ALTERNATIVE NO. 4
CHLOROFORM EFFLUENT LIMITATIONS

PLACER COUNTY DEPARTMENT OF FACILITY SERVICES
PLACER COUNTY SEWER MAINTENANCE DISTRICT 1
WASTEWATER TREATMENT PLANT
PLACER COUNTY
Proposed Waste Discharge Requirements and Proposed Cease and Desist Order
NPDES No. CA0079316

At the May 2010 Central Valley Water Board meeting, the Board continued its consideration of the subject item for various topics. The following tentative Alternative is for Central Valley Water Board consideration of a proposed final effluent limitation for chloroform, a California Toxic Rule (CTR) constituent, in accordance with the State Water Resources Control Board Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (2005 State Implementation Policy, or SIP). Although chloroform is a CTR constituent, the CTR does not include numeric criteria for chloroform. Therefore this Alternative proposes the establishment of a monthly final effluent limitation for chloroform in the Tentative NPDES Permit in accordance with either one of the following two optons:

Option No. 1: The applicability of the CalEPA Cancer Potency Factor as a Drinking Water Level" of 1.1 mg/L and the California Office of Environmental Health Hazard Assessment (OEHHA) Public Health Goal (PHG) of 1.1 ug/L (tentatively 1 ug/L), as implemented in the existing NPDES Permit (Order No. 2004-0074) with the resulting final monthly effluent limitation of 1.1 ug/L; or

Option No. 2: The applicability of the Department of Public Health's Primary Maximum Contaminant Level (MCL) for total Trihalomethanes (sum of bromoform, bromodichloromethane, chloroform and dibromochloromethane) of 80 ug/L, with a proposed monthly average effluent limitation of 80 ug/L for total trihalomethanes.

Recent wastewater treatment plant effluent data demonstrates a reasonable potential to cause or contribute to an exceedance of both the Cancer Potency Factor/PHG and the MCL. Data also demonstrates that the Discharger is unable to immediately comply with the proposed effluent limitation of 80 ug/L for total trihalomethanes and the existing (and now proposed) effluent limitation of 1.1 ug/L for chloroform. Therefore, this Alternative also proposes a 5-year compliance schedule in the Tentative Cease and Desist Order to correspond with the proposed final average monthly effluent limitations of 80 ug/L for total trihalomethanes and 1.1 ug/L for chloroform.

Changes to the tentative NPDES permit and tentative Cease and Desist Order (CDO) are shown below in strikeout/underline format for Option 1 and Option 2. Several sections in the NPDES permit and CDO are very similar for Option 1 and Option 2. In these situations inserted text is shown as Option 1/Option 2 (e.g., shown below as chloroform/total trihalomethanes).

NPDES Permit

1. *Modify section II.M. of the Findings as follows:*

   M. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on flow and percent removal requirements for 5-day biochemical oxygen demand (BOD_5), and total suspended solids (TSS). The WQBELs consist of restrictions on aluminum, ammonia, arsenic, chlorine residual, chlorodibromomethane, chloroform/total trihalomethanes, copper, dichlorobromomethane, electrical conductivity, lead, mercury, nitrate plus nitrite, nitrite, and pH.

2. *Modify section IV.A.1.a, Table 6 of the Effluent Limitations to include the following effluent limitation:*

For Option 1: Implementation of the Cancer Potency Factor/PHG of 1.1 ug/L:

Table 6. Final Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Non-Conventional Pollutants						
Chloroform	µg/L	1.1	--	--	--	--

For Option 2: Implementation of the MCL of 80 ug/L:

Table 6. Final Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Non-Conventional Pollutants						
Total Trihalomethanes[2]	µg/L	80	--	--	--	--

[2] Total trihalomethanes is the sum of bromoform, bromodichloromethane, chloroform and dibromochloromethane.

