etc. from the Discharger's degradation of water quality in the Delta. Nor has the case been made that there is no alternative for necessary housing other than placing it where its wastewater must discharge directly into sensitive but seriously degraded waters. It is unfortunate that the agency charged with implementing the Clean Water Act has apparently decided it is more important to protect the polluter than the environment.

There is nothing in the Permit resembling an alternatives analysis evaluating less damaging and degrading alternatives. Unfortunately, the Permit fails to evaluate and discuss why there is no alternative other than discharging to surface waters. Other communities have successfully disposed of wastes without discharging additional pollutants to degraded rivers. A proper alternatives analysis would cost out various alternatives and compare each of the alternatives' impacts on beneficial uses.

There is nothing resembling an analysis buttressing the unsupported claim that BPTC is being provided. An increasing number of wastewater treatment plants around the country and state are employing reverse-osmosis (RO), or even RO-plus. Clearly, micro or nano filtration can be considered BPTC for wastewater discharges of impairing pollutants into critically sensitive ecological areas containing listed species that are already suffering serious degradation. The City does not meet the federally mandated minimum secondary level of treatment. If this is not the case, the antidegradation analysis must explicitly detail how and why a primary treatment system that facilitate increased mass loadings of impairing constituents can be considered BPTC.

There is nothing in the Permit resembling an analysis that ensures that existing beneficial uses are protected. While the Permit identifies the constituents that are included on the 303(d) list as impairing receiving waters, it fails to discuss how and to what degree the identified beneficial uses will be additionally impacted by the discharge. Nor does the Permit analyze the incremental and cumulative impact of increased loading of non-impairing pollutants on beneficial uses. In fact, there is almost no information or discussion on the composition and health of the identified beneficial uses. Any reasonably adequate antidegradation analysis must discuss the affected beneficial uses (i.e., numbers and health of the aquatic ecosystem; extent, composition and viability of agricultural production; people depending upon these waters for water supply; extent of recreational activity; etc.) and the probable effect the discharge will have on these uses.

Alternatively, Tier 1 requires that existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. By definition, any increase in the discharge of impairing pollutants to impaired waterways unreasonably degrades beneficial uses and exceeds applicable water quality standards. Prohibition of additional mass loading of impairing pollutants is a necessary stabilization precursor to any successful effort in bringing an impaired waterbody into compliance.

The State Board has clearly articulated its position on increased mass loading of impairing pollutants. In Order WQ 90-05, the Board directed the San Francisco Regional Board on the appropriate method for establishing mass-based limits that comply with state and federal antidegradation policies. That 1990 order stated “[I]n order to comply with the federal antidegradation policy, the mass loading limits should also be revised, based on mean loading, concurrently with the adoption of revised effluent limits. The [mass] limits should be calculated by multiplying the [previous year’s] annual mean effluent concentration by the [four previous year’s] annual average flow (Order WQ 90-05, p. 78). USEPA points out, in its 12 November 1999 objection letter to the San Francisco Regional Board concerning Tosco’s Avon refinery, that ‘[a]ny increase in loading of a pollutant to a water body that is impaired because of that pollutant would presumably degrade water quality in violation of the applicable antidegradation policy.’”

Any project that allows a single new community to artificially minimize waste management costs by externalizing the disposal of wastes to already degraded waterways that are part of the common property right of all 36 million Californians has not met the test of “maximum benefit of the people of the State” and cannot be consistent with state and federal antidegradation policies. The continued pollutant mass loading will inescapably and detrimentally affect aquatic life, contribute to violations of water quality standards and increase the risks and costs to the millions of people who depend upon the Delta for their drinking/irrigation/recreation water. Any increase housing and/or economic expansion facilitated by the Permit will be at the expense of

other communities that will incur the consequences of larger load reductions when TMDL load allocations are instituted.

The antidegradation analysis in the Permit is not simply deficient, it is literally nonexistent. NPDES permits must include any more stringent effluent limitation necessary to implement the Regional Board Basin Plan (Water Code 13377). The Permit fails to properly implement the Basin Plan's Antidegradation Policy.

E. The Permit requires:

“B. Notification Requirements

1. For any CSS outflow that results in a discharge to a drainage channel or a surface water, the Discharger shall, as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify CALEMA, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the Regional Water Board.
2. As soon as possible, but no later than twenty-four (24) hours after becoming aware of a CSS outflow that results in a discharge to a drainage channel or a surface water, the Discharger shall submit to the appropriate Regional Water Quality Control Board a certification that CALEMA and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.”

The eighth of US EPA's nine minimum controls is that: “8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts.” The Permit requirements do not inform the public. The City should be required to post the Sacramento River at all public access points and inform local TV and radio station for all discharges to surface waters from their system. The Permit was revised by late revision to require that the City “consider” but not requiring notifying the public.

F. The Permit does not comply with water quality standards and objectives contained in the Basin Plan.

Bacteria

In waters designated for contact recreation (REC-1), the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200/100 ml, nor shall more than ten percent of the total number of samples taken during any 30-day period exceed 400/100 ml. The Permit limitation for fecal coliform organisms is significantly less stringent than the Basin Plan water quality objective for bacteria.

Biostimulatory Substances

Water shall not contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses. The discharge contains significant concentrations of ammonia. Ammonia and its conversion to other forms of nitrogen may reasonably contribute to unacceptable aquatic growths. Phosphorus levels are also known to be elevated in domestic wastewater and are not assessed in the Permit.

Chemical Constituents

Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses. At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Tables 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. The City of Sacramento's wastewater discharge may reasonably contain constituents contained in Title 22 at concentrations exceeding MCLs. The Permit contains no analysis of compliance with drinking water MCLs.

Color

Water shall be free of discoloration that causes nuisance or adversely affects beneficial uses. Sewage and the associated industrial constituents may discolor the Sacramento River. Title 22 contains an MCL for color. The Permit contains no assessment of whether the CSO discharges exceed the MCL for color.

Dissolved Oxygen

Within the legal boundaries of the Delta, the dissolved oxygen concentration shall not be reduced below: 7.0 mg/l in the Sacramento River (below the I Street Bridge) and in all Delta waters west of the Antioch Bridge; 6.0 mg/l in the San Joaquin River (between Turner Cut and Stockton, 1 September through 30 November); and 5.0 mg/l in all other Delta waters except for those bodies of water which are constructed for special purposes and from which fish have been excluded or where the fishery is not important as a beneficial use. The discharge of raw or primary treated sewage contains oxygen demanding substances such as BOD and ammonia. There is no analysis or assessment of whether the discharge of raw or primary treated wastewater from the City of Sacramento causes a dissolved oxygen sag below 7.0 mg/l.

Floating Material

Water shall not contain floating material in amounts that cause nuisance or adversely affect beneficial uses. With regard to the US EPA Findings that the City failed to adequately regulate

grease discharges, the Permit states that: “The Discharger claimed that this finding is incorrect as the City did participate in a regional study that concluded that regulation of restaurants was unnecessary. The Discharger has since implemented an outreach program for the community and restaurants. The Permit fails to recognize the site specific characteristics of oil and grease discharges and that the “requirement” to install grease traps in restaurants is commonplace. An “outreach” program does not “regulate” grease discharges.

The City of Sacramento has not undertaken an acceptable oil and grease control program. Monitoring at other local wastewater treatment plants, which likely provide a minimum of secondary treatment, is not validation of the absence of oil and grease in the raw or primary treated wastewater discharges from the City. Floating material, by definition will be at the top of the water column. Sampling for oil and grease should be conducted at the top of the water column.

G. The Permit does not require maximization of flows to the wastewater treatment plant for treatment.

The fourth of US EPA’s nine minimum controls requires maximization of flow to the POTW for treatment. As is stated above; a portion of the flow from the separate sanitary sewer system flows into the CSS; the remainder flows by gravity or is pumped to the Regional Interceptors to the Sacramento Regional County Sanitation District’s regional wastewater treatment plant (SRWTP). Combined sewer systems are not exempt from the requirements of the Clean water Act. Combined sewer systems are known to discharge inadequately treated sewage to surface waters as “combined system overflows” during wet weather. US EPA’s Combined Sewer Overflow Policy has the goal of eliminating sewer system overflows and compliance with the CWA. Adding flows from the separate sewer system will only contribute to excessive flows in the combined system and result in additional overflows. The Permit does not discuss why the separate sewer system is allowed to be discharged into the combined sewer system.

H. The Permit fails to contain adequate effluent Limitation to protect the beneficial uses of the Sacramento River.

Permit Finding No. G. states that:

“Water Quality-Based Effluent Limitations (WQBELs). Section 301(b) of the CWA and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. 40 CFR 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential

has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

According to the CSO Control Policy, a permittee is required to develop and implement a long-term CSO control plan which evaluates alternatives for attaining compliance with the CWA, including compliance with applicable water quality standards and protection of designated uses. It further states that once long-term CSO control plans are completed, permittees are responsible for implementing the plan to ensure compliance with applicable water quality standards. A detailed discussion of the water quality-based requirements included in this Order is provided in the Fact Sheet (Attachment F).

It is well documented in the Permit that the discharge exceeds water quality standards and toxic levels for copper, lead, zinc and pesticides. The Effluent limitation for coliform organisms is significantly less stringent than the Basin Plan water quality objective and does not protect the contact recreational use of the Sacramento River. There is no technical justification for an Effluent Limitation for suspended solids as high as 100 mg/l which could directly translate to exceedance of turbidity objectives. There is no assessment of the need for Effluent Limits for drinking water constituents with associated MCLs. There is no assessment of biostimulatory substances, particularly ammonia and phosphorus. There is no assessment of toxic substances such as ammonia and aluminum. There is no assessment of toxic materials that can be discharged from the documented under regulated industrial segment of the community such as metals from plating shops. While the State may have exempted combined sewerage discharges from CTR compliance; each of the CTR priority pollutants is based on protecting a beneficial use such as aquatic life (from toxicity) or human health in drinking water. An assessment of all priority pollutants and drinking water constituents must be undertaken and adequately limited before the permit is adopted.

California Water Code, section 13377, requires that: "Notwithstanding any other provision of this division, the state board and the regional boards shall, as required or authorized by the Federal Water Pollution Control Act, as amended, issue waste discharge and dredged or fill material permits which apply and ensure compliance with all applicable provisions of the act and acts amendatory thereof or supplementary, thereto, together with any more stringent effluent standards or limitations necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance." The application for permit renewal is incomplete and in accordance with 40 CFR 122.21(e) the Regional Board should not issue a permit.

5. THE MANNER IN WHICH THE PETITIONERS ARE AGGRIEVED.

CSPA is a non-profit, environmental organization that has a direct interest in reducing pollution to the waters of the Central Valley. CSPA's members benefit directly from the waters in the form of recreational hiking, photography, fishing, swimming, hunting, bird watching, boating, consumption of drinking water and scientific investigation. Additionally, these waters are an important resource for recreational and commercial fisheries. Central Valley waterways also provide significant wildlife values important to the mission and purpose of the Petitioners. This wildlife value includes critical nesting and feeding grounds for resident water birds, essential habitat for endangered species and other plants and animals, nursery areas for fish and shellfish and their aquatic food organisms, and numerous city and county parks and open space areas. CSPA's members reside in communities whose economic prosperity depends, in part, upon the quality of water. CSPA has actively promoted the protection of fisheries and water quality throughout California before state and federal agencies, the State Legislature and Congress and regularly participates in administrative and judicial proceedings on behalf of its members to protect, enhance, and restore declining aquatic resources. CSPA member's health, interests and pocketbooks are directly harmed by the failure of the Regional Board to develop an effective and legally defensible program addressing discharges to waters of the state and nation.

6. THE SPECIFIC ACTION BY THE STATE OR REGIONAL BOARD WHICH PETITIONER REQUESTS.

Petitioners seek an Order by the State Board to:

- A. Vacate Order No. R5-2010-0004 (NPDES No. CA0079111) and remand to the Regional Board with instructions prepare and circulate a new tentative order that comports with regulatory requirements.
- B. Alternatively; prepare, circulate and issue a new order that is protective of identified beneficial uses and comports with regulatory requirements.

7. A STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF LEGAL ISSUES RAISED IN THE PETITION.

CSPA's arguments and points of authority are adequately detailed in the above comments and our 4 January 2010 comment letter. Should the State Board have additional questions regarding the issues raised in this petition, CSPA will provide additional briefing on any such questions. The petitioners believe that an evidentiary hearing before the State Board will not be necessary to resolve the issues raised in this petition. However, CSPA welcomes the opportunity to present oral argument and respond to any questions the State Board may have regarding this petition.

8. A STATEMENT THAT THE PETITION HAS BEEN SENT TO THE APPROPRIATE REGIONAL BOARD AND TO THE DISCHARGERS, IF NOT THE PETITIONER.

A true and correct copy of this petition, without attachment, was sent electronically and by First Class Mail to Ms. Pamela Creedon, Executive Officer, Regional Water Quality Control Board, Central Valley Region, 11020 Sun Center Drive #200, Rancho Cordova, CA 95670-6114. A true and correct copy of this petition, without attachment, was sent to the Discharger in care of: Mr. Marty Hanneman, Director, Combined Sewer Collection and Treatment System, City of Sacramento, 1395 35th Avenue, Sacramento, CA 95822.

9. A STATEMENT THAT THE ISSUES RAISED IN THE PETITION WERE PRESENTED TO THE REGIONAL BOARD BEFORE THE REGIONAL BOARD ACTED, OR AN EXPLANATION OF WHY THE PETITIONER COULD NOT RAISE THOSE OBJECTIONS BEFORE THE REGIONAL BOARD.

CSPA presented the issues addressed in this petition to the Regional Board in 4 January 2010 comment letter that was accepted into the record.

If you have any questions regarding this petition, please contact Bill Jennings at (209) 464-5067 or Michael Jackson at (530) 283-1007.