3. *Modify the Monitoring and Reporting Program, Attachment E, Section IV.A.1, Table E-3 (Effluent Monitoring), and section VIII.A.1, Table E-6 (Receiving Water Monitoring) to include the following monitoring requirements:*

I. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Locations EFF-001 and EFF-002

1. The Discharger shall monitor the treated effluent at Monitoring Locations EFF-001 and EFF-002 as follows when discharging from Discharge Point Nos. 001 and 002, respectively. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level.

Table E-3. Effluent Monitoring – EFF-001 and EFF-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Non-Conventional Pollutants				
Total Trihalomethanes	µg/L	Grab	1/Month	3,12

A. Monitoring Locations RSW-001, RSW-002, RSW-003, and RSW-004

1. The Discharger shall monitor Rock Creek and Dry Creek at Monitoring Locations RSW-001, RSW-002, RSW-003, and RSW-004 as follows:

Table E-6. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Non-Conventional Pollutants				
Chloroform	µg/L	Grab	1/Month	3,12

4. Modify the Fact Sheet, Attachment F, section IV.C.3.1 (Rationale for Effluent Limitations, section IV.C.4 (WQBEL Calculations), and section IV.D (Summary of Final Effluent Limitations) as follows:

(Section IV.C)

1. Determining the Need for WQBELs

a. The Regional Water Board conducted the RPA in accordance with section 1.3 of the SIP. Although the SIP applies directly to the control of CTR priority pollutants, the State Water Board has held that the Regional Water Board may use the SIP as guidance for water quality-based toxics control.[1] The SIP states in the introduction "*The goal of this Policy is to establish a standardized approach for permitting discharges of toxic pollutants to non-ocean surface waters in a manner that promotes statewide consistency*." Therefore, in this Order the RPA procedures from the SIP were used to evaluate reasonable potential for both

CTR and non-CTR constituents, except for non-CTR constituents where the MCL is the applicable water quality objective and as otherwise described in sections IV.C.3.b and IV.C.3.c of this Fact Sheet. The RPA was based on information submitted as part of the application, in studies, and as directed by monitoring and reporting programs.

b. Constituents with No Reasonable Potential. WQBELs are not included in this Order for constituents that do not demonstrate reasonable potential (see Attachment G); however, monitoring for those pollutants is established in this Order as required by the SIP. If the results of effluent monitoring demonstrate reasonable potential, this Order may be reopened and modified by adding an appropriate effluent limitation. Based on new data and the procedures established in Section 1.3 of the SIP for determining reasonable potential, the discharge does not demonstrate reasonable potential to cause or contribute to an in-stream excursion for the following constituents:

~~**iv. Chloroform.** Order No. R5-2005-0074 established effluent limitations for chloroform based on the California Environmental Protection Agency (Cal/EPA) Office of Environmental Health Hazard Assessment (OEHHA) cancer potency factor represented by the one-in-a-million cancer risk level in drinking water of 1.1 µg/L. However, there are no immediate municipal uses downstream of the discharge and it is not appropriate to apply the OEHHA cancer potency factor to determine reasonable potential to exceed the Basin Plan's narrative chemical constituent objective. This interpretation of the narrative objective is consistent with other recently adopted permits in the Central Valley Region.~~

~~There are no applicable CTR criteria or MCLs for chloroform. However, DPH has developed a Primary MCL of 80 µg/L for total trihalomethanes, including chloroform, which can be used to interpret the narrative chemical constituent objective. The maximum annual average receiving water and effluent concentrations were used to evaluate reasonable potential to exceed the Primary MCL based on input from the DPH and the fact that MCLs are designed to protect human health over long exposure periods. Therefore, it was considered appropriate to analyze reasonable potential based on an annual average concentration. The maximum observed annual average effluent concentration for chloroform was 41 µg/L. Therefore, the discharge does not have reasonable potential to cause or contribute to the Basin Plan's narrative chemical constituent objective and effluent limitations for chloroform will not be retained in this Order.~~

c. Constituents with Reasonable Potential. The Regional Water Board finds that the discharge has a reasonable potential to cause or contribute to an in-stream excursion above a water quality standard for aluminum, ammonia, arsenic, chlorine residual, chlorodibromomethane, <u>chloroform/total trihalomethanes,</u> copper, dichlorobromomethane, electrical conductivity, lead, mercury, nitrate plus

nitrite, nitrite, pathogens, and pH. WQBELs for these constituents are included in this Order. A summary of the RPA is provided in Attachment G, and a detailed discussion of the RPA for each constituent is provided below.