Dated: 26 February 2010

Respectfully submitted,



Bill Jennings, Executive Director
California Sportfishing Protection Alliance

Attachment No. 1: Order No. R5-2010-0004.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

CENTRAL VALLEY REGION

11020 Sun Center Drive, #200 Rancho Cordova, California 95670-6114
 Phone (916) 464-3291 • Fax (916) 464-4645
 http://www.waterboards.ca.gov/centralvalley



**ORDER NO. R5-2010-0004
 NPDES NO. CA0079111**

**WASTE DISCHARGE REQUIREMENTS FOR THE
 CITY OF SACRAMENTO
 COMBINED WASTEWATER COLLECTION AND TREATMENT SYSTEM
 SACRAMENTO COUNTY**

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	City of Sacramento
Name of Facility	Combined Wastewater Collection and Treatment System
Facility Address	1395 35 th Avenue
	Sacramento, CA 95822
	Sacramento County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by the City of Sacramento from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
002	Combined Municipal and Industrial Wastewater and Stormwater	38° 31.164' N	121° 31.440' W	Sacramento River
003	Combined Municipal and Industrial Wastewater and Stormwater	38° 31.397' N	121° 31.424' W	Sacramento River
004	Combined Municipal and Industrial Wastewater and Stormwater	38° 32.869' N	121° 30.622' W	Sacramento River
005	Combined Municipal and Industrial Wastewater and Stormwater	38° 32.864' N	121° 30.623' W	Sacramento River
006	Combined Municipal and Industrial Wastewater and Stormwater	38° 34.308' N	121° 30.800' W	Sacramento River
007	Combined Municipal and Industrial Wastewater and Stormwater	38° 34.322' N	121° 30.786' W	Sacramento River

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	28 January 2010
This Order shall become effective on:	19 March 2010
This Order shall expire on:	1 January 2015
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date

I, **Pamela C. Creedon**, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 28 January 2010.

Original signed by Kenneth Landau, Asst. E. O.
 for **Pamela C. Creedon**, Executive Officer

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I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 4. Facility Information

Discharger	City of Sacramento
Name of Facility	Combined Wastewater Collection and Treatment System
Facility Address	1395 35 th Avenue
	Sacramento, CA 95822
	Sacramento County
Facility Contact, Title, and Phone	Marty Hanneman, Director, (916) 808-7508
Mailing Address	Same as Facility Address
Type of Facility	Combined sewer collection and treatment system
Facility Design Flow	380 million gallons per day (treated flow)

II. FINDINGS

The California Regional Water Quality Control Board, Central Valley Region (hereinafter Regional Water Board), finds:

A. Background. The City of Sacramento (hereinafter Discharger) is currently discharging pursuant to Order No. 5-01-258 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0079111. The Discharger submitted a Report of Waste Discharge, dated 2 June 2006, and applied for a NPDES permit renewal to discharge up to 380 million gallons per day (mgd) of treated wastewater from a combined wastewater collection and treatment system, hereinafter Facility.

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. Facility Description. The Discharger owns and operates a combined wastewater collection and treatment system for portions of the City of Sacramento. The Facility consists of four main complexes to manage the collected combined sewage: Sumps 1/1A, Sumps 2/2A, the Pioneer Reservoir Treatment Plant, and the Combined Wastewater Treatment Plant (CWTP). The combined sewer system (CSS) conveys domestic and industrial wastewater and storm runoff to Sumps 1/1A and Sumps 2/2A, where up to 60 mgd flows are pumped via the Regional Force Main to the Sacramento Regional County Sanitation District’s regional wastewater treatment plant (SRWTP) for secondary treatment prior to discharge to the Sacramento River. When flow to Sumps 2/2A exceeds 60 mgd, flows are automatically routed through the Pioneer Interceptor to available storage in the Pioneer Reservoir (23 million gallons of storage capacity in the reservoir itself and 5 million gallons of storage capacity in the Pioneer Interceptor). After available storage in the Pioneer Reservoir is filled flows are routed to the CWTP to

maximize available storage, before flows continue to be sent to the Pioneer Reservoir treatment facility for treatment.

The Pioneer Reservoir provides primary treatment and disinfection for up to 250 mgd. After the wastewater is dechlorinated, it is discharged to the Sacramento River at Discharge Point No. 006. Flows can also be sent via the CWTP Force Main to the CWTP, where an additional 130 mgd of combined wastewater receives primary treatment and disinfection prior to discharge to the Sacramento River at Discharge Point Nos. 002 or 003. Both the Pioneer Reservoir and the CWTP basins can also be used for storage of up to 27 and 9.2 million gallons (including the CWTP Interceptor) of combined sewage, respectively, and then routing flows back to the SRWTP.

Sumps 1/1A can also pump up to 200 mgd to Pioneer Reservoir. As flows to Sumps 1/1A and Sumps 2/2A increase, and once treatment capacity limits for Pioneer Reservoir and CWTP are reached, flows above 250 mgd are routed through Pioneer Reservoir for at least partial primary treatment and then discharge to the Sacramento River. During extreme high flow conditions, discharges of untreated combined wastewater may occur at Sumps 2/2A through Discharge Point Nos. 004 and 005 and at the Sump A bypass at Discharge Point No. 007. Each of the six permitted combined sewer overflow (CSO) Discharge Points (Nos. 002 through 007) discharge directly to the Sacramento River, a water of the United States, within the Sacramento-San Joaquin River Basins Watershed. Attachment B provides a location map of the six CSO discharge locations. Attachment C provides a flow schematic of the Facility.

C. Legal Authorities. This Order is issued pursuant to section 402 of the Clean Water Act (CWA) and implementing regulations adopted by USEPA and chapter 5.5, division 7 of the California Water Code (CWC; commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this Facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260).

On 11 April 1994, USEPA adopted the Combined Sewer Overflow (CSO) Control Policy (59 FR 18688-18698). The CSO Control Policy was recently incorporated into the federal CWA by the Wet Weather Water Quality Act of 2000 [House Resolution (H.R.) 828] which is part of H.R. 4577, an omnibus funding bill. The CWA at Section 402(q)(1) now states: "...Each permit...pursuant to this Act...for a discharge from a municipal combined storm and sanitary sewer shall conform to the CSO Control Policy..." The CSO policy establishes a consistent national approach for controlling discharges from CSOs to the nation's water through the NPDES permit program. CSOs are defined as the discharge from the combined sewer system at a point prior to the publicly owned treatment works (POTW) treatment plant (see Federal Register, Vol. 59 No. 75, Tuesday, 19 April 1994, Section I.A.). The CSS is not a publicly owned treatment works and is not subject to requirements that apply only to POTWs. This Order implements the USEPA CSO Control Policy.

D. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact

Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and H are also incorporated into this Order.

E. California Environmental Quality Act (CEQA). Under CWC section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

F. Technology-based Effluent Limitations. Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations (40 CFR 122.44), require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 CFR 125.3.