For Option 1: Implementation of the Cancer Potency Factor/PHG of 1.1 ug/L:

vi. Chloroform

a. WQO. There are no applicable CTR criteria or MCLs for chloroform. However, CalEPA has developed a Cancer Potency Factor as a Drinking Water Level of 1.1 mg/L and the California Office of Environmental Health Hazard Assessment (OEHHA) has developed a Public Health Goal (PHG) of 1.1 ug/L (tentatively 1 ug/L) for chloroform, which can be used to interpret the narrative toxicity and chemical constituents objective in the Basin Plan for the protection of the MUN beneficial use. The maximum effluent concentrations were used to evaluate reasonable potential to exceed the standard for chloroform of 1.1 µg/L.

b. RPA Results. The maximum effluent concentration was used to evaluate reasonable potential to exceed the standard for protection human health over long exposure periods. The maximum observed effluent concentration of chloroform was 99 µg/L. Background receiving water data for chloroform is not available. Therefore, chloroform in the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the standard.

c. WQBELs. This Order contains a monthly average effluent limitation for chloroform as shown in Table F-9 of this Fact Sheet, based on the Basin Plan's narrative toxicity and chemical constituent objective for protection of the MUN beneficial use.

d. Plant Performance and Attainability. Analysis of the effluent data shows that out of a dataset of 23 monthly data points representing effluent concentrations measured between July 2006 and April 2009, 22 of the data points exceeded the monthly effluent limitation of 1.1 ug/L. The dataset ranged from 1 ug/L to 99 ug/L. Therefore, the limitation appears to put the Discharger in immediate non-compliance.

For Option 2: Implementation of the MCL of 80 ug/L:

vi. Chloroform

a. WQO. There are no applicable CTR criteria or MCLs for chloroform. However, DPH has developed a Primary MCL of 80 µg/L for total

trihalomethanes, including chloroform, which can be used to interpret the narrative chemical constituent objective. The maximum effluent concentrations were used to evaluate reasonable potential to exceed the Primary MCL for total Trihalomethanes (the sum of bromoform, bromodichloromethane, chloroform and dibromochloromethane) of 80 ug/L, which is used to interpret the Basin Plan's chemical constituent objective for the protection of the MUN beneficial use and is implemented as a monthly average.

b. RPA Results. The maximum effluent concentration was used to evaluate reasonable potential to exceed the Primary MCL. The maximum observed effluent concentration of chloroform was 99 µg/L. Background receiving water data for chloroform is not available. Therefore, chloroform in the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the Primary MCL.

c. WQBELs. This Order contains a monthly average effluent limitation for total trihalomethanes as shown in Table F-9 of this Fact Sheet, based on the Basin Plan's narrative chemical constituent objective for protection of the MUN beneficial use.

d. Plant Performance and Attainability. Analysis of the effluent data shows that the MEC of 99 µg/L observed in August 2007 is greater than applicable WQBELs. Therefore, the limitation appears to put the Discharger in immediate non-compliance.

5. WQBEL Calculations

a. This Order includes WQBELs for aluminum, ammonia, arsenic, chlorine residual, chlorodibromomethane, copper, chloroform/total trihalomethanes, dichlorobromomethane, electrical conductivity, lead, mercury, nitrate plus nitrite, nitrite, pH, and total coliform organisms. The general methodology for calculating WQBELs based on the different criteria/objectives is described in subsections IV.C.4.b through e, below. See Attachment H for the WQBEL calculations.

(Section IV.D)

D. Final Effluent Limitations

For Option 1: Implementation of the Cancer Potency Factor and PHG of 1.1 ug/L:

Table F-9. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations					Basis[1]
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Non-Conventional Pollutants							
Chloroform	µg/L	1.1	--	--	--	--	PHG

For Option 2: Implementation of the MCL of 80 ug/L:

Table F-9. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations					Basis[1]
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Non-Conventional Pollutants							
Total Trihalomethanes	µg/L	80	--	--	--	--	MCL

2. Averaging Periods for Effluent Limitations

40 CFR 122.45 (d) requires average weekly and average monthly discharge limitations for publicly owned treatment works (POTWs) unless impracticable. However, for toxic pollutants and pollutant parameters in water quality permitting, USEPA recommends the use of a maximum daily effluent limitation in lieu of average weekly effluent limitations for two reasons. "*First, the basis for the 7-day average for POTWs derives from the secondary treatment requirements. This basis is not related to the need for assuring achievement of water quality standards. Second, a 7-day average, which could comprise up to seven or more daily samples, could average out peak toxic concentrations and therefore the discharge's potential for causing acute toxic effects would be missed.*" (TSD, pg. 96) This Order utilizes MDELs in lieu of average weekly effluent limitations for aluminum, ammonia, chlorodibromomethane, copper, dichlorobromomethane, and lead as recommended by the TSD for the achievement of water quality standards and for the protection of the beneficial uses of the receiving stream. Furthermore, for BOD_5, TSS, pH, chlorine residual, and total coliform organisms, weekly average effluent limitations have been replaced or supplemented with effluent limitations utilizing shorter averaging periods. The rationale for using shorter averaging periods for these constituents is discussed in section IV.C.3 of this Fact Sheet.

3. Satisfaction of Anti-Backsliding Requirements

For Option 1: Implementation of the Cancer Potency Factor/ PHG of 1.1 ug/L:

The CWA specifies that a revised permit may not include effluent limitations that are less stringent than the previous permit unless a less stringent limitation is justified based on exceptions to the anti-backsliding provisions contained in CWA sections 402(o) or 303(d)(4), or, where applicable, 40 CFR 122.44(l).

The effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R5-2005-0074, with the exception of effluent limitations for alachlor, atrazine, bis (2-ethylhexyl) phthalate, ~~chloroform,~~ manganese, methyl tertiary butyl ether, oil and grease, persistent chlorinated hydrocarbon pesticides, phthalate acid esters, polychlorinated biphenyls, settleable solids, silver, TCDD-equivalents, tributyltin, and zinc. Effluent limitations for these parameters have not been retained from Order No. R5-2005-0074. Based on updated monitoring data that was not available at the time Order No. R5-2005-0074 was issued, these parameters do not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water. Removal of the WQBELs in the previous permit is in accordance with CWA sections 303(d)(4) and 402(o), which allow for the removal of WQBELs for attainment waters where antidegradation requirements are satisfied. Removal of the WQBELs is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16. Therefore, the modifications to these effluent limitations do not violate anti-backsliding requirements.

For Option 2: Implementation of the MCL of 80 ug/L:

The CWA specifies that a revised permit may not include effluent limitations that are less stringent than the previous permit unless a less stringent limitation is justified based on exceptions to the anti-backsliding provisions contained in CWA sections 402(o) or 303(d)(4), or, where applicable, 40 CFR 122.44(l).

The effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R5-2005-0074, with the exception of effluent limitations for alachlor, atrazine, bis (2-ethylhexyl) phthalate, chloroform, manganese, methyl tertiary butyl ether, oil and grease, persistent chlorinated hydrocarbon pesticides, phthalate acid esters, polychlorinated biphenyls, settleable solids, silver, TCDD-equivalents, tributyltin, and zinc. <u>With the exception of chloroform,</u> effluent limitations for these parameters have not been retained from Order No. R5-2005-0074. Based on updated monitoring data that was not available at the time Order No. R5-2005-0074 was issued, these parameters do not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water.