According to the CSO Control Policy, a permittee is required to implement nine minimum controls (NMCs) which constitute the technology-based requirements of the CWA as applied to combined sewer facilities: best practicable control technology currently available (BPT), best conventional pollutant control technology, (BCT), and best available technology economically achievable, (BAT) based on BPJ. These NMCs are intended to prevent CSOs and reduce their effects on receiving water quality. A detailed discussion of the technology-based requirements included in this Order is provided in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations (WQBELs). Section 301(b) of the CWA and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

40 CFR 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

According to the CSO Control Policy, a permittee is required to develop and implement a long-term CSO control plan which evaluates alternatives for attaining compliance with the CWA, including compliance with applicable water quality standards and protection of designated uses. It further states that once long-term CSO control plans are completed, permittees are responsible for implementing the plan to ensure compliance with

applicable water quality standards. A detailed discussion of the water quality-based requirements included in this Order is provided in the Fact Sheet (Attachment F).

H. Water Quality Control Plans. The Regional Water Board adopted a *Water Quality Control Plan, Fourth Edition (Revised October 2007)*, for the Sacramento and San Joaquin River Basins (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Sacramento River are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
002, 003, 004, 005, 006, and 007	Sacramento River	<p><u>Existing:</u> Municipal and domestic supply (MUN); Agricultural supply, including stock watering (AGR); Industrial process (PROC) and service supply (IND); Water contact recreation (REC-1); Non-contact water recreation (REC-2); Warm freshwater aquatic habitat (WARM), Cold freshwater aquatic habitat (COLD); Warm migration, cold migration (MIGR); Warm spawning habitat (SPWN), Wildlife habitat (WILD); and navigation (NAV).</p>

The Basin Plan includes a list of Water Quality Limited Segments (WQLSs), which are defined as "...those sections of lakes, streams, rivers or other fresh water bodies where water quality does not meet (or is not expected to meet) water quality standards even after the application of appropriate limitations for point sources (40 CFR 130, et seq.)." The Basin Plan also states, "Additional treatment beyond minimum federal standards will be imposed on dischargers to WQLSs. Dischargers will be assigned or allocated a maximum allowable load of critical pollutants so that water quality objectives can be met in the segment." The listing for the Sacramento River (Delta Waterways - northern portion) includes: chlorpyrifos, DDT, diazinon, exotic species, Group A pesticides, mercury, PCBs (Polychlorinated biphenyls), and unknown toxicity. Of these pollutants, only chlorpyrifos and diazinon are listed based on urban runoff/storm sewer sources.

The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on 18 May 1972, and amended this plan on 18 September 1975. This plan contains temperature objectives for surface waters. Requirements of this Order implement the Thermal Plan.

The *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (Bay-Delta Plan) was adopted in May 1995 by the State Water Board superseding the 1991 Bay-Delta Plan. The Bay-Delta Plan identifies the beneficial uses

of the estuary and includes objectives for flow, salinity, and endangered species protection.

The Bay-Delta Plan attempts to create a management plan that is acceptable to the stakeholders while at the same time is protective of beneficial uses of the Sacramento – San Joaquin Delta. The State Water Board adopted Decision 1641 (D-1641) on 29 December 1999. D-1641 implements flow objectives for the Bay-Delta Estuary, approves a petition to change points of diversion of the Central Valley Project and the State Water Project in the Southern Delta, and approves a petition to change places of use and purposes of use of the Central Valley Project. The water quality objectives of the Bay-Delta Plan are implemented as part of this Order.

Requirements of this Order specifically implement the applicable Water Quality Control Plans.

- I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on 22 December 1992, and later amended it on 4 May 1995 and 9 November 1999. About 40 criteria in the NTR applied in California. On 18 May 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on 13 February 2001. These rules contain water quality criteria for priority pollutants.
- J. **State Implementation Policy.** On 2 March 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on 28 April 2000 with respect to the priority pollutant criteria promulgated for California by USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on 18 May 2000 with respect to the priority pollutant criteria promulgated by USEPA through the CTR. The State Water Board adopted amendments to the SIP on 24 February 2005 that became effective on 13 July 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control.

The SIP states that it “...does not apply to discharges of toxic pollutants from combined sewer overflow. These discharges will continue to be regulated in accordance with the federal “Combined Sewer Overflow (CSO) Control Policy,” published April 19, 1994 (59 FR 18688-18698).”

- K. **Compliance Schedules and Interim Requirements.** In general, an NPDES permit must include final effluent limitations that are consistent with CWA section 301 and with 40 CFR 122.44(d). There are exceptions to this general rule. The State Water Board has concluded that where the Regional Water Board’s Basin Plan allows for schedules of compliance and the Regional Water Board is newly interpreting a narrative standard, it may include schedules of compliance in the permit to meet effluent limits that implement a narrative standard. See In the Matter of Waste Discharge Requirements for Avon Refinery (State Water Board Order WQ 2001-06 at pp. 53-55). See also

This Order does not include compliance schedules and interim effluent limitations or discharge specifications.

L. Alaska Rule. On 30 March 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes. (40 CFR 131.21 and 65 FR 24641 (27 April 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after 30 May 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by 30 May 2000 may be used for CWA purposes, whether or not approved by USEPA.

M. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based effluent limitations for individual pollutants and water quality-based requirements. The technology-based effluent limitations consist of restrictions on total suspended solids. The water quality-based requirements consist of restrictions on a number of parameters and application of the CSO Control Policy. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA, and the water quality-based requirements contained in the CSO Control Policy.

N. Antidegradation Policy. 40 CFR 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires

that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharge is consistent with the antidegradation provision of 40 CFR 131.12 and Resolution No. 68-16.

- O. Anti-Backsliding Requirements.** Section 303(d)(4) and sections 402(o)(2)(A) and (B)(i) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions. All effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. 5-01-258. The establishment of less stringent, or removal of, water quality based effluent limitations based on newly available information, is allowed under Sections 303(d)(4), and 402(o)(2)(A) and (B)(i) of the CWA. The establishment of less stringent, or removal of, technology based effluent limitations based on a facility upgrade is allowed under 40 CFR 122.44(l)(2)(i)(A).
- P. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
- Q. Monitoring and Reporting.** 40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. CWC sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. The Monitoring and Reporting Program is provided in Attachment E.
- R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the Fact Sheet.
- S. Provisions and Requirements Implementing State Law.** The provisions/requirements in sections IV.B, IV.C, and V.B of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

- T. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- U. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED, that Order No. 5-01-258 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the CWC (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

- A.** Discharge of wastewater at a location or in a manner different from that described in the Findings is prohibited.
- B.** The by-pass of, or overflow from, the wastewater collection system to surface waters is prohibited, except as allowed by federal Standard Provisions I.G. and I.H. (Attachment D). This Discharge Prohibition does not apply to discharges from Discharge Point Nos. 002, 003, 004, 005, 006, and 007 in accordance with Discharge Prohibitions III.D and III.E below.
- C.** Neither the discharge nor its treatment shall create a nuisance as defined in Section 13050 of the California Water Code.
- D.** The discharge to the Sacramento River is prohibited at the following discharge points unless the following specified conditions are met, or authorization has been granted¹:
1. Sump 2 Bypass (Discharge Point Nos. 004 and 005), and Sump 1A Bypass (Discharge Point No. 007). The storage capacity of the Pioneer Reservoir (28 million gallons, including the Pioneer Interceptor) and the CWTP (9.2 million gallons including the CWTP Interceptor) must be reached prior to discharge.
 2. Pioneer Reservoir (Discharge Point No. 006). No discharge in excess of 250 mgd unless available storage at the 130 mgd CWTP has been maximized.