The Basin Plan contains the narrative "chemical constituent" objective that requires, at a minimum, that waters with a designated MUN use not exceed California MCLs. In addition, the chemical constituent objective prohibits chemical constituents in concentrations that adversely affect beneficial uses. The California primary MCL for total THMs is 80 µg/L.. Total THMs include bromoform, dichlorobromomethane, chloroform, and chlorodibromomethane. The Cal/EPA Office of Environmental Health Hazard Assessment (OEHHA) has published the Toxicity Criteria Database, which contains cancer potency factors for chemicals, including chloroform, that have been used as a basis for regulatory actions by the regional boards, departments, and offices within Cal/EPA. This cancer potency factor is equivalent to a chloroform concentration in drinking water of 1.1 µg/L (ppb) at the 1-in-a-million cancer risk level with an average daily consumption of two liters of drinking water over a 70-year lifetime. MUN is a designated beneficial use of the receiving water. However, there are no known active drinking water intakes in the receiving waters for several miles downstream of the discharge, and chloroform is a non-conservative pollutant. Therefore, to protect the MUN beneficial use of the receiving waters, the Regional Water Board finds that application of the USEPA MCL for total THMs for the effluent is appropriate, as long as the receiving water does not exceed the OEHHA cancer potency factor's equivalent receiving water concentration at a reasonable distance from the outfall.

The OEHHA public health goal is not used to base effluent limitations when there are no active drinking water intakes in the vicinity of the discharge, because chloroform is a volatile organic constituent that will degrade in the environment. If there are no intakes near the discharge, the MCL for total THMs is used with receiving water monitoring for chloroform to determine if the constituent is degrading in the environment before reaching any drinking water intakes. Therefore, the primary MCL for total THMs is used to regulate chloroform. The reduction in stringency of the effluent limitations for chloroform is in compliance with 40 CFR 122.44(l)(2)(i)(B)(1).

Removal of the WQBELs in the previous permit and reduction of stringency of the chloroform effluent limitation is in accordance with CWA sections 303(d)(4) and 402(o), which allow for the removal of WQBELs for attainment waters where antidegradation requirements are satisfied. Removal of the WQBELs is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16. Therefore, the modifications to these effluent limitations do not violate anti-backsliding requirements.

5. *Modify the Fact Sheet, Attachment F, section VI.B.2.d (Rationale for Effluent Monitoring and Reporting Requirements) as follows:*

6. In order to determine compliance with effluent limitations for aluminum, chloroform, copper, lead, mercury, and dichlorobromomethane, Order No. R5-2005-0074

established quarterly effluent monitoring requirements. Consistent with the monitoring requirements for other toxic pollutants in this Order and in recently adopted permits in the Central Valley Region, this Order revises the monitoring frequency from quarterly to monthly for these parameters. In a letter dated 22 February 2010, the Discharger requested that the monitoring frequency for these parameters be reduced to quarterly. However, because these parameters continue to exhibit reasonable potential to cause or contribute to exceedances of water quality objectives, monthly monitoring is considered appropriate and necessary for characterization of the effluent and determining compliance with applicable effluent limitations.

7. *Modify Attachment G as follows:*

For Option 1: Implementation of the PHG of 1.1 ug/L:

Summary of Reasonable Potential Analysis

Constituent	Units	MEC	B	MCL/ PHG	Reasonable Potential
Chloroform	µg/L	9941[4]	NA	~~80~~ 1.1	~~No~~ Yes

For Option 2: Implementation of the MCL of 80 ug/L:

Summary of Reasonable Potential Analysis

Constituent	Units	MEC	B	MCL/ PHG	Reasonable Potential
Chloroform	µg/L	9941[4]	NA	~~80~~ 1.1	~~No~~ Yes

Cease and Desist Order

1. *Modify Findings 5 as follows:*

6. On **<DATE>**, the Central Valley Water Board adopted Order No. R5-2010-XXXX rescinding Order No. R5-2005-0074 and prescribing renewed WDRs for the Facility. Order No. R5-2010-XXXX section IV.A.1.a contains Final Effluent Limitations for Discharge Point Nos. 001 and 002 which read, in part, as follows:

"Table 6. Final Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Non-Conventional Pollutants						
Chloroform/Total Trihalomethanes	µg/L	1.1/80	--	--	--	--

2. Modify Findings 8, 9, 13 and 15 as follows:

8. The Central Valley Water Board finds that the Discharger is not able to consistently comply with the effluent limitations for aluminum, chlorodibromomethane, chloroform/total trihalomethanes, dichlorobromomethane, nitrate plus nitrite, and nitrite. The schedules for completing the actions necessary to achieve full compliance exceed the adoption date of this Order. Additional time is necessary to provide the necessary treatment to comply with the requirements of Order No. R5-2010-XXXX. New time schedules are necessary in a CDO for all the constituents listed above. These limitations were new requirements that became applicable to the Order after the effective date of adoption of the WDRs, and after 1 July 2000, for which new or modified control measures are necessary in order to comply with the limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

9. Immediate compliance with the effluent limitations for aluminum, chlorodibromomethane, chloroform/total trihalomethanes, dichlorobromomethane, nitrate plus nitrite, and nitrite is not possible or practicable. The Clean Water Act and the California Water Code authorize time schedules for achieving compliance.

   The Discharger indicated in the *Infeasibility Report for the Sewer Maintenance District 1 Wastewater Treatment Plant* (Infeasibility Report) submitted 4 May 2010 that additional time is required to comply with the final effluent limitations for aluminum, chlorodibromomethane, dichlorobromomethane, nitrate plus nitrite, and nitrate. The Regional Water Board is providing no later than 1 September 2015 for the Discharger to comply with these requirements and the requirements for chloroform/total trihalomethanes.

13. Because CDO No. R5-2005-0075 provided the Discharger with almost five years to comply with effluent limitations for aluminum, chloroform/total trihalomethanes, nitrate plus nitrite, and nitrite, the exception from mandatory minimum penalties pursuant to CWC section 13385(j)(3) does not apply for these parameters. Pursuant to CWC section 13263.3(d)(1)(D), a pollution prevention plan was required in CDO No. R5-2005-0075 for aluminum, chloroform/total trihalomethanes, nitrate plus nitrite, and nitrite in order to effectively reduce the effluent concentrations by source control measures. This Order requires the Discharger to update and implement the existing pollution prevention plans for these constituents.

15. The compliance time schedule in this Order includes interim effluent limitations for aluminum, chlorodibromomethane, chloroform/total trihalomethanes, dichlorobromomethane, nitrate plus nitrite, and nitrite. In developing the interim limitations for aluminum, chlorodibromomethane, chloroform/total trihalomethanes, dichlorobromomethane, nitrate plus nitrite, and nitrite, where there are 10 sampling data points or more, sampling and laboratory variability is accounted for by establishing interim limits that are based on normally distributed data where 99.9 percent of the data points will lie within 3.3 standard deviations of the mean (*Basic Statistical Methods for Engineers and*

Scientists, Kennedy and Neville, Harper and Row, 3rd Edition, January 1986). Where actual sampling shows an exceedance of the proposed mean plus 3.3-standard deviation interim limit, the maximum detected concentration has been established as the interim limitation. In developing the interim limitations, when there are less than 10 sampling data points available, the USEPA *Technical Support Document for Water Quality- based Toxics Control* ((EPA/505/2-90-001), TSD) recommends a coefficient of variation of 0.6 be utilized as representative of wastewater effluent sampling. The TSD recognizes that a minimum of 10 data points is necessary to conduct a valid statistical analysis. The multipliers contained in Table 5-2 of the TSD are used to determine a maximum daily limitation based on a long-term average objective. In this case, the long-term average objective is to maintain, at a minimum, the current plant performance level. Therefore, when there are less than 10 sampling points for a constituent, an interim limitation is based on 3.11 times the maximum observed effluent concentration to obtain the daily maximum interim limitation (TSD, Table 5-2). The following table summarizes the calculations of the interim performance-based effluent limitations for aluminum, chlorodibromomethane, chloroform/total trihalomethanes, dichlorobromomethane, nitrate plus nitrite, and nitrite:

For Option 1: **Interim Effluent Limitation Calculation Summary**

Parameter	Units	MEC	Mean	Std. Dev.	# of Samples	Interim Maximum Daily Effluent Limitation
Chloroform	µg/L	99	23.9	28.3	23	117

For Option 2: **Interim Effluent Limitation Calculation Summary**

Parameter	Units	MEC	Mean	Std. Dev.	# of Samples	Interim Maximum Daily Effluent Limitation
Total Trihalomethanes	µg/L	113	27.8	32.4	23	135

3. Modify Provisions 1 and 2 as follows:

IT IS HEREBY ORDERED THAT Cease and Desist Order No. R5-2005-0075 is rescinded, and, pursuant to CWC Section 13301:

1. The Discharger shall comply with the following time schedule to ensure compliance with the final effluent limitations in Order Nos. R5-2005-0074 and R5-2010-XXXX for aluminum, chlorodibromomethane, chloroform/total trihalomethanes, dichlorobromomethane, nitrate plus nitrite, and nitrite:

Task	**Date Due**
i. Submit Method of Compliance Workplan/Schedule	Within **6 months** after adoption of this Order
ii. Update and implement Pollution Prevention Plan[1] as specified in CWC Section 13263.3 for aluminum, chloroform/total trihalomethanes, nitrate plus nitrite, and nitrite	Within **90 days** after adoption of this Order

iii. Submit and implement Pollution Prevention Plan (PPP)[2] pursuant to CWC section 13263.3 for chlorodibromomethane and dichlorobromomethane	Within **6 months** after adoption of this Order
iv. Award Final Design and Environmental Consultant Contracts	1 May 2011
v. Complete Final Design of Improvements and Complete CEQA Documentation	31 July 2011
vi. Obtain Bids and Project Funding and Award Construction Contract	31 December 2011
vii. Complete Construction of Improvements	31 December 2014
viii. Complete Startup and Performance Testing	31 August 2015
ix. Report of Compliance or Non-Compliance with Interim Milestones	14 days following the due date for Tasks iv through viii
x. Progress Reports[3]	**30 June, annually**, after approval of work plan until final compliance
xi. Full compliance with aluminum, chlorodibromomethane, <u>chloroform/total trihalomethanes,</u> dichlorobromomethane, nitrate plus nitrite, and nitrite effluent limitations	**1 September 2015**

[1] The pollution prevention plan shall be updated and implemented for aluminum, <u>chloroform,</u> nitrate plus nitrite, and nitrite, as appropriate, and shall meet the requirements specified in CWC section 13263.3.

[2] The pollution prevention plan shall be updated and implemented for chlorodibromomethane and dichlorobromomethane, as appropriate, and shall meet the requirements specified in CWC section 13263.3.

[3] The progress reports shall detail what steps have been implemented towards achieving compliance with waste discharge requirements, including studies, construction progress, evaluation of measures implemented, and recommendations for additional measures as necessary to achieve full compliance by the final date.

2. The following interim effluent limitations for aluminum, chlorodibromomethane, <u>chloroform,</u> dichlorobromomethane, nitrate plus nitrite, and nitrite shall be effective immediately, and shall remain in effect through **31 August 2015**, or when the Discharger is able to come into compliance with the final effluent limitations, whichever is sooner.

Parameter	Units	Maximum Daily Effluent Limitation
Aluminum, Total Recoverable	µg/L	188
Chlorodibromomethane	µg/L	3.0
<u>Chloroform/Total Trihalomethanes</u>	<u>µg/L</u>	<u>117/135</u>
Dichlorobromomethane	µg/L	17
Nitrate Plus Nitrite (as N)	mg/L	49
Nitrite Nitrogen, Total (as N)	mg/L	9.7