¹ The Discharger must obtain prior written approval from the Executive Officer to discharge from the CWTP, Pioneer Reservoir, or the CSS for maintenance or equipment testing, when the discharges would not be required by wet weather conditions.

E. Other than as a result of wet weather, or as approved by the Executive Officer¹, discharges from Discharge Point Nos. 002, 003, 004, 005, 006, and 007 to surface waters or surface water drainage courses is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point Nos. 002 (CWTP), 003 (CWTP Sump 104), and 006 (Pioneer Reservoir)

1. Final Effluent Limitations – Discharge Point Nos. 002, 003, and 006

a. The Discharger shall maintain compliance with the following effluent limitations at Discharge Point Nos. 002, 003, and 006, with compliance measured at Monitoring Locations EFF-002, EFF-003, and EFF-006, respectively, as described in the Monitoring and Reporting Program:

Table 6. Effluent Limitations

Constituent	Units	Storm Year ¹ Average	Storm Maximum	Instantaneous Minimum	Instantaneous Maximum
Total Suspended Solids	mg/L	100 ^{2,3}	--	--	--
Settleable Solids	ml/L	--	1.0 ³	--	--
Chlorine Residual	mg/L	--	0.019	--	--
pH	standard units	--	--	6.5	8.5

¹ A storm year is defined as 1 October through 30 September

² In addition, two consecutive samples shall not exceed 150 mg/L

³ Applicable to Discharge Point No. 006 (Pioneer Reservoir) for flows of 250 mgd or less and for all flows from Discharge Point Nos. 002 or 003.

b. The discharger shall eliminate or capture for treatment, or provide storage and subsequent treatment, at least 85 percent, by volume, of the combined sewage collected in the CSS during precipitation events on a system-wide annual average basis. Sewage captured for treatment shall receive treatment, at a minimum, to include primary clarification or equivalent, solids and floatables disposal, and disinfection.

c. **Temperature.** The maximum temperature of the discharge shall not exceed the natural receiving water temperature by more than 20°F.

d. **Fecal Coliform Organisms.** Effluent fecal coliform organisms shall not exceed:

i. 1,000 MPN/100 mL in any three consecutive samples; and

- ii. 200 MPN/100 mL, as a storm year (1 October through 30 September) median.

2. Interim Effluent Limitations – Not Applicable

B. Land Discharge Specifications – Not Applicable

C. Reclamation Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the Sacramento River:

1. **Bacteria.** The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, to exceed a geometric mean of 200 MPN/100 mL, nor more than 10 percent of the total number of fecal coliform samples taken during any 30-day period to exceed 400 MPN/100 mL.
2. **Biostimulatory Substances.** Water to contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.
3. **Chemical Constituents.** Chemical constituents to be present in concentrations that adversely affect beneficial uses.
4. **Color.** Discoloration that causes nuisance or adversely affects beneficial uses.
5. **Dissolved Oxygen:**
 - a. The dissolved oxygen concentration to be reduced below 7.0 mg/L at any time.
6. **Floating Material.** Floating material to be present in amounts that cause nuisance or adversely affect beneficial uses.
7. **Oil and Grease.** Oils, greases, waxes, or other materials to be present in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.
8. **pH.** The pH to be depressed below 6.5, raised above 8.5, nor changed by more than 0.5 units.

9. Pesticides:

- a. Pesticides to be present, individually or in combination, in concentrations that adversely affect beneficial uses;
- b. Pesticides to be present in bottom sediments or aquatic life in concentrations that adversely affect beneficial uses;
- c. Total identifiable persistent chlorinated hydrocarbon pesticides to be present in the water column at concentrations detectable within the accuracy of analytical methods approved by USEPA or the Executive Officer;
- d. Pesticide concentrations to exceed those allowable by applicable antidegradation policies (see State Water Board Resolution No. 68-16 and 40 CFR 131.12.);
- e. Pesticide concentrations to exceed the lowest levels technically and economically achievable;
- f. Pesticides to be present in concentration in excess of the maximum contaminant levels set forth in CCR, Title 22, division 4, chapter 15; nor
- g. Thiobencarb to be present in excess of 1.0 µg/L.

10. Radioactivity:

- a. Radionuclides to be present in concentrations that are harmful to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
- b. Radionuclides to be present in excess of the maximum contaminant levels specified in Table 4 (MCL Radioactivity) of Section 64443 of Title 22 of the California Code of Regulations.

11. Suspended Sediments. The suspended sediment load and suspended sediment discharge rate of surface waters to be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

12. Settleable Substances. Substances to be present in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.

13. Suspended Material. Suspended material to be present in concentrations that cause nuisance or adversely affect beneficial uses.

14. Taste and Odors. Taste- or odor-producing substances to be present in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses.

- 15. Temperature.** The natural temperature to be increased by more than 4°F.
- 16. Toxicity.** Toxic substances to be present, individually or in combination, in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.
- 17. Turbidity.** The turbidity to increase as follows:
- a. More than 1 Nephelometric Turbidity Unit (NTU) where natural turbidity is between 0 and 5 NTUs;
 - b. More than 20 percent where natural turbidity is between 5 and 50 NTUs;
 - c. More than 10 NTU where natural turbidity is between 50 and 100 NTUs; nor
 - d. More than 10 percent where natural turbidity is greater than 100 NTUs.

B. Groundwater Limitations – Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions (federal NPDES standard conditions from 40 CFR Part 122) included in Attachment D of this Order.
2. The Discharger shall comply with the following provisions:
 - a. If the Discharger's wastewater treatment plant is publicly owned or subject to regulation by California Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade according to Title 23, CCR, division 3, chapter 26. (Applicable to POTWs only.)
 - b. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - i. violation of any term or condition contained in this Order;
 - ii. obtaining this Order by misrepresentation or by failing to disclose fully all relevant facts;
 - iii. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
 - iv. a material change in the character, location, or volume of discharge.

The causes for modification include:

- *New regulations.* New regulations have been promulgated under section 405(d) of the CWA, or the standards or regulations on which the permit was

- *Land application plans.* When required by a permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.
- *Change in sludge use or disposal practice.* Under 40 CFR 122.62(a)(1), a change in the Discharger's sludge use or disposal practice is a cause for modification of the permit. It is cause for revocation and reissuance if the Discharger requests or agrees.

The Regional Water Board may review and revise this Order at any time upon application of any affected person or the Regional Water Board's own motion.

- c. If a toxic effluent standard or prohibition (including any scheduled compliance specified in such effluent standard or prohibition) is established under section 307(a) of the CWA, or amendments thereto, for a toxic pollutant that is present in the discharge authorized herein, and such standard or prohibition is more stringent than any limitation upon such pollutant in this Order, the Regional Water Board will revise or modify this Order in accordance with such toxic effluent standard or prohibition.

The Discharger shall comply with effluent standards and prohibitions within the time provided in the regulations that establish those standards or prohibitions, even if this Order has not yet been modified.

- d. This Order shall be modified, or alternately revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the CWA, if the effluent standard or limitation so issued or approved:
 - i. contains different conditions or is otherwise more stringent than any effluent limitation in the Order; or
 - ii. controls any pollutant limited in the Order.

The Order, as modified or reissued under this paragraph, shall also contain any other requirements of the CWA then applicable.

- e. The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.
- f. The Discharger shall take all reasonable steps to minimize any adverse effects to waters of the State or users of those waters resulting from any discharge or sludge use or disposal in violation of this Order. Reasonable steps shall include such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge or sludge use or disposal.

- g.** A copy of this Order shall be maintained at the discharge facility and be available at all times to operating personnel. Key operating personnel shall be familiar with its content.
- h.** Safeguard to electric power failure:

 - i.** The Discharger shall provide safeguards to assure that, should there be reduction, loss, or failure of electric power, the discharge shall comply with the terms and conditions of this Order.
 - ii.** Upon written request by the Regional Water Board the Discharger shall submit a written description of safeguards. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means. A description of the safeguards provided shall include an analysis of the frequency, duration, and impact of power failures experienced over the past 5 years on effluent quality and on the capability of the Discharger to comply with the terms and conditions of the Order. The adequacy of the safeguards is subject to the approval of the Regional Water Board.
 - iii.** Should the treatment works not include safeguards against reduction, loss, or failure of electric power, or should the Regional Water Board not approve the existing safeguards, the Discharger shall, within 90 days of having been advised in writing by the Regional Water Board that the existing safeguards are inadequate, provide to the Regional Water Board and USEPA a schedule of compliance for providing safeguards such that in the event of reduction, loss, or failure of electric power, the Discharger shall comply with the terms and conditions of this Order. The schedule of compliance shall, upon approval of the Regional Water Board, become a condition of this Order.
- i.** The Discharger, upon written request of the Regional Water Board, shall file with the Board a technical report on its preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. This report may be combined with that required under Regional Water Board Standard Provision contained in section VI.A.2.h. of this Order.

The technical report shall:

- i.** Identify the possible sources of spills, leaks, untreated waste by-pass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.
- ii.** Evaluate the effectiveness of present facilities and procedures and state when they became operational.

- iii. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational.

The Regional Water Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions shall be incorporated as part of this Order, upon notice to the Discharger.

- j. A publicly owned treatment works whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment and disposal facilities. The projections shall be made in January, based on the last 3 years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in 4 years, the Discharger shall notify the Regional Water Board by 31 January. A copy of the notification shall be sent to appropriate local elected officials, local permitting agencies and the press. Within 120 days of the notification, the Discharger shall submit a technical report showing how it will prevent flow volumes from exceeding capacity or how it will increase capacity to handle the larger flows. The Regional Water Board may extend the time for submitting the report. (Applicable to POTWs only.)
- k. The Discharger shall submit technical reports as directed by the Executive Officer. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code, sections 6735, 7835, and 7835.1. To demonstrate compliance with Title 16, CCR, sections 415 and 3065, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.
- l. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, sections 13385, 13386, and 13387.
- m. For publicly owned treatment works, prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (CWC section 1211). (Applicable to POTWs only.)
- n. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, maximum daily effluent limitation, 1-hour average

- o. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- p. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Regional Water Board.

To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, address and telephone number of the persons responsible for contact with the Regional Water Board and a statement. The statement shall comply with the signatory and certification requirements in the federal Standard Provisions (Attachment D, section V.B) and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the CWC. Transfer shall be approved or disapproved in writing by the Executive Officer.

B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in Attachment E of this Order.

C. Special Provisions

1. Reopener Provisions

- a. Conditions that necessitate a major modification of a permit are described in 40 CFR 122.62, including:
 - i. If new or amended applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, this permit may be reopened and modified in accordance with the new or amended standards.

- ii. When new information, that was not available at the time of permit issuance, would have justified different permit conditions at the time of issuance.
- b. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.
- c. **Mercury.** If a mercury or methylmercury TMDL is adopted, this Order shall be reopened to address TMDL requirements applicable to the Discharger. If the Regional Water Board determines that a mercury offset program is feasible for Dischargers subject to a NPDES permit, then this Order may be reopened to reevaluate the interim mercury mass loading limitation(s) and the need for a mercury offset program for the Discharger.
- d. **Compliance with State-Wide Sanitary Sewer System General Order.** The CSS is not currently subject to Order No. 2006-0003-DWQ, a Statewide General WDR for Sanitary Sewer Systems. If the State Water Board revises or reissues Order No. 2006-0003-DWQ during the term of this Order to extend coverage to the CSS, this Order shall be reopened and revised to ensure consistency with and eliminate duplication of any applicable provisions and/or requirements.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. **CSS Water Quality Assessment.** The Discharger shall complete a water quality assessment to demonstrate compliance with applicable water quality based objectives for CSO discharges from the CSS, including protection of designated uses. The intent of the assessment is for the Discharger to determine if their Long-Term Control Plan (which is based on the USEPA CSO Control Policy's Presumption Approach) continues to achieve compliance with all applicable State water quality objectives and protects designated uses of the Sacramento River for remaining CSOs.

By 1 September 2010, the Discharger shall provide to the Regional Water Board for review and approval, a plan for conducting the water quality assessment, including proposed data, data sources, and methodology(ies) to be used for evaluating compliance. The water quality assessment plan shall describe the monitoring that will be conducted to collect data for use in the assessment, including:

- 1) Pollutant parameters (including individual pollutants of concern, indicator pollutants, and other indicator tests such as whole effluent toxicity). The Discharger shall also include monitoring CSO discharges and the receiving water for *Giardia* and *Cryptosporidium*.
- 2) Sampling locations.

- 3) Sampling frequencies.
- 4) Analytical methods.

Monitoring shall, at a minimum, include two full wet weather seasons. In developing the plan, the Discharger may propose coordinating data collection with 1) the routine pollutant monitoring required as part of the Monitoring and Reporting Program (see Attachment E), and 2) the monitoring program required as part of the Discharger's municipal separate storm sewer system (MS4) program (as required in Order No. R5-2008-0142/NPDES Permit No. CAS082597).

The Discharger shall complete the water quality assessment and provide a report to the Regional Water Board by **no later than 30 June 2013**. The CSO water quality assessment report shall, at a minimum, include the following components:

- i. An analysis evaluating the potential impact of CSO discharges in relation to all applicable water quality objectives (including Basin Plan and CTR water quality objectives) and designated uses. If applicable water quality objectives cannot be achieved and designated uses cannot be adequately protected, then the Discharger shall also assess the need for coordination with the Regional Water Board for the review and revision of water quality objectives and implementation procedures to ensure that future CSS controls will be sufficient to meet water quality objectives.
- ii. An evaluation of necessary updates and/or revisions to the Nine Minimum Controls and/or Long-Term Control Plan if the assessment indicates that applicable water quality objectives are exceeded or that designated uses are impaired. The Discharger shall also provide proposed time frames for implementation of any proposed CSS program updates and/or revisions.

3. Best Management Practices and Pollution Prevention – Not Applicable

4. Construction, Operation and Maintenance Specifications

In accordance with the USEPA CSO Control Policy's Nine Minimum Controls and the Discharger's Long-Term Control Plan, the Discharger must adhere to the following provisions to constitute compliance with the USEPA Combined Sewer Overflow Policy requirements for control of discharges from the Discharger's CSS.

- a. **Combined Wastewater Control System Plan of Operations.** The Discharger shall revise and update as necessary their Combined Wastewater Control System Plan of Operations to ensure compliance with the Nine Minimum Controls and Long-Term Control Plan requirements specified in Sections VI.C.4.b and VI.C.4.c below. The Combined Wastewater Control System Plan of Operations shall specify the procedures to be used by the Discharger to manage the CSS. The Combined Wastewater Control System Plan of Operations shall clearly establish operation, maintenance, and inspection procedures to maximize the removal of pollutants during and after each precipitation event using all

The Discharger shall operate the combined wastewater collection and treatment system in conformance with the Combined Wastewater Control System Plan of Operations and shall report any variation from the Plan in the next monthly monitoring report as required in Attachment E (Section X.B). Any modifications to the Combined Wastewater Control System Plan of Operations must be submitted for review and approval by the Executive Officer. If within 30 days the Discharger has not received a response from the Executive Officer, then the Discharger may implement the modifications as proposed.

- b. Nine Minimum Controls and CSS Outflow Controls.** The Discharger shall implement and comply with the following requirements:
- i. Conduct Proper Operations and Regular Maintenance Programs.** The Discharger shall revise as necessary the Combined Wastewater Control System Plan of Operations that will include the elements listed in this section. The Discharger shall update the Combined Wastewater Control System Plan of Operations to include any changes to the system, or operation and maintenance procedures. The Discharger shall keep records to document the implementation of the Combined Wastewater Control System Plan of Operations and submit such documentation in accordance with the requirements specified in the Monitoring and Reporting Program (Attachment E) of this order.
- (a) Organizational Structure for the Combined Sewer System.** The Combined Wastewater Control System Plan of Operations shall include an organizational structure (shown with an organizational chart or other documents) that provides the names and telephone numbers of key personnel, the chain of command, and the relationships among various program components (e.g., operations, maintenance). In addition, the organizational structure should establish clear lines of communication, authority, and responsibility.
- The Discharger shall designate the key personnel responsible for the combined wastewater collection and treatment system. These key personnel shall serve as the contacts for the CSOs and CSS outflows from the combined wastewater collection and treatment system. The Discharger shall notify the Regional Water Board within 90 days of new key personnel and update the organizational structure as necessary.
- (b) Inspection and Maintenance of the CSS.** The Discharger shall:
- (1)** Describe in the Combined Wastewater Control System Plan of Operations, the combined wastewater collection and treatment system maintenance program to be implemented. The maintenance program

shall list and address at a minimum, the most critical elements of the combined wastewater collection and treatment system. "Critical elements" are those facilities that affect the performance of the combined wastewater collection and treatment system, the number and extent of CSS outflows and CSOs, or CSS outflow and CSO pollutant levels. The list should include as appropriate, regulator structures, pumping stations, diversion structures, retention basins, sections of the CSS prone to sedimentation, all CSO discharge points, and the Pioneer Reservoir and CWTP primary treatment facilities. The list should include a physical description of each facility and its location.

At a minimum, the inspection and maintenance program shall include:

- A schedule for regular inspection and maintenance of all overflow structures, regulator, and pumping stations to ensure that they are in good working condition and adjusted to minimize overflows and outflows.
- An inspection schedule for each potential overflow Discharge Point (i.e., Discharge Point Nos. 002, 003, 004, 005, 006, and 007) and critical combined wastewater collection and treatment system facilities. This schedule shall specify at least one inspection per month during the dry weather season (May 1 to September 30) and more frequent inspection during the wet season (October 1 to April 30). The inspections shall include, but are not limited to, entering regulator structures if accessible, determining the extent of debris and grit build-up, and removing any debris that may constrict flow, cause blockage, and result in dry weather overflows. For overflow Discharge Points that are inaccessible, the Discharger may perform a visual check.
- Documentation of the presence of debris during inspections of these facilities, and removal of these wastes to avoid blockages during precipitation events.

(2) Record the results of the inspections and routine maintenance activities in a maintenance log.

(c) Provision for Trained Staff. The Discharger shall describe in the Combined Wastewater Control System Plan of Operations the number of full-time equivalents needed to operate, maintain, repair, and perform testing functions required to ensure compliance with the terms and conditions of this Order. The Combined Wastewater Control System Plan of Operations shall also describe the appropriate training required of each staff member to perform his/her responsibilities.

(d) Allocation of Funds for Operation and Maintenance. The Discharger shall document the funds available for combined wastewater collection and treatment system operation and maintenance (O&M) activities and the procedures for budgeting. The Discharger shall identify as part of the Nine Minimum Controls Annual Report required in the Monitoring and Reporting Program (Attachment E, Section X.D.3), the funds committed to implement the Combined Wastewater Control System Plan of Operations, including all regularly scheduled inspection and maintenance activities.

(e) Untreated Discharges. The Discharger shall provide in the Combined Wastewater Control System Plan of Operations, the procedures for when and under what circumstances Discharge Point Nos. 004, 005 and 007 are used, as well as the treatment (if any) that is provided prior to discharge to the Sacramento River.

(f) Fats, Oil, and Grease (FOG) Control Program. The Discharger shall continue to implement a FOG control program to minimize the discharge of FOG wastes from households, restaurants and other food establishments.

ii. Maximize Use of the Collection System for Storage.

(a) The Discharger shall maximize the use of the collection system for storage. The Discharger shall balance the storage needs with the goal of preventing outflows of sewage from the collection system to City streets.

(b) Based on the results of the CSS Water Quality Assessment required in Section VI.C.2.a. of this Order, the Discharger shall evaluate the need for and feasibility of increasing the storage capacity of the existing combined sewer system and the up-stream separate sanitary system. The Discharger shall continue to maximize the in-line storage capacity of both the combined sewer system and the sanitary system.

(c) The Discharger shall keep records to document implementation of this control measure and submit them as part of the Nine Minimum Controls Annual Report required in the Monitoring and Reporting Program (Attachment E, Section X.D.3).

iii. Review and Modify Pretreatment Program. By 30 January 2012, the Discharger shall provide to the Regional Water Board the results of an evaluation of the potential impact from non-domestic users of the CSS during precipitation events, in terms of their contributions of pollutants in CSS outflows and CSOs. The Discharger shall determine whether additional modifications through the Sacramento Regional County Sanitation District's pretreatment program are necessary or of practical value. At a minimum, this evaluation shall include the feasibility of limiting or prohibiting discharges by non-domestic users during wet weather events and the feasibility of requiring some form of retention to prevent such discharges during wet weather events.

iv. Maximize Flow to POTW Treatment Plant.

- (a) The Discharger shall operate the combined wastewater collection and treatment system at a maximum treatable flow during wet weather events. The Discharger shall report rainfall and flow data to the Regional Water Board as part of the Nine Minimum Controls Annual Report required in the Monitoring and Reporting Program (Attachment E, Section X.D.3).
- (b) **Combined Wastewater Control System Plan of Operations.** The Discharger shall implement the Combined Wastewater Control System Plan of Operations to achieve the following objectives:
 - (1) Maximize the volume of wastewater treated at the SRWTP, Pioneer Reservoir, and the CWTP, consistent with the hydraulic capacities of the Discharger's storage, transport, treatment and disposal facilities, and
 - (2) Assure that all discharges from the diversion structure are first baffled to reduce floatable volume.

The Discharger shall maintain records documenting the achievement of these objectives provide them as part of the Nine Minimum Controls Annual Report required in the Monitoring and Reporting Program (Attachment E, Section X.D.3).

v. Prohibit Combined Sewer Overflows During Dry Weather.

- (a) Dry weather overflows from CSO Discharge Point Nos. 002 through 007 are prohibited. The Discharger shall inspect all CSS overflow points in accordance with the requirements in Section VI.C.4.b above. All dry weather overflows must be reported to the USEPA and the Regional Water Board within 24 hours of the Discharger becoming aware of the dry weather overflow. When the Discharger becomes aware of a dry weather overflow, the Discharger shall begin corrective actions immediately.
- (b) The Discharger shall inspect the dry weather overflow point each subsequent day after the overflow until the overflow has been eliminated. The Discharger shall record in the inspection log each dry weather overflow event, as well as the cause, the estimated volume of the dry weather overflow, the corrective action taken, and the dates on which the overflow began and ended.

vi. Control Solid and Floatable Materials in CSOs.

- (a) The Discharger shall continue to implement measures to control solid and floatable materials in its CSOs.
- (b) The Discharger shall:

- (1) Ensure that all overflows from the diversion structures are baffled or that other means are used to reduce the volume of solid and floatable materials discharged to the Sacramento River
- (2) Remove solid and floatable materials captured in the storage and transport facilities in an acceptable manner prior to discharge to the Sacramento River
- (3) Based on the results of the CSS Water Quality Assessment required in Section VI.C.2.a. of this Order, identify and study the feasibility of implementing additional measures to restrict the entry of solid and floatable materials (including green wastes) into the CSS. The Discharger shall document the evaluation of the measures that it identifies and studies and its decision to implement or not implement each studied measure.

vii. Develop and Implement Pollution Prevention Program.

- (a) The Discharger shall continue to implement a pollution prevention program focused on reducing to the greatest extent possible, the amount of contaminants that enter the CSS and the impacts of CSOs on the Sacramento River.
- (b) Based on the results of the CSS Water Quality Assessment required in Section VI.C.2.a. of this Order, the Discharger shall identify opportunities for improving existing controls (including those controls implemented as part of the Discharger's MS4 program) for reducing the potential discharge of pesticides (e.g., diuron, chlorpyrifos, diazinon) during precipitation events when CSOs are likely to occur. This control plan shall identify the proposed control measures that will be used by the Discharger, and a schedule for its initiation and implementation.
- (c) The Discharger shall keep records to document pollution prevention implementation activities and provide them as part of the Nine Minimum Controls Annual Report required in the Monitoring and Reporting Program (Attachment E, Section X.D.3).

viii. Notify the Public of Overflows.

- (a) The Discharger shall implement its revised March 2007 "Standard Operating Procedures for Emergency Response."
- (b) The Discharger shall include as part of the public notification process, notification to downstream drinking water agencies whenever there is a discharge to surface waters. At a minimum, the following agencies shall be notified: the California Urban Water Agencies, the Contra Costa Water District, the Santa Clara Valley Water District, the Zone 7 Water Agency,

the Alameda County Water District, and the Metropolitan Water District of Southern California.

(c) By 30 January 2011, the Discharger shall evaluate and report on the implementation of the public notification provisions of the March 2007 "Standard Operating Procedures for Emergency Response" to ensure that the public is receiving adequate notification of CSS outflows and CSOs in accordance with the USEPA's CSO Control Policy and the CSS outflow reporting requirements contained in Attachment G of this Order. The Discharger shall investigate the feasibility of using additional means for notifying the public when CSOs and CSS outflows occur that may pose a risk to public health and the environment, including posting at affected areas, selected public places, and at CSO outfall locations. The Discharger shall also consider providing notices in newspapers or on radio and television news programs, as well as letter notifications to affected residents.

ix. Monitor to Effectively Characterize CSO Impacts and the Efficacy of CSO Controls.

(a) The Discharger shall regularly monitor CSO outfalls to effectively characterize overflow impacts and the efficacy of CSO controls. The specific monitoring requirements for CSOs are provided in Attachment E (Monitoring and Reporting Program).

(b) The Discharger shall submit as part of its Nine Minimum Controls Annual Progress Report that is due on 30 January of each year (see Attachment E, Section X.D.3), a summary of existing monitoring data and an evaluation of the efficacy of CSO controls (including pollution prevention efforts) to minimize and/or prevent impacts from CSOs. If necessary, the Discharger shall propose revisions to the CSO control program (including the Nine Minimum Controls) to improve the efficiency and effectiveness of controls.

(c) CSS Outflow Volume Estimates. The Discharger shall continue to provide accurate and reasonable estimates of outflows from the CSS. These methods shall be included in the Wastewater Collection Standard Operating Procedures.

c. Long-Term Control Plan. The Discharger shall continue implementation of the Long-Term Control Plan with the following interim goals to be met as progress is made towards the final goal of minimizing street flooding during a 10-year storm event and to prevent structure flooding during the 100-year storm event:

i. Obtaining protection from a 5-year storm in the six areas of worst flooding (including downtown, north of Capital park; U.C. Medical Center area; immediately south of Highway 80 between Riverside and Freeport; the area

- ii. Obtaining protection from a 5-year storm throughout the combined sewer system area,
- iii. Obtaining protection from a 10-year storm in the six areas of worst flooding, and then
- iv. Obtaining the goal of protection from a 10-year storm event throughout the combined sewer system.

As part of the Annual Long-Term Control Program Progress Reports required in the Monitoring and Reporting Program (Attachment E, Section X.D.4), the Discharger shall report on the progress in achieving the interim goals listed above.

5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable

6. Other Special Provisions

a. Sludge/Biosolids Discharge Specifications

- i. Collected screenings, residual sludge, biosolids, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer, and consistent with Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in Title 27, CCR, division 2, subdivision 1, section 20005, et seq. Removal for further treatment, disposal, or reuse at sites (e.g., landfill, composting sites, soil amendment sites) that are operated in accordance with valid waste discharge requirements issued by a Regional Water Board will satisfy these specifications.
- ii. Sludge and solid waste shall be removed from screens, sumps, ponds, clarifiers, etc. as needed to ensure optimal plant performance.

7. Compliance Schedules – Not Applicable

VII. COMPLIANCE DETERMINATION

- A. Multiple Sample Data.** When determining compliance with a Storm Year Average, effluent limitation and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of “Detected, but Not Quantified” (DNQ) or “Not Detected” (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure: