CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

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ORDER NO. R4-2014-XXXX
NPDES NO. CA0064564

WASTE DISCHARGE REQUIREMENTS FOR THE NAVAL ENGINEERING AND EXPEDITIONARY WARFARE CENTER SEAWATER DESALINATION TEST FACILITY

The following Discharger is subject to waste discharge requirements (WDRs) set forth in this Order:

Table 1. Discharger Information

Discharger	Naval Engineering and Expeditionary Warfare Center
Name of Facility	Seawater Desalination Test Facility
Facility Address	Building TF11, Stetham Road
	Naval Base Ventura County
	Port Hueneme, CA 93043

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Reconstituted seawater consisting of ~~potable water~~permeate, brine solution, filter backwash, and intake overflow water	34º 08' 50" N	119º 12' 40" W	Port Hueneme Harbor

Table 3. Administrative Information

This Order was adopted on:	**October 9, 2014**
This Order shall become effective on:	**December 1, 2014**
This Order shall expire on:	**November 30, 2019**
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	**180 days prior to the Order expiration date**
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) have classified this discharge as follows:	**Minor discharge**

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on October 9, 2014.

_____
Samuel Unger, P.E., Executive Officer

TENTATIVE REQUIREMENTS SENT: JULY 24, 2014
REVISED TENTATIVE REQUIREMENTS SENT: SEPTEMBER 12, 2014

REVISED TENTATIVE

REVISED TENTATIVE

Contents

I. Facility Information 3
II. Findings 3
III. Discharge Prohibitions 3
IV. Effluent Limitations and Discharge Specifications 5
A. Effluent Limitations—Discharge Point No. 001 5
B. Land Discharge Specifications—Not Applicable 6
C. Reclamation Specifications—Not Applicable 6
V. Receiving Water Limitations 6
A. Surface Water Limitations 6
B. Groundwater Limitations—Not Applicable 7
VI. Provisions 7
A. Standard Provisions 7
B. Monitoring and Reporting Program (MRP) Requirements 10
C. Special Provisions 10
VII. Compliance Determination 11
A. Single Constituent Effluent Limitation 11
B. Effluent Limitations Expressed as a Sum of Several Constituents 12
C. Effluent Limitations Expressed as a Median 12
D. Mass-based Effluent Limitations 12
E. Multiple Sample Data 12
F. Average Monthly Effluent Limitation (AMEL) 12
G. Maximum Daily Effluent Limitations (MDEL) 13
H. Instantaneous Minimum Effluent Limitation 13
I. Instantaneous Maximum Effluent Limitation 13
J. Chronic Toxicity 13

Tables

Table 1. Discharger Information 1
Table 2. Discharge Location 1
Table 3. Administrative Information 1
Table 4. Effluent Limitations 5

Attachments

Attachment A – Definitions A-1
Attachment B – Map B-1
Attachment C – Flow Schematic C-1
Attachment D – Standard Provisions D-1
Attachment E – Monitoring and Reporting Program E-1
Attachment F – Fact Sheet F-1
Attachment G – State Water Board Minimum Levels A-1
Attachment H – List of Priority Pollutants B-1
Attachment I – Summary of Reasonable Potential Analysis (RPA) C-1

REVISED TENTATIVE

I. FACILITY INFORMATION

Information describing the Naval Engineering and Expeditionary Warfare Center—Seawater Desalination Test Facility is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Water Board), finds:

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

B. 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 the requirements in this Order, is hereby incorporated into and constitutes Findings for this Order. Attachments A through E and G through J are also incorporated into this Order.

C. Provisions and Requirements Implementing State Law. The provisions/requirements in subsections IV.B, IV.C, and V.B 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.

D. Notification of Interested Parties. The Regional Water Board Name 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 the notification are provided in the Fact Sheet.

E. 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. R4-2008-0030, as amended by Order No. R4-2009-0067, 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 Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger is authorized to discharge from the identified facility and outfalls into waters of the United States and shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

A. Wastes discharged shall be limited to 950,000 GPD of commingled permeate ~~(potable water)~~, ~~concentrated effluent (brine)~~ brine solution, filter backwash, and intake overflow ~~wastewater~~ seawater from the seawater desalination facility to Discharge Point No. 001. The discharge of wastes from accidental spills or other sources is prohibited.

B. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, Port Hueneme Harbor, Pacific Ocean, or other waters of the state, are prohibited.

C. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or create a nuisance as defined by section 13050 of the Water Code.

D. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.

E. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board (State Water Board) as required by the federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.

F. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

G. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of this Order.

REVISED TENTATIVE

REVISED TENTATIVE

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations—Discharge Point No. 001

1. Final Effluent Limitations—Discharge Point No. 001

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. 001, with compliance measured at Monitoring Location EFF-001, as described in the attached Monitoring and Reporting Program (MRP) (Attachment E):

Table 4. Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous	
				Minimum	Maximum
Conventional Pollutants					
pH	s.u.	--	--	6.5	8.5
Biochemical Oxygen Demand (BOD) (5-day@20 Deg. C)	mg/L	20	30	--	--
	lbs/day[1]	158	238	--	--
Total Suspended Solids (TSS)	mg/L	50	75	--	--
	lbs/day[1]	396	595	--	--
Non-Conventional Pollutants					
Bacteria	MPN/100 mL	[2]			
Oil and Grease	mg/L	10	15	--	--
	lbs/day[1]	79	119	--	--
Settleable Solids	ml/L	0.1	0.3	--	--
Temperature	°F	--	--	--	86
Turbidity	NTU	50	75	--	--
Total Residual Chlorine	mg/L	--	0.1	--	--
	lbs/day[1]	--	0.8	--	--
Priority Pollutants					
Copper, Total Recoverable	µg/L	2.7	5.8	--	
	lbs/day[1]	0.021	0.046	--	
Selenium, Total Recoverable	µg/L	27	94	--	--
	lbs/day[1]	0.21	0.74	--	--

[1] The mass (lbs/day) limitations are based on a maximum flow of 0.95 MGD and are calculated as follows:
Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor)

[2] Bacteria limits are established for both geometric means and single samples. The Basin Plan includes and implementation provision for geometric means: *"The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period.)*

a. Rolling 30-dayGeometric Mean Limits
   i. Total coliform density shall not exceed 1,000/100 mL;
   ii. Fecal coliform density shall not exceed 200/100 mL; and,
   iii. Enterococcus density shall not exceed 35/100 mL.

b. Single Sample Limits
   i. Total coliform density shall not exceed 10,000/100 mL;
   ii. Fecal coliform density shall not exceed 400/100 mL;
   iii. Enterococcus density shall not exceed 104/100 mL; and,
   iv. Total coliform density shall not exceed 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

REVISED TENTATIVE

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 Port Hueneme Harbor.

1. The normal ambient pH to fall below 6.5 nor exceed 8.5 units nor vary from normal ambient pH levels by more than 0.2 units.

2. Surface water temperature to raise greater than 5°F above the natural temperature of the receiving waters at any time or place. At no time shall the temperature be raised above 80°F as a result of waste discharged.

3. In marine waters designated for Water Contact Recreation (REC-1), the waste discharged shall not cause the following bacterial standards to be exceeded in the receiving water:

a. Geometric Mean Limits

i. Total coliform density shall not exceed 1,000/100 ml.
ii. Fecal coliform density shall not exceed 200/100 ml.
iii. Enterococcus density shall not exceed 35/100 ml.

b. Single Sample Maximum (SSM)

i. Total coliform density shall not exceed 10,000/100 ml.
ii. Fecal coliform density shall not exceed 400/100 ml.
iii. Enterococcus density shall not exceed 104/100 ml.
iv. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.

4. Depress the concentration of dissolved oxygen below 5.0 mg/L at any time, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.

5. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.

6. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.

7. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.

8. Toxic or other deleterious substances in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

REVISED TENTATIVE

9. Accumulation of bottom deposits or aquatic growths.
10. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
11. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
12. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.
13. Alteration of turbidity, or apparent color beyond present natural background levels.
14. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities, nor overload the design capacity.
15. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.
16. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
17. Create nuisance, or adversely affect beneficial uses of the receiving water.
18. Violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water Board. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

B. Groundwater Limitations—Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. **Regional Water Board Standard Provisions.** The Discharger shall comply with the following provisions.
   - **a.** This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 C.F.R. sections 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
   - **b.** The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of waste water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in the municipal storm water management

REVISED TENTATIVE

program developed to comply with NPDES permits issued by the Regional Water Board to local agencies.

c. A discharge of waste to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.

d. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 318, 405, and 423 of the federal CWA and amendments thereto.

e. These requirements do not exempt the operator of the facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

f. Oil or oily material, chemicals, refuse, or other waste materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.

g. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.

h. 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 failure to disclose all relevant facts;
iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

i. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.

j. The Discharger shall notify the Regional Water Board not later than 120 days in advance of implementation of any plans to alter the operation and treatment capacity by more than ten percent. Such notification shall include estimates of proposed treatment capacity, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.

k. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Water Board as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture an intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.

l. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Water Board.

REVISED TENTATIVE

m. The Water Code provides that any person who violates a waste discharge requirement or a provision of the Water Code is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day or $25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

n. Violation of any of the provisions of the NPDES program or of any of the provisions of this Order may subject the violator to any of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

o. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.

p. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.

q. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to the planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

- **i.** Name and general composition of the chemical,
- **ii.** Frequency of use,
- **iii.** Quantities to be used,
- **iv.** Proposed discharge concentrations, and
- **v.** USEPA registration number, if applicable.

r. 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.

s. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, Average Monthly Effluent Limitation (AMEL), Maximum Daily Effluent Limitation (MDEL), instantaneous maximum effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (213) 576-6600 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

t. 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

REVISED TENTATIVE

of Water Rights, and receive approval for such a change. (Water Code section 1211).

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E.

C. Special Provisions

1. Reopener Provisions

a. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.

b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.

c. This Order may be reopened and modified in accordance with the provisions set forth in 40 C.F.R. parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new Minimum Levels (MLs).

d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Ventura Coastal Watershed Management Area including Port Hueneme Harbor.

e. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for dilution credits or a mixing zone, as may be appropriate.

f. 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.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan. The Discharger shall submit to the Regional Water Board an Initial Investigation TRE workplan (1-2 pages) **within 90 days** of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected, and should include at a minimum:

a. A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency;

b. A description of the Facility's method of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the Facility;

REVISED TENTATIVE

c. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in house expert or an outside contractor) (section V of the MRP, Attachment E provides references for the guidance manuals that should be used for performing TIEs).

3. Spill Contingency Plan

The Discharger shall submit to the Regional Water Board, **within 90 days** of the effective date of this Order, an updated Spill Contingency Plan that includes a technical report on the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events at the site.

The Spill Contingency Plan shall cover all areas of the Facility and shall include an updated drainage map for the Facility. The Discharger shall identify on the map of appropriate scale the areas that contribute runoff to the permitted discharge point. The Discharger shall describe the activities in each area and the potential for contamination of wastewater and the discharge of hazardous waste/material and address the feasibility of contaminant and/or treatment of wastewater. The Spill Contingency Plan shall be reviewed at a minimum once per year and updated as needed.

4. Construction, Operation and Maintenance Specifications

a. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.

b. The Discharger shall develop and maintain a record of all spills from the facility. This record shall be made available to the Regional Water Board and USEPA upon request. The Discharger shall submit to the Regional Water Board and USEPA a report listing all spills, overflows, or bypasses occurring during the previous quarter in the quarterly monitoring reports. The reports shall provide the date and time of each spill, the location of each spill, the estimated volume of each spill, including gross volume, amount recovered, and amount not recovered; the cause of each spill, whether each spill entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances; mitigation measures implemented; corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences; and beneficial uses impacted.

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

6. Other Special Provisions—Not Applicable

7. Compliance Schedules—Not Applicable

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below:

A. Single Constituent Effluent Limitation

If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (see Reporting Requirement I.G. of the MRP), then the Discharger is out of compliance.

REVISED TENTATIVE

B. Effluent Limitations Expressed as a Sum of Several Constituents

If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations of a group of pollutants, consider constituents reported as ND or DNQ to have concentrations equal to zero, provided that the applicable ML is used.

C. Effluent Limitations Expressed as a Median

In determining compliance with a median limitation, the analytical results in a set of data will be arranged in order of magnitude (either increasing or decreasing order); and

1. If the number of measurements (n) is odd, then the median will be calculated as = $X_{(n+1)/2}$, or
2. If the number of measurements (n) is even, then the median will be calculated as = [$X_{n/2}$ + $X_{(n/2)+1}$], i.e., the midpoint between the n/2 and n/2+1 data points.

D. Mass-based Effluent Limitations

In calculating mass emission rates from the monthly average concentrations, use one half of the method detection limit for “Not Detected” (ND) and the estimated concentration for “Detected, but Not Quantified” (DNQ) for the calculation of the monthly average concentration. To be consistent with Limitations and Discharge Requirements, Section VII.B, if all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant concentration should be considered as zero for the calculation of the monthly average concentration.

E. Multiple Sample Data

When determining compliance with an AMEL for priority pollutants 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:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

F. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection E above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

REVISED TENTATIVE

In determining compliance with the AMEL, the following provisions shall also apply to all constituents:

1. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for that constituent, the Discharger has demonstrated compliance with the AMEL for that month.

2. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any constituent, the Discharger shall collect four additional samples at approximately equal intervals during the month. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later.

   When all sample results are greater than or equal to the reported ML (see Reporting Requirement I.G. of the MRP), the numerical average of the analytical results of these five samples will be used for compliance determination.

3. In the event of noncompliance with an AMEL, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

4. If only one sample was obtained for the month or more than a monthly period and the result exceeds the AMEL, then the Discharger is in violation of the AMEL.

G. Maximum Daily Effluent Limitations (MDEL)

If a daily discharge on a calendar day exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that day for that parameter. If no sample (daily discharge) is taken over a calendar day, no compliance determination can be made for that day with respect to an effluent violation determination, but compliance determination can be made for that day with respect to reporting violation determination.

H. Instantaneous Minimum Effluent Limitation

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and the discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

I. Instantaneous Maximum Effluent Limitation

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and the discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

J. Chronic Toxicity

This discharge is subject to determination of “Pass” or “Fail” and “Percent (%) Effect” from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (Ho) for the TST approach is:

Mean discharge IWC response ≤0.75 × Mean control response. A test result that rejects this null hypothesis is reported as “Pass”. A test result that does not reject this null hypothesis is reported as “Fail”. The relative “Percent (%) Effect” at the discharge IWC is defined and reported as: ((Mean control response – Mean discharge IWC response) ÷ Mean control response)) × 100.

Accelerated monitoring for chronic toxicity is triggered when a chronic toxicity test, analyzed using the TST approach, results in “Fail”.

REVISED TENTATIVE

REVISED TENTATIVE

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)
Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)
The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Best Management Practices (BMPs)
BMPs are methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges including storm water. BMPs include structural and non-structural control, and operation maintenance procedures, which can be applied before, during, and/or after pollution-producing activities.

Bioaccumulative
Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Carcinogenic
Pollutants are substances that are known to cause cancer in living organisms.

Coefficient of Variation (CV)
CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge
Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ)
DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

REVISED TENTATIVE

Dilution Credit
Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Effluent Concentration Allowance (ECA)
ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays
Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration
The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries
Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the appropriate areas of the Ventura River, Santa Clara River, Calleguas Creek, Ballona Creek, Dominguez Channel, Los Angeles River and San Gabriel River. Estuaries do not include inland surface waters or ocean waters.

Existing Discharger
Any discharger that is not a new discharger. An existing discharger includes an "increasing discharger" (i.e., any existing facility with treatment systems in place for its current discharge that is or will be expanding, upgrading, or modifying its permitted discharge after the effective date of this Order).

Infeasible
Not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

Inland Surface Waters
All surface waters of the state that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation
The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

REVISED TENTATIVE

Instantaneous Minimum Effluent Limitation
The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Effluent Limitation (MDEL)
The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median
The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the n/2 and n/2+1).

Method Detection Limit (MDL)
MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in in 40 C.F.R. part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)
ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone
Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Not Detected (ND)
Sample results which are less than the laboratory's MDL.

Persistent Pollutants
Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP)
PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

REVISED TENTATIVE

Pollution Prevention
Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Board or the Regional Water Board.

Reporting Level (RL)
The RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Satellite Collection System
The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Source of Drinking Water
Any water designated as municipal or domestic supply (MUN) in a <**Regional Water Board Name**> Basin Plan.

Standard Deviation (σ)
Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:
- x is the observed value;
- μ is the arithmetic mean of the observed values; and
- n is the number of samples.

Toxicity Reduction Evaluation (TRE)
TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

REVISED TENTATIVE

ACRONYMS AND ABBREVIATIONS

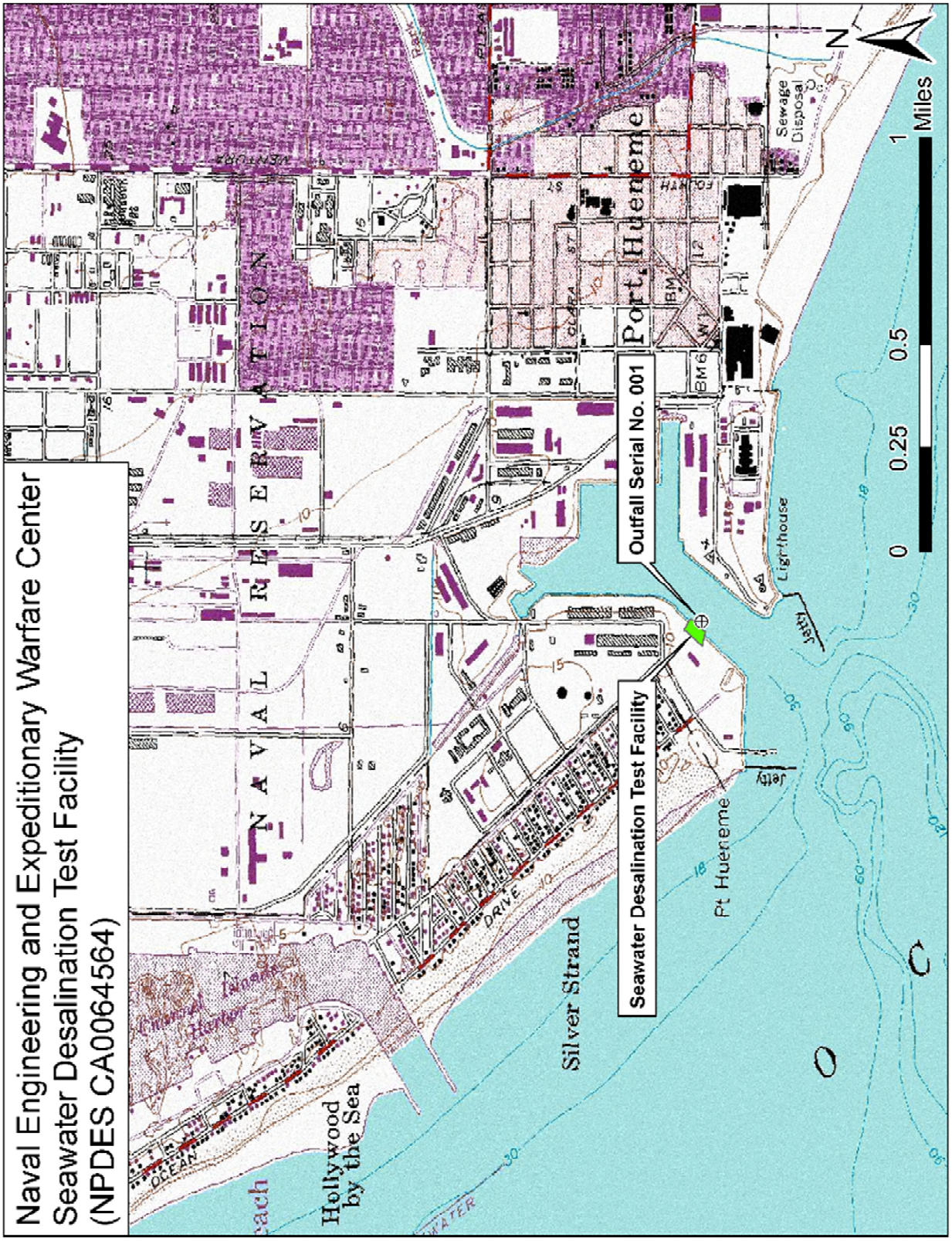
AMEL	Average Monthly Effluent Limitation
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	*Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 °C
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
C.F.R.	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	California Water Code
Discharger	Honeywell International Incorporated
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	California Department of Public Health Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	Groundwater Remediation System Facility
gpd	gallons per day
IC	Inhibition Coefficient
IC_{15}	Concentration at which the organism is 15% inhibited
IC_{25}	Concentration at which the organism is 25% inhibited
IC_{40}	Concentration at which the organism is 40% inhibited
IC_{50}	Concentration at which the organism is 50% inhibited
IWC	In-stream Waste Concentration
LA	Load Allocations
LOEC	Lowest Observed Effect Concentration
µg/L	micrograms per Liter
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
ND	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
OAL	Office of Administrative Law
PMEL	Proposed Maximum Daily Effluent Limitation
PMP	Pollutant Minimization Plan

POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
Ocean Plan	*Water Quality Control Plan for Ocean Waters of California*
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
Sediment Quality Plan	*Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality*
SIP	State Implementation Policy (*Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*)
SMR	Self-Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	Test Acceptability Criteria
Thermal Plan	*Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California*
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TSS	Total Suspended Solid
TST	Test of Significant Toxicity
TU_c	Chronic Toxicity Unit
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WET	Whole Effluent Toxicity
WLA	Waste Load Allocations
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
%	Percent

REVISED TENTATIVE

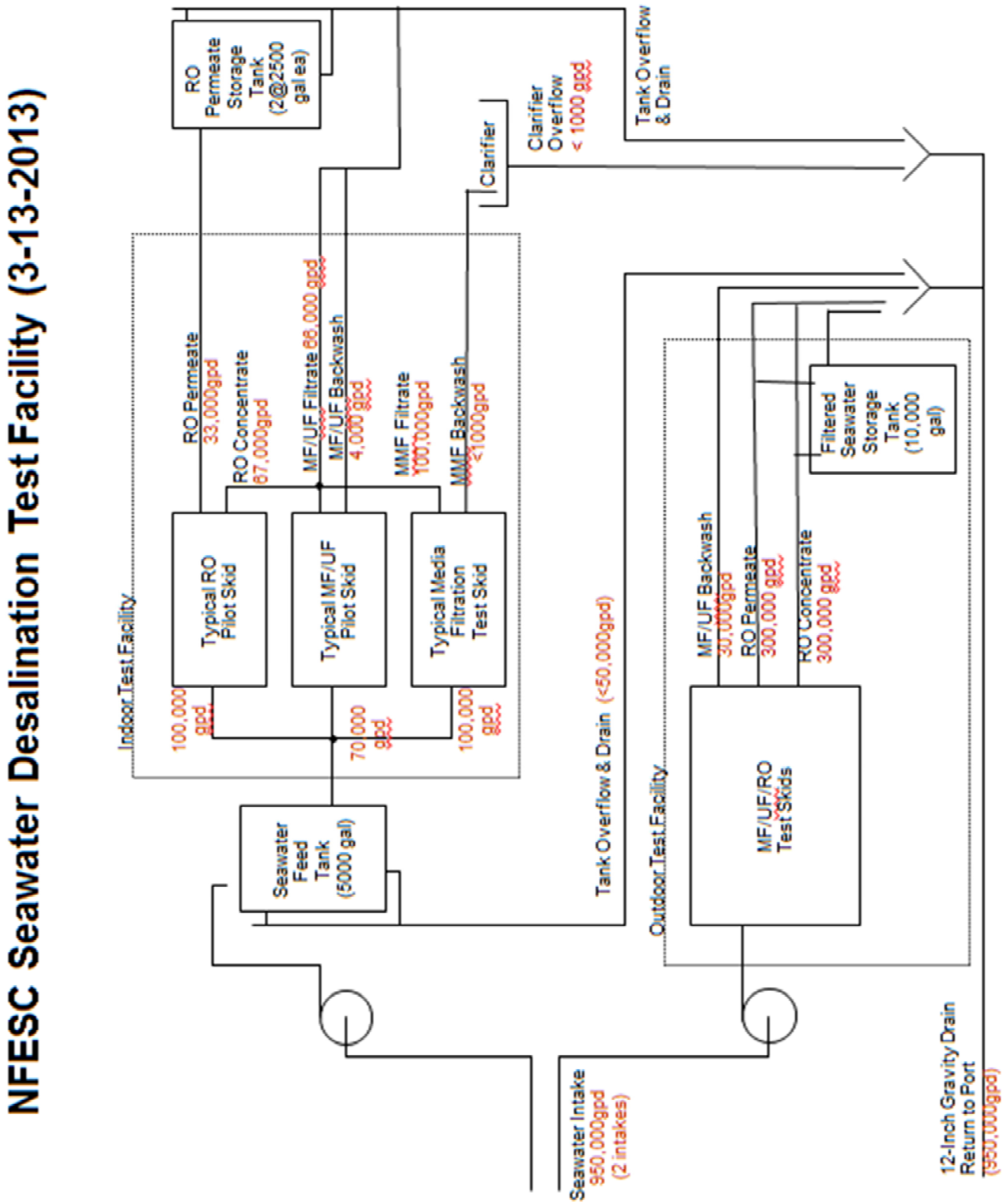
REVISED TENTATIVE

ATTACHMENT B – MAP



REVISED TENTATIVE

ATTACHMENT C – FLOW SCHEMATIC



REVISED TENTATIVE

ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 C.F.R. § 122.41(a); Wat. Code, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be

REVISED TENTATIVE

required by law, to (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i); Wat. Code, §§ 13267, 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(i); 40 C.F.R. § 122.41(i)(1); Wat. Code, §§ 13267, 13383);

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(2); Wat. Code, §§ 13267, 13383);

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(3); Wat. Code, §§ 13267, 13383); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

G. Bypass

1. Definitions

a. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)

b. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and

c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

REVISED TENTATIVE

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

5. Notice

a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)

b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):

a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));

c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and

d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a

REVISED TENTATIVE

notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. §§ 122.41(l)(3), 122.61.)

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)

B. Monitoring results must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. subchapters N or O. In the case of pollutants for which there are no approved methods under 40 C.F.R. part 136 or otherwise required under 40 C.F.R. subchapters N or O, monitoring must be conducted according to a test procedure specified in this Order for such pollutants. (40 C.F.R. §§ 122.41(j)(4), 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS—RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 C.F.R. part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));

3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));

5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and

6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and

REVISED TENTATIVE

2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS—REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, §§ 13267, 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)

2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)

REVISED TENTATIVE

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 C.F.R. § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)

REVISED TENTATIVE

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):

a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. § 122.41(l)(1)(ii).)

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the prior permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R.§ 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 C.F.R. § 122.41(l)(2).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board**,** State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13268, 13385, 13386, and 13387.

REVISED TENTATIVE

B. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions [40 C.F.R. § 122.41(a)(2)] [Water Code sections 13385 and 13387].

C. Any person may be assessed an administrative penalty by the Regional Water Board for violating Section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000 [40 C.F.R. § 122.41 (a)(3)].

D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 C.F.R. § 122.410)(5)].

E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 C.F.R. § 122.41 (k)(2)].

REVISED TENTATIVE

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):

a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));

b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));

c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or

d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)

2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels" (40 C.F.R. § 122.42(a)(2)):

a. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));

b. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));

c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or

d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

REVISED TENTATIVE

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP No. 9397)

Contents

I. General Monitoring Provisions E-2
II. Monitoring Locations E-5
III. Influent Monitoring Requirements—Not Applicable E-5
IV. Effluent Monitoring Requirements E-5
A. Monitoring Location EFF-001 ..... E-5
V. Whole Effluent Toxicity Testing Requirements E-8
B. Chronic Toxicity E-8
VI. Land Discharge Monitoring Requirements—NOT APPLICABLE E-11
VII. Recycling Monitoring Requirements—NOT APPLICABLE E-11
VIII. Receiving Water Monitoring Requirements E-12
A. Monitoring Location RSW-001 ..... E-12
B. Monitoring Location RSW-002 ..... E-13
IX. Other Monitoring Requirements E-13
A. Spill Contingency Plan (SCP) Status and Effectiveness Report E-13
X. Reporting Requirements E-13
A. General Monitoring and Reporting Requirements E-13
B. Self-Monitoring Reports (SMRs) E-14
C. Discharge Monitoring Reports (DMRs)—Not Applicable E-16
D. Other Reports E-16

Tables

Table E-1. Monitoring Station Locations E-5
Table E-2. Effluent Monitoring E-6
Table E-3. Receiving Water Monitoring Requirements for RSW-001 ..... E-12
Table E-4. Receiving Water Monitoring Requirements for RSW-002 ..... E-13
Table E-5. Monitoring Periods and Reporting Schedule E-14

REVISED TENTATIVE

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP No. 9397)

The Code of Federal Regulations (40 C.F.R. § 122.48) requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. An effluent sampling station shall be established for Discharge Point No. 001 (Latitude 34° 08' 50" N, Longitude -118° 12'40" W) and shall be located where representative samples of that effluent can be obtained.

B. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.

C. The Regional Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.

D. Pollutants shall be analyzed using the analytical methods described in sections 136.3, 136.4, and 136.5 (revised May 18, 2012); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.

E. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.

F. For any analyses performed for which no procedure is specified in the United States Environmental Protection Agency (USEPA) guidelines or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.

G. The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:

1. An actual numerical value for sample results greater than or equal to the ML; or

2. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML; or,

3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

Analytical data reported as "less than" for the purpose of reporting compliance with permit limitations shall be the same or lower than the permit limit(s) established for the given parameter.

Current MLs (Attachment G) are those published by the State Water Board in the Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, February 24, 2005.

REVISED TENTATIVE

H. Where possible, the MLs employed for effluent analyses shall be lower than the permit limitations established for a given parameter. If the ML value is not below the effluent limitation, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory QA/QC procedures.

The Regional Water Board, in consultation with the State Water Board Quality Assurance Program, shall establish a ML that is not contained in Attachment G to be included in the Discharger's permit in any of the following situations:

1. When the pollutant under consideration is not included in Attachment G;

2. When the Discharger and Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in 40 C.F.R. part 136 (revised May 18, 2012);

3. When the Discharger agrees to use an ML that is lower than that listed in Attachment G;

4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment G, and proposes an appropriate ML for their matrix; or,

5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the Regional Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

I. Water/wastewater samples must be analyzed within allowable holding time limits as specified in section 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.

J. All analyses shall be accompanied by the chain of custody, including but not limited to data and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a statement, under penalty of perjury, executed by the person responsible for the laboratory.

K. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.

L. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. Unless otherwise specified in the analytical method, duplicate samples must be analyzed at a frequency of 5% (1 in 20 samples) with at least one if there is fewer than 20 samples in a batch. A batch is defined as a single analytical run encompassing no more than 24 hours from to finish. A similar frequency shall be maintained for analyzing spiked samples.

REVISED TENTATIVE

M. When requested by the Regional Water Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.

N. For parameters that both average monthly and daily maximum limits are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the average monthly limit, the Discharger shall collect four additional samples at approximately equal intervals during the month, until compliance with the average monthly limit has been demonstrated. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. In the event of noncompliance with an average monthly effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the average monthly effluent limitation has been demonstrated. The Discharger shall provide for the approval of the Executive Officer a program to ensure future compliance with the average monthly limit.

O. In the event wastes are transported to a different disposal site during the report period, the following shall be reported in the monitoring report:

1. Types of wastes and quantity of each type;

2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and

3. Location of the final point(s) of disposal for each type of waste.

If no wastes are transported off-site during the reporting period, a statement to that effect shall be submitted.

P. Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.

Q. Laboratories analyzing monitoring samples shall be certified by the Department of Public Health, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.

REVISED TENTATIVE

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	A sampling station shall be established where a representative sample effluent can be obtained immediately prior to discharging to Discharge Point No. 001 (Latitude 34° 08' 50" N, Longitude 118° 12'40" W)
--	RSW-001	A sampling station shall be established at a location outside the influence of the effluent discharge location, at least 50 feet upcurrent, relative to tidal flow, in Port Hueneme Harbor.
--	RSW-002	A sampling station shall be established within 5 feet of the shore in the vicinity of the ~~wastewater~~ discharge outfall to the receiving water, Port Hueneme Harbor.

The North latitude and West longitude information in Table 1 are approximate for administrative purposes.

III. INFLUENT MONITORING REQUIREMENTS—NOT APPLICABLE

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

The Discharger shall monitor the final effluent consisting of ~~potable water~~ permeate, brine ~~water~~ solution, filter backwash water, and intake overflow water at Monitoring Location EFF-001 as follows. 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:

REVISED TENTATIVE

Table E-2. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow[1]	GPD[2]	Flow Meter	1/Day[3]	--
Conventional Pollutants				
pH	standard units	Grab	1/Quarter	[4]
Biochemical Oxygen Demand (BOD) (5-day@20 Deg. C)[5]	mg/L	Grab	1/Quarter	[4]
Total Suspended Solids (TSS)[5]	mg/L	Grab	1/Quarter	[4]
Non-Conventional Pollutants				
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Year	[4]
Chronic Toxicity	Pass or Fail for TST approach	24 hour composite	1/Year[7]	[4,6]
Dissolved Oxygen	mg/L	Grab	1/Quarter	[4]
Fecal Coliform	MPN/100 ml	Grab	1/Year	[4]
Enterococcus	MPN/100 ml	Grab	1/Year	[4]
Oil and Grease	mg/L	Grab	1/Quarter	[4]
Settleable Solids	ml/L	Grab	1/Quarter	[4]
Specific Conductivity	µmhos/cm	Grab	1/Quarter	[4]
Temperature	°F	Grab	1/Quarter	[4]
Total Coliform	MPN/100 ml	Grab	1/Year	[4]
Turbidity	NTU	Grab	1/Quarter	[4]
Total Residual Chlorine[4]	mg/L	Grab	1/Quarter	[4]
Priority Pollutants				
Arsenic, Total Recoverable[5]	µg/L	Grab	1/Quarter	[4]
Cadmium, Total Recoverable[5]	µg/L	Grab	1/Quarter	[4]
Chromium, Total Recoverable[5]	µg/L	Grab	1/Quarter	[4]
Copper, Total Recoverable[5]	µg/L	Grab	1/Month[9]	[4]
Hexavalent Chromium, Total Recoverable[5]	µg/L	Grab	1/Quarter	[4]
Lead, Total Recoverable[5]	µg/L	Grab	1/Quarter	[2]
Mercury, Total Recoverable[5]	µg/L	Grab	1/Quarter	[2]
Nickel, Total Recoverable[5]	µg/L	Grab	1/Quarter	[2]
Selenium, Total Recoverable[5]	µg/L	Grab	1/Quarter	[2]
Silver, Total Recoverable[5]	µg/L	Grab	1/Quarter	[2]
Zinc, Total Recoverable[5]	µg/L	Grab	1/Quarter	[2]
Remaining Priority Pollutants[8]	µg/L	Grab	1/Year	[2]
TCDD Equivalents[9,10]	µg/L	Grab	1/Year	[2]

REVISED TENTATIVE

[1] The Discharger pumps water in from the harbor, stores it in tanks, gravity feeds the water into the Facility for the desalination tests, reconstitutes the seawater and discharges it back into the harbor daily. The intake flow therefore is equal to the effluent flow. The intake flow is metered but due to the fact that the effluent flow is of very low volume throughout the day it is problematic to obtain an accurate reading using a meter. The intake flow, therefore, is used to accurately represent the effluent flow.

[2] GPD = gallons per day

[3] Flow shall be recorded daily during each period of discharge. Periods of no flow shall also be reported.

[4] Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; for priority pollutants, the methods must meet the lowest MLs specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. 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.

[5] The mass emission (lbs/day) for the discharge shall be calculated and reported using the limitation concentration and the actual flow rate measured at the time of discharge, using the formula:

$$M = 8.34 \times Ce \times Q$$

where: M = mass discharge for a pollutant, lbs/day
Ce = Reported concentration for a pollutant
Q = actual discharge flow rate.

[6] Refer to section V, Whole Effluent Toxicity Testing Requirements.

[7] During species sensitivity screening, chronic toxicity sampling shall be performed monthly for three months. Thereafter sampling shall be performed annually using the most sensitive species.

[8] Priority pollutants as defined by the CTR defined in Attachment H of this Order.

[9] Monthly monitoring is required for total recoverable copper. If the results of monthly monitoring demonstrate compliance with the effluent limits for a period of 12 consecutive months, the the minimum sampling frequency will change to 1/Quarter. If a violation of the effluent limits for copper occurs during quarterly monitoring, then the monitoring frequency will return to 1/Month until compliance is demonstrated for a period of 12 consecutive months.

[10] TCDD equivalents shall be calculated using the following formula, where the toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

$$\text{Dioxin-TEQ (TCDD equivalents)} = \Sigma(C_x \times TEF_x)$$

where: C_X = concentration of dioxin or furan congener x
TEF_X = TEF for congener x

Congeners	Toxicity Equivalence Factor (TEF)
2,3,7,8 - tetra CDD	1.0
1,2,3,7,8 - penta CDD	1.0
1,2,3,4,7,8 - hexa CDD	0.1
1,2,3,6,7,8 - hexa CDD	0.1
1,2,3,7,8,9 - hexa CDD	0.1
1,2,3,4,6,7,8 - hepta CDD	0.01
Octa CDD	0.0001
2,3,7,8 - tetra CDF	0.1
1,2,3,7,8 - penta CDF	0.05
2,3,4,7,8 - penta CDF	0.5
1,2,3,4,7,8 - hexa CDF	0.1
1,2,3,6,7,8 - hexa CDF	0.1
1,2,3,7,8,9 - hexa CDF	0.1
2,3,4,6,7,8 - hexa CDF	0.1
1,2,3,4,6,7,8 - hepta CDFs	0.01
1,2,3,4,7,8,9 - hepta CDFs	0.01
Octa CDF	0.0001

REVISED TENTATIVE

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

B. Chronic Toxicity

1. Definition of Chronic Toxicity

Chronic toxicity measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or ambient waters compared to that of the control organisms. This Order includes a chronic testing toxicity trigger defined as a result of "Fail" from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) approach

2. Discharge In-stream Waste Concentration (IWC) for Chronic Toxicity

The chronic toxicity IWC for this discharge is 100 percent effluent.

3. Sample Volume and Holding Time

The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume shall be collected to perform the required toxicity test. All toxicity tests shall be conducted as soon as possible following sample collection. No more than 36 hours shall elapse before the conclusion of sample collection and test initiation.

4. Chronic Marine and Estuarine Species and Test Methods

If effluent samples are collected from outfalls discharging to receiving waters with salinity ≥1 ppt, the Discharger shall conduct the following chronic toxicity tests on effluent samples—at the in-stream waste concentration for the discharge—in accordance with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995). Artificial sea salts shall be used to increase sample salinity. In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

a. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.01).

b. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, ~~and~~ or the sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0); or a static non-renewal toxicity test with the red abalone, *Haliotis rufescens* (Larval Shell Development Test Method).

c. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).

5. Species Sensitivity Screening

Species sensitivity screening shall be conducted monthly for a period of three months. Once each month, the Discharger shall collect a single effluent sample and concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. The species that exhibits the highest "Percent (%) Effect" at the discharge IWC during species sensitivity screening shall be used for routine annual monitoring.

Rescreening is required every three years. The Discharger shall rescreen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of rescreening tests demonstrates that the same species is the most sensitive, then

REVISED TENTATIVE

the rescreening does not need to include more than one suite of tests. If a different species is the most sensitive, or if there is ambiguity, then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

6. Quality Assurance and Additional Requirements

a. The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (Ho) for the TST approach is: Mean discharge IWC response ≤0.75 × Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent (%) Effect" at the discharge IWC is defined and reported as: ((Mean control response - Mean discharge IWC response) ÷ Mean control response)) × 100.

b. Dilution water and control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.

c. Annual reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported.

d. The Discharger shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of the Monitoring and Reporting Program and the rational is explained in the Fact Sheet (Attachment F).

7. Preparation of an Initial Investigation TRE Workplan

The Discharger shall prepare or update and submit a generic Initial Investigation TRE Work Plan within 90 days of the permit effective date, to be ready to respond to toxicity events. The Discharger shall review and update this work plan as necessary so it remains current and applicable to the discharge. At minimum, the work plan shall include:

a. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

b. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.

c. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of who would conduct the TIEs (i.e., an in-house expert or outside contractor).

8. Accelerated Monitoring Schedule for "Fail" Result on the Toxicity Test for the TST approach:

Within 24 hours of the time the Discharger becomes aware of this result, the Discharger shall implement an accelerated monitoring schedule of ~~four~~ six toxicity tests—consisting of five-concentrations (including the discharge IWC) and a control—conducted at approximately two week intervals, over ~~an eight~~ a twelve week period. If each of the accelerated toxicity tests results in "Pass", the Discharger shall return to routine

REVISED TENTATIVE

monitoring for the next monitoring period. If one of the accelerated toxicity tests results in "Fail", the Discharger shall both immediately notify the Regional Water Board Executive Officer and implement the Toxicity Reduction Evaluation (TRE) Process conditions set forth below.

a. If any three out of the initial test and the six additional tests result in "Fail", the Discharger shall immediately implement the Initial Investigation TRE workplan.

- **i.** Further actions by the Discharger to investigate, identify, and correct the causes of toxicity.
- **ii.** Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.
- **iii.** A schedule for these actions, progress reports, and the final report.

b. If implementation of the Initial Investigation TRE workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the normal sampling frequency required in Table E-2 in this MRP.

c. If all of the six additional tests required result in "Pass", then the Discharger may return to the normal sampling frequency.

d. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

9. Toxicity Reduction Evaluation (TRE) Process

a. Preparation and Implementation of Detailed TRE Work Plan. The Discharger shall immediately initiate a TRE using—according to the type of treatment facility—EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999) or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989). Within 30 days, the Discharger shall submit to the Regional Water Board Executive Officer a Detailed TRE Work Plan, which shall follow the generic Initial Investigation TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Executive Officer:

b. TIE Implementation. The Discharger may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.

c. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from

the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.

d. The Discharger shall conduct routine effluent monitoring for the duration of the TRE process. Additional accelerated monitoring and TRE work plans are not required once a TRE is begun.

e. The Regional Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

10. Reporting

The Self-Monitoring Report (SMR) shall include a full laboratory report for each toxicity test. This report shall be prepared using the format and content of the test methods manual chapter called Report Preparation, including:

a. The toxicity test results for the TST approach, reported as “Pass” or “Fail” and “Percent (%) Effect” at the chronic toxicity IWC for the discharge.

b. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).

c. TRE/TIE results. The Regional Water Board Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses.

d. Statistical program (e.g., TST calculator, CETIS, etc.) output results for each toxicity test.

VI. LAND DISCHARGE MONITORING REQUIREMENTS—NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS—NOT APPLICABLE

REVISED TENTATIVE

REVISED TENTATIVE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Location RSW-001

The Discharger shall monitor Port Hueneme Harbor at Monitoring Location RSW-001, within 50 feet ~~upstream~~ downstream of Discharge Point No. 001, relative to tidal flow, as follows:

Table E-3. Receiving Water Monitoring Requirements for RSW-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ammonia, Total (as N)	mg/L	Grab	1/Year	[1]
Temperature	°F	Grab	1/Year[2]	[1]
pH	s.u.	Grab	1/Year[2]	[1]
Priority Pollutants[3]	µg/L	Grab	1/Year[2]	[1]
TCDD Equivalents[4]	µg/L	Grab	1/Year	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; for priority pollutants the methods must meet the lowest MLs specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding ML.

[2] Receiving water pH, and temperature must be analyzed concurrent with priority pollutant sampling.

[3] Priority pollutants as defined by the CTR, defined in Attachment H of this Order.

[4] TCDD equivalents shall be calculated using the following formula, where the toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

Dioxin-TEQ = $\Sigma(C_x \times TEF_x)$

where:

C_X = concentration of dioxin or furan congener x

TEF_X = TEF for congener x

Congeners	Toxicity Equivalence Factor (TEF)
2,3,7,8 - tetra CDD	1.0
1,2,3,7,8 - penta CDD	1.0
1,2,3,4,7,8 - hexa CDD	0.1
1,2,3,6,7,8 - hexa CDD	0.1
1,2,3,7,8,9 - hexa CDD	0.1
1,2,3,4,6,7,8 - hepta CDD	0.01
Octa CDD	0.0001
2,3,7,8 - tetra CDF	0.1
1,2,3,7,8 - penta CDF	0.05
2,3,4,7,8 - penta CDF	0.5
1,2,3,4,7,8 - hexa CDF	0.1
1,2,3,6,7,8 - hexa CDF	0.1
1,2,3,7,8,9 - hexa CDF	0.1
2,3,4,6,7,8 - hexa CDF	0.1
1,2,3,4,6,7,8 - hepta CDFs	0.01
1,2,3,4,7,8,9 - hepta CDFs	0.01
Octa CDF	0.0001

REVISED TENTATIVE

B. Monitoring Location RSW-002

The Discharger shall monitor Port Hueneme Harbor at Monitoring Location RSW-002, approximately 5 feet from the shore downstream of Discharge Point No. 001, relative to tidal flow, as follows:

Table E-4. Receiving Water Monitoring Requirements for RSW-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ammonia, Total (as N)	mg/L	Grab	1/Year	[1]
pH	s.u.	Grab	1/Year	[1]
Temperature	°F	Grab	1/Year	[1]
Salinity	mg/L	Grab	1/Year	[1]
Dissolved Oxygen	mg/L	Grab	1/Year	[1]
Total Coliform	MPN/100 mL	Grab	1/Year	[1]
Fecal Coliform	MPN/100 mL	Grab	1/Year	[1]
Enterococcus	MPN/100 mL	Grab	1/Year	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; for priority pollutants the methods must meet the lowest MLs specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding ML.

IX. OTHER MONITORING REQUIREMENTS

A. Spill Contingency Plan (SCP) Status and Effectiveness Report

1. As required under Special Provision V.C.3 of this Order, the Discharger shall submit an updated SCP to the Regional Water Board within 90 days of the effective date of this permit.
2. Annually the Discharger shall report the status of the implementation and the effectiveness of the SCP Status required under Special Provision V.C.3 of this Order. The SCP Status shall be reviewed at a minimum once per year and updated as needed to ensure all actual or potential sources of pollutants in wastewater discharged from the facility are addressed in the SCP Status. All changes or revisions to the SCP Status will be summarized in the annual report required under Attachment E, Monitoring and Reporting, section X.D.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the Discharger shall indicate under penalty of perjury in the corresponding monitoring report that no effluent was discharged to surface water during the reporting period.
3. Each monitoring report shall contain a separate section titled “Summary of Non-Compliance” which discusses the compliance record and corrective actions taken or

REVISED TENTATIVE

planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.

4. The Discharger shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

5. The Discharger shall report the results of chronic toxicity testing, TRE and TIE as required in the Attachment E, Monitoring and Reporting, Sections V.A. and V.B.

B. Self-Monitoring Reports (SMRs)

1. The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). The CIWQS Web site will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit quarterly and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On:	Monitoring Period	SMR Due Date
1/Day	On permit effective date.	Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	May 1 August 1 November 1 February 1
1/Quarter	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
1/Year	January 1 following (or on) permit effective date	January 1 through December 31	February 1

4. Reporting Protocols. The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 C.F.R. part 136.

5. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

   a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

REVISED TENTATIVE

b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

6. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

7. Multiple Sample Data. When determining compliance with an AMEL or MDEL for priority pollutants 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:

a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

8. The Discharger shall submit SMRs in accordance with the following requirements:

a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

REVISED TENTATIVE

b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

c. SMRs must be submitted to the Regional Water Board electronically as specified in finding XI.B.1. above, signed and certified as required by the Standard Provisions (Attachment D). If the size of the submittal necessitates the submittal of a disk, please mail it to the address listed below:

California Regional Water Quality Control Board

Los Angeles Region

320 W. 4th Street, Suite 200

Los Angeles, CA 90013

C. Discharge Monitoring Reports (DMRs)—Not Applicable

D. Other Reports

1. Within 90 days of the effective date of the permit, the Discharger is required to submit the following to the Regional Water Board:

a. Initial Investigation TRE workplan

b. Updated SCP

REVISED TENTATIVE

ATTACHMENT F – FACT SHEET

Contents

I. Permit Information F-3
II. Facility Description F-4
A. Description of Wastewater and Biosolids Treatment and Controls F-4
B. Discharge Points and Receiving Waters F-5
C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data F-5
D. Compliance Summary F-7
E. Planned Changes F-7
III. Applicable Plans, Policies, and Regulations F-7
A. Legal Authorities F-7
B. California Environmental Quality Act (CEQA) F-7
C. State and Federal Laws, Regulations, Policies, and Plans F-7
D. Impaired Water Bodies on CWA Section 303(d) List F-9
E. Other Plans, Polices and Regulations—Not Applicable F-10
IV. Rationale For Effluent Limitations and Discharge Specifications F-10
V. Rationale for Receiving Water Limitations F-26
A. Surface Water F-26
B. Groundwater—Not Applicable F-26
VI. Rationale for Provisions F-26
A. Standard Provisions F-26
B. Special Provisions F-26
VII. Rationale for Monitoring and Reporting Requirements F-27
A. Influent Monitoring—Not Applicable F-27
B. Effluent Monitoring F-27
C. Whole Effluent Toxicity Testing Requirements F-27
D. Receiving Water Monitoring F-28
E. Other Monitoring Requirements—Not Applicable F-28
VIII. Public Participation F-28
A. Notification of Interested Parties F-28
B. Written Comments F-29
C. Public Hearing F-29
D. Waste Discharge Requirements Petitions F-29
E. Information and Copying F-29
F. Register of Interested Parties F-29
G. Additional Information F-30

REVISED TENTATIVE

Tables

Table F-1. Facility Information F-3
Table F-2. Historic Effluent Limitations and Monitoring Data F-5
Table F-3. Compliance Summary F-7
Table F-4. Basin Plan Beneficial Uses F-8
Table F-5. Summary of Technology-Based Effluent Limitations F-12
Table F-6. Applicable Water Quality Criteria F-14
Table F-7. Summary Reasonable Potential Analysis F-16
Table F-8. Applicable Basin Plan Numeric Objectives F-20
Table F-9. Summary of Water-Based Effluent Limitations F-22
Table F-10. Summary of Final Effluent Limitations F-25

REVISED TENTATIVE

ATTACHMENT F – FACT SHEET

As described in section I, the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) incorporates this Fact Sheet as findings of the Regional Water Board supporting the issuance of this Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as "not applicable" have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as "not applicable" are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4A560703002
Discharger	Naval Engineering and Expeditionary Warfare Center
Name of Facility	Seawater Desalination Test Facility
Facility Address	Building TF11, Stetham Road
	Naval Base Ventura County
	Port Hueneme, CA 93043
Facility Contact, Title and Phone	Alicia Thompson, Water Program Manager, (805) 982-2969
Authorized Person to Sign and Submit Reports	Lawrence Vasquez, Commanding Officer, NBVC
Mailing Address	311 Main Road, Building 632, N45V, Point Mugu, CA 93042
Billing Address	SAME AS MAILING
Type of Facility	Seawater Desalination Pilot Test Facility
Major or Minor Facility	Minor
Threat to Water Quality	3
Complexity	C
Pretreatment Program	No
Recycling Requirements	Not Applicable
Facility Permitted Flow	950,000 gallons per day (GPD)
Facility Design Flow	950,000 GPD
Watershed	Ventura County Coastal
Receiving Water	Port Hueneme Harbor
Receiving Water Type	Enclosed Bay

A. Naval Engineering and Expeditionary Warfare Center (hereinafter Discharger) is the owner and operator of the Seawater Desalination Test Facility (hereinafter Facility) located on Stetham Road adjacent to Port Hueneme Harbor at Naval Base Ventura County.

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.

REVISED TENTATIVE

B. The Facility discharges reconstituted seawater, including ~~potable water~~ permeate, brine ~~water~~ solution, filter backwash water, and intake overflow water, to Port Hueneme Harbor, a water of the United States and State of California. From July 5, 2008 until July 4, 2009, the Discharger was regulated by Order No. R4-2008-0030, adopted on June 5, 2008 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0064564. For the purpose of correcting the total recoverable metals effluent limits, Order No. R4-2008-0030 was amended by Order No. R4-2009-0067, which was adopted on June 4, 2009. Order No. R4-2009-0067 became effective on July 4, 2009 and expired on May 13, 2013. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

C. The Discharger filed a report of waste discharge and submitted an application for reissuance of its WDRs and NPDES permit on August 29, 2013. The application was deemed complete on March 25, 2014. A site visit was conducted on April 9, 2014, to observe operations and collect additional data to develop permit limitations and requirements for waste discharge.

II. FACILITY DESCRIPTION

The primary purpose of the Facility is to test existing military water purification assets and perform research and development of the new water purification technologies. The Facility primarily evaluates reverse osmosis (RO) desalination systems and related equipment, including filtration technologies (such as microfiltration and ultrafiltration membrane systems), high pressure pumps, and energy recovery devices.

A. Description of Wastewater and Biosolids Treatment and Controls

The Facility uses seawater from Port Hueneme Harbor that is drawn from an intake structure located at the end of a pier that extends approximately 40 feet out into the Harbor. The intake structure consists of two intake hoses, each with perforated PVC piping in the shape of a “T”, that can be dropped down into the Port Hueneme Harbor. The intake hoses are connected to one of two pumps depending on desired flow. One pump can generate up to 200 gallons per minute (gpm) and the other pump can generate up to 440 gpm. The system will draw up to 950,000 gallons per day (GPD) of seawater for testing various filtration and desalination equipment. Screens are attached to the seawater intake to prevent larger material (fish and other marine organisms) from being taken into the process. A secondary screen with a 1/8 inch opening further strains the intake water.

From the intake structure, the seawater is directed to a seawater feed tank. Because the intake flow isn’t regulated, the feed tank overflows and discharges into one of the two outfall sumps and is later directed to Discharge Point No. 001. Seawater for the various desalination test systems is drawn from the feed tank. The various desalination test systems include reverse osmosis, microfiltration, ultrafiltration, media filtration, cartridge filters, and other treatment technologies. Some of these treatment systems include the use of chemicals, including coagulants, antiscalants, chlorine, and dechlorination chemicals. At times, testing is limited to a pump, with no treatment; thus, seawater is simply pumped from the feed tank to one of the outfall sumps.

Microfiltration and ultrafiltration membranes are periodically backwashed. This backwash water is routed to a clarifier to settle out particulates. The clarified water is then discharged back to Port Hueneme Harbor via Discharger Point No. 001.

Membrane cleaning involves using various cleaning solutions. This water stream is discharged directly to the sanitary sewer under the Naval Base Ventura County industrial wastewater discharge requirements set forth under permit number ~~SIU-0608-1 with the City of~~

REVISED TENTATIVE

~~Port Hueneme~~ OC-4 with the City of Oxnard. Discharges from the membrane cleaning wastewaters are not included in the effluent through Discharge Point No. 001.

Desalination produces two separate streams: ~~potable water~~ permeate and brine solution. ~~Potable water~~ Permeate from the test systems is directed to the ~~potable water~~ permeate storage tank. ~~Brine from the test systems is directed to the brine storage tank.~~ The treated water and the brine ~~water~~ solution are then recombined and discharged to the two outfall sumps with the filter backwash water and intake overflow water, and then discharges to Port Hueneme Harbor via Discharge Point No. 001.

B. **Discharge Points and Receiving Waters**

The Facility discharges up to 950,000 GPD of intake overflow, pump test seawater, filter backwash, ~~potable water~~ permeate and brine solution to Port Hueneme Harbor, a water of the United States and State of California via Discharge Point No. 001 (Latitude 34° 08' 50" N, Longitude -118° 12'40" W).

C. **Summary of Existing Requirements and Self-Monitoring Report (SMR) Data**

Effluent limitations contained in the prior Order for discharges from Discharge Point No. 001 (Monitoring Location EFF-001) and representative monitoring data submitted in SMRs from the term of the prior Order are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation		Monitoring Data (From September 2008 – December 2012)	
		Average Monthly	Maximum Daily	Highest Average Monthly Discharge	Highest Daily Discharge
Biochemical Oxygen Demand (5-day @ 20 deg. C) (BOD)	mg/L	50	75	2.3	2.3
	lbs/day[1]	396	595	NR	NR
Oil and Grease	mg/L	10	15	<0.5	<0.5
	lbs/day[1]	79	119	NR	NR
pH	s.u.	6.5 – 8.5[2]		7.5 – 8.04[2]	
Total Suspended Solids (TSS)	mg/L	50	75	45	45
	lbs/day[1]	396	595	NR	NR
Temperature	°F	--	86[3]	--	72.7
Settleable Solids	ml/L	0.1	0.3	<0.1	<0.1
Turbidity	NTU	50	75	3.3	3.3
Total Residual Chlorine	mg/L	--	0.1	0.075	0.075
	lbs/day[1]	--	0.8	NR	NR
Arsenic, Total Recoverable	µg/L	36[4]	69[4]	1.45[5]	1.45[5]
	µg/L	29.4[5]	59[5]	3.39[7]	3.39[7]
	lbs/day[1]	0.24[5]	0.5[5]	NR	NR
Cadmium, Total Recoverable	µg/L	9.3[4]	42[4]	0.035[5]	0.035[5]
	µg/L	7.7[5]	15.4[5]	0.5[7]	0.5[7]
	lbs/day[1]	0.061[5]	0.12[5]	NR	NR
Copper, Total Recoverable	µg/L	2.6[4]	4.0[4]	4.26[5]	8.35[5]
	µg/L	2.9[5]	5.8[5]	6.4[7]	6.78[7]

REVISED TENTATIVE

Parameter	Units	Effluent Limitation		Monitoring Data (From September 2008 – December 2012)	
		Average Monthly	Maximum Daily	Highest Average Monthly Discharge	Highest Daily Discharge
	lbs/day[1]	0.023[5]	0.05[5]	NR	NR
Lead, Total Recoverable	µg/L	7.8[4]	200[4]	0.099[5]	0.099[5]
	µg/L	7[6]	14[6]	0.57[7]	0.57[7]
	lbs/day[1]	0.06[6]	0.11[6]	NR	NR
Mercury, Total Recoverable	µg/L	0.051	0.102	0.01	0.01
	lbs/day[1]	0.0004	0.0008	NR	NR
Nickel, Total Recoverable	µg/L	8.2[4]	74[4]	1.755[5]	1.755[5]
	µg/L	6.8[6]	13.7[6]	4.385[7]	4.385[7]
	lbs/day[1]	0.054[6]	0.11[6]	NR	NR
Selenium, Total Recoverable	µg/L	71[4]	290[4]	0.01[5]	0.01[5]
	µg/L	58[6]	117[6]	0.12[7]	94[7]
	lbs/day[1]	0.46[6]	0.93[6]	NR	NR
Silver, Total Recoverable	µg/L	1.6[4]	--	0.1[5]	--
	µg/L	1.12[6]	2.24[6]	0.47[7]	1.2[7]
	lbs/day[1]	0.009[6]	0.018[6]	NR	NR
Zinc, Total Recoverable	µg/L	77[4]	85[4]	5.881[5]	5.881[5]
	µg/L	47.3[6]	95[6]	23[7]	23[7]
	lbs/day[1]	0.38	0.75	NR	NR
Acute Toxicity	% Survival	--	[8]	--	96[9]
Chronic Toxicity	TU_c	--	[10]	--	1.0

NR – Not Reported

1 The mass (lbs/day) limitations are based on a maximum flow of 0.95 MGD and are calculated as follows:
Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor)

2 Range of instantaneous values.

3 Applied as an instantaneous maximum effluent limitation.

4 Limitation established in Order No. R4-2008-0030 effective between July 5, 2008 and July 4, 2009.

5 Values represent monitoring conducted prior to July 4, 2009.

6 Amended limitation established in Order No. R4-2009-0067 effective after July 4, 2009.

7 Values represent monitoring conducted after July 4, 2009.

8 The acute toxicity of the effluent shall be such that:
a. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay test shall be at least 90%, and
b. No single test shall produce less than 70% survival.

9 Represents the minimum value reported.

10 Order No. R4-2008-0030, as amended by Order No. R4-2009-0067, did not include a numeric effluent limitation for chronic toxicity. The Order included a chronic toxicity trigger of 1.0 TU_c in a critical life stage for 100% effluent.

REVISED TENTATIVE

D. **Compliance Summary**

Monitoring data from September 2008 through December 2012 indicate that the Discharger has consistently complied with the effluent limitations of Order No. R4-2008-0030, as amended by Order No. R4-2009-0067, except for the effluent limitation exceedances listed in the following table.

Table F-3. Compliance Summary

Date	Type of Limitation	Pollutant	Units	Effluent Limitation	Result
10/28/2008	AMEL	Copper, Total Recoverable	µg/L	2.6[1]	4.06
2/04/2009	AMEL	Copper, Total Recoverable	µg/L	2.6[1]	4.26
3/24/2009	MDEL	Copper, Total Recoverable	µg/L	4.0[1]	8.35
3/31/2009	AMEL	Copper, Total Recoverable	µg/L	~~4.0~~ 2.6[1]	3.48
5/5/2009	MDEL	Copper, Total Recoverable	µg/L	4.0[1]	4.43
5/31/2009	AMEL	Copper, Total Recoverable	µg/L	2.6[1]	2.98
8/31/2009	AMEL	Copper, Total Recoverable	µg/L	2.9[2]	4.14
11/30/2010	AMEL	Copper, Total Recoverable	µg/L	2.9[2]	4.09
2/28/2011	AMEL	Copper, Total Recoverable	µg/L	2.9[2]	3.40
3/31/2011	AMEL	Copper, Total Recoverable	µg/L	2.9[2]	~~3.15~~ 2.9
10/30/2012	MDEL	Copper, Total Recoverable	µg/L	5.8[2]	6.40
10/31/2012	AMEL	Copper, Total Recoverable	µg/L	2.9[2]	6.40
11/30/2012	AMEL	Copper, Total Recoverable	µg/L	2.9[2]	3.35

[1] Effluent limitation established in Order No. R4-2008-0030.
[2] Amended effluent limitation established in Order No. R4-2009-0067.

These exceedances are being reviewed for appropriate enforcement action.

E. **Planned Changes**

The Facility indicates there are no planned changes during the term of the proposed permit.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the requirements and authorities described in this section.

A. **Legal Authorities**

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

B. **California Environmental Quality Act (CEQA)**

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

C. **State and Federal Laws, Regulations, Policies, and Plans**

1. **Water Quality Control Plan.** The Regional Water Board adopted a *Water Quality Control Plan Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (hereinafter Basin Plan) on June 13, 1994, that designates

REVISED TENTATIVE

beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan. In addition, the Basin Plan implements State Water Board Resolution 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 Port Hueneme Harbor are as follows:

Table F-4. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Port Hueneme Harbor	Existing: Industrial process supply (PROC), navigation (NAV), water contact recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM), Marine Habitat (MAR) and wildlife habitat (WILD)

2. **Enclosed Bays and Estuaries Policy.** The *Water Quality Control Policy for the Enclosed Bays and Estuaries of California* (Enclosed Bay and Estuaries Policy), adopted by the State Water Board as Resolution No. 95-84 on November 16, 1995, states that:

   "It is the policy of the State Water Board that the discharge of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries, other than the San Francisco Bay- Delta system, shall be phased out at the earliest practicable date. Exceptions to this provision may be granted by a Regional Water Board only when the Regional Water Board finds that the wastewater in question would consistently be treated and discharged in such a manner that it would enhance the quality of receiving waters above that which would occur in the absence of the discharge."

   While the discharge from the Facility discharges into the Port Hueneme Harbor, within the enclosed bay, the discharge is comprised primarily of reconstituted sea water, and therefore is not considered to be industrial process wastewater. Nonetheless, this Order contains provisions necessary to protect all beneficial uses of the receiving water.

3. **Thermal Plan.** The State Water Board adopted the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan) on January 7, 1971, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. Requirements of this Order implement the Thermal Plan. Additionally, a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region.* The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. A maximum effluent temperature limitation of 86°F was determined to be appropriate for protection of aquatic life and is included in this Order.

4. **Sediment Quality Plan.** The State Water Board adopted the *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1, Sediment Quality* (Sediment Quality Plan) on September 16, 2008, and it became effective on August 25, 2009. The Sediment Quality Plan establishes: 1) narrative sediment quality objectives for benthic community protection from exposure to contaminants in sediment and to protect human health; and

REVISED TENTATIVE

2) a program of implementation using a multiple lines of evidence approach to interpret the narrative sediment quality objectives. Requirements of this Order implement the Sediment Quality Plan.

5. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 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 February 13, 2001. These rules contain federal water quality criteria for priority pollutants.

6. **State Implementation Policy.** On March 2, 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 April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the 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 May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

7. **Antidegradation Policy.** Federal regulation 40 C.F.R. section 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 68-16. Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality 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. The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.

8. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

9. **Endangered Species Act Requirements.** 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, §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C. §§ 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.

D. **Impaired Water Bodies on CWA Section 303(d) List**

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all CWA section 303(d)-listed water bodies and

REVISED TENTATIVE

pollutants, the Regional Water Board plans to develop and adopt TMDLs that will specify WLAs for point sources and load allocations (LAs) for non-point sources, as appropriate.

The USEPA approved the State's 2010 CWA section 303(d) list of impaired water bodies on November 12, 2010. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2010 CWA section 303(d) list and have been scheduled for TMDL development. The Facility discharges into Port Hueneme Harbor. The 2010 State Water Board's California CWA section 303(d) List classifies Port Hueneme Harbor as impaired. The pollutants of concern in the harbor include: PCBs (tissue) and DDT (tissue). The inclusion of Port Hueneme Harbor on the 2010 CWA section 303(d) list documents the waterbody's lack of assimilative capacity for the pollutants of concern. A total maximum daily load (TMDL) is developed for the pollutants of concern in a CWA section 303(d) listed waterbody to facilitate the waterbody's recovery of its ability to fully support beneficial uses. To date, no TMDLs have been developed for Port Hueneme Harbor; therefore, no conditions in the Order are based on TMDLs.

E. **Other Plans, Polices and Regulations—Not Applicable**

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

Generally, mass-based effluent limitations ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limitations. Section 122.45(f)(1) requires that all permit limitations, standards or prohibitions be expressed in terms of mass units except under the following conditions: (1) for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limitations; (2) when applicable standards or limitations are expressed in terms of other units of measure; or (3) if in establishing technology-based permit limitations on a case-by-case basis limitations based on mass are infeasible because the mass or pollutant cannot be related to a measure of production. The limitations, however, must ensure that dilution will not be used as a substitute for treatment. This Order includes mass-based effluent limitations, where appropriate, to comply with 40 C.F.R. section 122.45(f)(1).

A. Discharge Prohibitions

The discharge prohibitions are based on the requirements of the Basin Plan, State Water Board's plans and policies, the CWA, the Water Code, and previous permit provisions, and are consistent with the requirements established for other discharges regulated by NPDES permits to Port Hueneme Harbor.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 C.F.R. section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary

REVISED TENTATIVE

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 C.F.R. section 125.3.

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

a. Best practicable treatment control technology (BPT) represents the average of the best existing performance by well-operated facilities within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop Effluent Limitation Guidelines (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 C.F.R. section 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the Regional Water Board must consider specific factors outlined in 40 C.F.R. section 125.3.

2. Applicable Technology-Based Effluent Limitations

As the discharge from this Facility is predominantly reconstituted sea water, there are no applicable national ELGs. Where USEPA has not yet developed technology-based standards for a particular industry or a particular pollutant, CWA section 402(a)(1) and 40 C.F.R. section 125.3 authorize the use of BPJ to derive technology-based effluent limitations (TBELs) on a case-by-case basis using BPJ. When BPJ is used, the permit must reflect specific factors outlined at 40 C.F.R. section 125.3.

The previous Order No. R4-2009-0067 established TBELs for TSS, oil and grease, settleable solids, turbidity and total residual chlorine. This Order retains the TBELs from the previous order for these pollutants. Order No. R4-2009-0067 included average monthly and maximum daily effluent limitations for BOD of 50 mg/L and 75 mg/L, respectively. Average monthly and maximum daily BOD limits for other industrial facilities within the Region are typically established at 20 mg/L and 30 mg/L, respectively. These limits have also been included consistent with those included in the previous Order.

The technology-based effluent limitations for BOD, TSS, and oil and grease are based on BPT and BCT. In setting these limitations, the Regional Water Board considered the factors listed in 40 C.F.R. section 125.3(d)(1) and 125.3(d)(2), respectively. The technology-based effluent limitations for settleable solids, turbidity and total residual

REVISED TENTATIVE

chlorine are based on BPT and BAT. In setting these limitations, the Regional Water Board considered the factors listed in 40 C.F.R. section 125.3(d)(1) and 125.3(d)(3), respectively. These factors include: cost of application of technology, age of equipment and facilities used, process employed, engineering aspects/control techniques, process changes and non-water quality environmental impacts.

The Discharger's past performance demonstrates the ability to consistently meet the TBELs for BOD, TSS, oil and grease, settleable solids, turbidity and total residual chlorine established in this Order. As the current technology used by the Discharger is capable of meeting the limitations, no changes to equipment, facilities, process or controls are necessary; thereby incurring no additional costs or non-water quality environmental impacts.

A summary of the technology-based effluent limitations for Discharge Point No. 001 is shown in Table F-5:

Table F-5. Summary of Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	20	30
	lbs/day[1]	158	238
Oil and Grease	mg/L	10	15
	lbs/day[1]	79	119
Settleable Solids	ml/L	0.1	0.3
Total Suspended Solids (TSS)	mg/L	50	75
	lbs/day[1]	396	595
Turbidity	NTU	50	75
Total Residual Chlorine	mg/L	--	0.1
	lbs/day[1]	--	0.8

[1] The mass (lbs/day) limitations are based on a maximum flow of 0.95 MGD and are calculated as follows:
Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor)

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

CWA Section 301(b) and 40 C.F.R. section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) of 40 C.F.R. requires 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, water quality-based effluent limitations (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 section 122.44(d)(1)(vi).

REVISED TENTATIVE

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

The specific procedures for determining reasonable potential for discharges from the Facility, and if necessary for calculating WQBELs, are contained in the SIP for non-storm water discharges.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The Regional Water Board adopted a 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 Basin Plan. The beneficial uses applicable to the Port Hueneme Harbor are summarized in section III.C.1 of this Fact Sheet. The Basin Plan includes both narrative and numeric water quality objectives applicable to the receiving water.

Priority pollutant water quality criteria in the CTR are applicable to the Port Hueneme Harbor. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with section 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time. The salinity at Port Hueneme Harbor exceeds 10 ppt. Therefore, the CTR criteria for saltwater aquatic life or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of the Port Hueneme Harbor.

Table F-6 summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent or receiving water during the most recent discharges.

REVISED TENTATIVE

Table F-6. Applicable Water Quality Criteria

CTR No.	Constituent	Selected Criteria	CTR/NTR Water Quality Criteria					
			Freshwater		Saltwater		Human Health for Consumption of:	
			Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms only
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1	Antimony	4,300	--	--	--	--	--	4,300
2	Arsenic	36	--	--	69	36	--	--
4	Cadmium	9.4	--	--	42	9.4	--	--
5a	Chromium (III)	No Criteria	--	--	--	--	--	--
6	Copper	3.73	--	--	5.78	3.73	--	--
7	Lead	8.5	--	--	221	8.5	--	--
8	Mercury	0.051	--	--	--	--	--	0.051
9	Nickel	8.3	--	--	75	8.3	--	4,600
10	Selenium	71	--	--	291	71	--	--
11	Silver	2.2	--	--	2.24	--	--	--
12	Thallium	6.30	--	--	--	--	--	6.30
13	Zinc	86	--	--	95	86	--	--
20	Bromoform	360	--	--	--	--	--	360
54	Phenol	4,600,000	--	--	--	--	--	4,600,000
56	Acenaphthene	2,700	--	--	--	--	--	2,700
57	Acenapthylene	No Criteria	--	--	--	--	--	--
58	Anthracene	110,000	--	--	--	--	--	110,000
60	Benzo(a)Anthracene	0.049	--	--	--	--	--	0.049
68	Bis(2-Ethylhexyl)Phthalate	5.9	--	--	--	--	--	5.9
70	Butylbenzyl Phthalate	5,200	--	--	--	--	--	5,200
73	Chrysene	0.049	--	--	--	--	--	0.049
81	Di-n-Butyl Phthalate	12,000	--	--	--	--	--	12,000
86	Fluoranthene	370	--	--	--	--	--	370
87	Fluorene	14,000	--	--	--	--	--	14,000
94	Naphthalene	No Criteria	--	--	--	--	--	--
99	Phenanthrene	No Criteria	--	--	--	--	--	--
100	Pyrene	11,000	--	--	--	--	--	11,000

REVISED TENTATIVE

3. Determining the Need for WQBELs

In accordance with section 1.3 of the SIP, the Regional Water Board conducts a Reasonable Potential Analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Water Board analyzes effluent and receiving water data and identifies the maximum observed effluent concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent. To determine reasonable potential, the MEC and the B are then compared with the applicable water quality objectives (C) outlined in the CTR, NTR, as well as the Basin Plan. For all pollutants that have a reasonable potential to cause or contribute to an excursion above a state water quality standard, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Regional Water Board identifies the MEC and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

Trigger 1 – If the MEC ≥ C, a limit is needed.

Trigger 2 – If the background concentration (B) > C and the pollutant is detected in the effluent, a limit is needed.

Trigger 3 – If other related information such as CWA section 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

Sufficient effluent and receiving water data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

The RPA was performed using data collected by the Discharger at Monitoring Location EFF-001 from September 2008 through February 2014. This period represents the terms of the previous Order No. R4-2008-0030 and its subsequent amendment through Order No. R4-2009-0067. Based on the RPA, pollutants that demonstrate reasonable potential are copper and selenium. The following table summarizes results from the RPA. Only CTR pollutants that were detected in the effluent or receiving water are included in Table F-7.

REVISED TENTATIVE

Table F-7. Summary Reasonable Potential Analysis

CTR No.	Constituent	Applicable Water Quality Criteria (C)	Max Effluent Conc. (MEC)	Maximum Detected Receiving Water Conc. (B)	RPA Result - Need Limit?	Reason
1	Antimony	4,300	0.2	0.26	No	MEC<C
2	Arsenic	36	3.39	2.0	No	MEC<C
4	Cadmium	9.4	0.5	0.060	No	MEC<C
5a	Chromium (III)	No Criteria	0.30	0.32	No	No Criteria
6	Copper	3.73	8.35	2.7	Yes	MEC>C
7	Lead	8.5	0.57	0.28	No	MEC<C
8	Mercury	0.051	0.01	0.02	No	MEC<C
9	Nickel	8.3	4.385	0.50	No	MEC<C
10	Selenium	71	94	110	Yes	MEC>C
11	Silver	2.2	1.2	0.28	No	MEC<C
12	Thallium	6.30	0.011	0.013	No	MEC<C
13	Zinc	86	23	9.6	No	MEC<C
20	Bromoform	360	1.7	<0.16	No	MEC<C
54	Phenol	4,600,000	0.19	<0.0005	No	MEC<C
56	Acenaphthene	2,700	0.0084	0.0063	No	MEC<C
57	Acenapthylene	No Criteria	<0.0005	0.15	No	No Criteria
58	Anthracene	110,000	0.0024	15.6	No	MEC<C
60	Benzo(a)Anthracene	0.049	<0.0005	0.0014	No	MEC<C
68	Bis(2-Ethylhexyl)Phthalate	5.9	1.7	1.7	No	MEC<C
70	Butylbenzyl Phthalate	5,200	1.9	1.9	No	MEC<C
73	Chrysene	0.049	0.0016	0.0021	No	MEC<C
81	Di-n-Butyl Phthalate	12,000	0.142	<0.005	No	MEC<C
86	Fluoranthene	370	0.11	0.0094	No	MEC<C
87	Fluorene	14,000	0.0046	0.0032	No	MEC<C
94	Naphthalene	No Criteria	0.013	0.014	No	No Criteria
99	Phenanthrene	No Criteria	0.012	0.0094	No	No Criteria
100	Pyrene	11,000	0.0072	0.0055	No	MEC<C

REVISED TENTATIVE

4. WQBEL Calculations

a. If reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in section 1.4 of the SIP. These procedures include:

i. If applicable and available, use of the WLA established as part of a TMDL.

ii. Use of a steady-state model to derive MDELs.

iii. Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.

b. The final WQBELs for copper and selenium are based on monitoring results and following the procedure based on the steady-state model, available in Section 1.4 of the SIP.

c. Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this Order, no dilution credit is being allowed. However, in accordance with the reopener provision in Section VI.C.1.e, this Order may be reopened upon the submission by the Discharger of adequate information to establish appropriate dilution credits or a mixing zone, as determined by the Regional Water Board.

d. <u>WQBELs Calculation Example</u>

Using total recoverable copper as an example, the following demonstrates how WQBELs were established for this Order. The tables in Attachment J summarize the development and calculation of all WQBELs for this Order using the process described below.

The process for developing these limits is in accordance with Section 1.4 of the SIP. Attachment J summarizes the development and calculation of all WQBELs for this Order using the process described below.

Calculation of aquatic life AMEL and MDEL:

Step 1: For each constituent requiring an effluent limit, identify the applicable water quality criteria or objective. For each criterion, determine the effluent concentration allowance (ECA) using the following steady state equation:

$ECA = C + D(C-B)$ when $C > B$, and

$ECA = C$ when $C \leq B$,

Where

C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. For discharges from the Facility, criteria for saltwater are independent of hardness and pH.
D = The dilution credit, and
B = The ambient background concentration

As discussed above, this Order does not allow dilution; therefore

$ECA = C$

For total recoverable copper, the applicable water quality criteria are:

$ECA = WLA_{acute} = 5.78\ \mu g/L$

$ECA = WLA_{chronic} = 3.73\ \mu g/L$

REVISED TENTATIVE

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in section 1.4, Step 3 of the SIP and will not be repeated here.

$LTA_{acute} = ECA_{acute} \times Multiplier_{acute\ 99}$

$LTA_{chronic} = ECA_{chronic} \times Multiplier_{chronic\ 99}$

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6. If the data set is greater than 10 samples, and at least 20% of all the samples in the data set are reported as detected, the CV shall be equal to the standard deviation of the data set divided by the average of the data set.

For total recoverable copper, the following data were used to develop the acute and chronic LTAs using equations provided in section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

No. of Samples	CV	ECA $Multiplier_{acute}$	ECA $Multiplier_{chronic}$
52	0.68	0.289	0.490

$LTA_{acute} = 5.78\ \mu g/L \times 0.289 = 1.67\ \mu g/L$

$LTA_{chronic} = 3.73\ \mu g/L \times 0.490 = 1.82\ \mu g/L$

Step 3: Select the most limiting (lowest) of the LTA.

LTA = most limiting of LTA_{acute} or $LTA_{chronic}$

For total recoverable copper, the most limit LTA was the LTA_{acute}

$LTA_{copper} = LTA_{acute} = 1.67\ \mu g/L$

Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as MDEL. The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the CV of the data set, the number of samples (for AMEL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in section 1.4, Step 5 of the SIP and will not be repeated here.

$AMEL_{aquatic\ life} = LTA \times AMEL_{multiplier\ 95}$

$MDEL_{aquatic\ life} = LTA \times MDEL_{multiplier\ 99}$

AMEL multipliers are based on the 95th percentile occurrence probability and MDEL multipliers are based on the 99th percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4).

REVISED TENTATIVE

For total recoverable copper the following data were used to develop the AMEL and MDEL for effluent limitations using equations provided in section 1.4, Step 5 of the SIP:

No. of Samples Per Month	CV	$Multiplier_{MDEL99}$	$Multiplier_{MDEL95}$
4	0.68	3.47	1.63

AMEL= 1.67 µg/L x 1.63 = 2.7 µg/L

MDEL= 1.67 µg/L x 3.47 = 5.8 µg/L

Step 5: For the ECA based on human health, set the AMEL equal to the $ECA_{human\ health}$

$AMEL_{human\ health} = ECA_{human\ health}$

For total recoverable copper, there are no human health criteria. Therefore, there will be no AMEL calculated for human health criteria.

Step 6: Calculate the MDEL for human health by multiplying the AMEL by the ratio of $Multipler_{MDEL}$ to the $Multiplier_{AMEL}$. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

$MDEL_{human\ health} = AMEL_{human\ health} \times (Multiplier_{MDEL} / Multiplier_{AMEL})$

For total recoverable copper, there are no human health criteria. Therefore, there will be no MDEL calculated for human health criteria.

Step 7: Select the lower of the AMEL and MDEL based on aquatic life and human health as the WQBEL for the Order.

Calculations for effluent limitations were based on the acute criteria for total recoverable copper and the chronic criteria for total recoverable selenium. These limitations are expected to be protective of the beneficial uses. Final WQBELs for each are summarized in Table F-9 of this Fact Sheet.

5. WQBELs Based on Basin Plan Objectives

These Basin Plan Objectives were evaluated with respect to effluent monitoring data and Facility operations:

REVISED TENTATIVE

Table F-8. Applicable Basin Plan Numeric Objectives

Constituent	Units	Water Quality Objectives
pH	s.u.	The pH of bays and estuaries shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.2 units from natural conditions as a result of waste discharge.
Bacteria	MPN/100ml	*Marine Waters Designated for Water Contact Recreation (REC-1)* Rolling 30-day Geometric Means Limits i. Total coliform density shall not exceed 1,000/100 ml. ii. Fecal coliform density shall not exceed 200/100 ml. iii. Enterococcus density shall not exceed 35/100 ml. Single Sample Limits i. Total coliform density shall not exceed 10,000/100 ml. ii. Fecal coliform density shall not exceed 400/100 ml. iii. Enterococcus density shall not exceed 104/100 ml. iv. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.
Chlorine, Total Residual	mg/L	Chlorine residual shall not be present in surface water discharges at concentrations that exceed 0.1 mg/L and shall not persist in receiving waters at any concentration that causes impairment of beneficial uses.
Turbidity	NTU	Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%. Where natural turbidity is greater than 50 NTU increases shall not exceed 10%.

a. **pH.** This Order includes effluent and receiving water limitations for pH to ensure compliance with Basin Plan Objectives for pH. The effluent limitation for pH is consistent with the previous Order.

b. **Bacteria.** Total coliform and fecal coliform were not detected in effluent samples greater than Basin Plan objectives, based on 5 samples each. However, *Enterococcus* was detected in concentrations greater than Basin Plan objectives in two out of five samples, with a maximum effluent concentration of 326 MPN/100 mL reported in September 2009. Therefore, this Order establishes effluent limitations for bacteria and continues to require the Discharger to monitor for bacteria to ensure compliance with Basin Plan objectives for bacteria.

c. **Chlorine, Total Residual.** This Order includes a technology-based effluent limitation for total residual chlorine that is consistent with the Basin Plan water quality objective and the effluent limitation from the previous Order.

d. **Turbidity**. The Basin Plan requirements for turbidity are as follows:

i. Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%.

ii. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.

This Order applies the water quality objective for turbidity as a receiving water limitation in addition to the technology-based effluent limitation.

REVISED TENTATIVE

e. Temperature. This Order addresses the WQO for temperature, through interpretation of the Thermal Plan and the White Paper, as described in section III.C.3 of this Fact Sheet.

6. Whole Effluent Toxicity (WET)

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses by aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota.

a. Acute Toxicity

In accordance with the Basin Plan, Order No. R4-2008-0030 contained acute toxicity objectives that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. The Facility does not demonstrate reasonable potential for acute toxicity. In five acute toxicity tests reported between September, 2008 and October, 2011 the Facility did not exceed the acute toxicity limit. This Order therefore discontinues the acute toxicity limitation and monitoring requirement.

Recent information indicates that chronic toxicity is a more stringent measure of the aggregate toxic properties of the discharge. A chemical at a low concentration can have chronic effects but no acute effects. Therefore, based on best professional judgment, annual chronic toxicity testing requirements are retained in this Order.

b. Chronic Toxicity

In addition to the Basin Plan requirements, section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Order No. R4-2008-0030 included a trigger for chronic toxicity of 1.0 TUc. The Facility does not demonstrate reasonable potential for chronic toxicity. In 20 chronic toxicity tests reported between September, 2008 and October, 2011 the Facility did not exceed the chronic toxicity trigger. Therefore, this Order does not include a chronic toxicity effluent limitation, but requires the annual chronic toxicity testing of the effluent at discharge location EFF-001. This Order also establishes a chronic toxicity accelerated monitoring trigger defined as a test result of “Fail” for the TST approach.

REVISED TENTATIVE

7. Final WQBELs

Table F-9. Summary of Water-Based Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous	
				Minimum	Maximum
pH	standard units	--	--	6.5	8.5
Bacteria	CFU/100 ml or MPN/100 ml	[1]			
Copper, Total Recoverable	µg/L	2.7	5.8	--	--
	lbs/day[2]	0.021	0.046	--	--
Selenium, Total Recoverable	µg/L	27	94	--	--
	lbs/day[2]	0.21	0.74	--	--
Temperature	°F	--	--	--	86

[1] Bacteria limits are established for both geometric means and single samples. The Basin Plan includes and implementation provision for geometric means: *"The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period.)"*

a. Rolling 30-dayGeometric Mean Limits
   i. Total coliform density shall not exceed 1,000/100 ml.
   ii. Fecal coliform density shall not exceed 200/100 ml.
   iii. Enterococcus density shall not exceed 35/100 ml.

b. Single Sample Limits
   i. Total coliform density shall not exceed 10,000/100 ml.
   ii. Fecal coliform density shall not exceed 400/100 ml.
   iii. Enterococcus density shall not exceed 104/100 ml.
   iv. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to total coliform exceeds 0.1.

c. Enterococcus density shall not exceed 35/100 mL.

[2] The mass (lbs/day) limitations are based on a maximum flow of 0.95 MGD and are calculated as follows:
Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor)

REVISED TENTATIVE

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 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 where limitations may be relaxed. The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of effluent limitations for arsenic, cadmium, lead, mercury, nickel, silver, zinc, and acute toxicity. As discussed below, this relaxation of effluent limitations is consistent with exceptions allowed under CWA sections 402(o) and 303(d)(4).

CWA section 402(o)(1) allows for relaxation of effluent limitations based on state standards if the relaxation is consistent with the provisions of CWA section 303(d)(4). Section 303(d)(4)(B) applies to waters where the water quality equals or exceeds levels necessary to protect the designated use, or to otherwise meet applicable water quality standards (i.e., an *attainment* water). Effluent limitations for arsenic, cadmium, lead, mercury, nickel, silver, zinc, and acute toxicity have been removed in this Order. Effluent monitoring data collected from September 11, 2008 through February 5, 2014 indicate that there is no reasonable potential for cadmium, lead, mercury, nickel, silver, and zinc to cause or contribute to an exceedance above the respective water quality objectives in the receiving water. In five acute toxicity tests reported between September, 2008 and October, 2011 the Facility's discharges also did not demonstrate reasonable potential for acute toxicity. The removal of these effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations, based on the consideration of new information (i.e., discharge monitoring reports and reasonable potential analysis) obtained since the prior permit was issued. [CWA section 402(o)(1)]. As addressed in section IV.D.2 of this Fact Sheet, removal of these effluent limitations is not expected to result in degradation of the receiving water and therefore is consistent with CWA section 303(d)(4). This Order also continues to require monitoring for arsenic, cadmium, lead, mercury, nickel, silver, and zinc. This Order also requires monitoring for chronic toxicity which is a more stringent measure of the aggregate toxic properties of the discharge than acute toxicity.

2. Antidegradation Policies

Section 131.12 requires that the state water quality standards include an anti-degradation 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 water quality 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.

The lack of effluent limitations for arsenic, cadmium, lead, mercury, nickel, silver, zinc and acute toxicity in this Order is consistent with Resolution No. 68-16. The 2010 CWA section 303(d) list does not identify Port Hueneme Harbor as impaired for these constituents and, as such, is within *attainment* as it relates to CWA section 303(d)(4). As indicated by the RPA, the Facility's discharges did not exhibit reasonable potential for these pollutants to cause or contribute to an exceedance of a water quality objective and therefore will not result in a lowering of water quality. This Order does not provide for an increase in the permitted design flow or allow for a reduction in the level of treatment. Moreover, this Order requires continued monitoring for these constituents to ensure that

REVISED TENTATIVE

effluent concentrations do not increase beyond current levels. As a result, the removal of effluent limitations for arsenic, cadmium, lead, mercury, nickel, silver, zinc, and acute toxicity is consistent with requirements in Resolution No. 68-16.

The effluent limits included in this Order hold the Discharger to performance levels that will not cause or contribute to water quality impairment or water quality degradation. Further, compliance with these requirements will result in the use of best practicable treatment or control of the discharge. Therefore, the issuance of this permit is consistent with the state's antidegradation policy.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD, TSS, oil and grease, settleable solids, total residual chlorine, and turbidity at Discharge Point No. 001. Restrictions on these parameters are discussed in section IV.B.2 of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

This Order includes WQBELs for pH, bacteria, copper, selenium, and temperature at Discharge Point No. 001. WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

4. Mass-Based Effluent Limitations

Mass-based effluent limitations are established using the following formula:

Mass (lbs/day) = flow rate (MGD) x 8.34 x effluent limitation (mg/L)

where: Mass = mass limitation for a pollutant (lbs/day)

Effluent limitation = concentration limit for a pollutant (mg/L)

Flow rate = discharge flow rate (MGD)

REVISED TENTATIVE

5. Summary of Final Effluent Limitations

Table F-10. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations				Basis[1]
		Average Monthly	Maximum Daily	Instantaneous		
				Minimum	Maximum	
Conventional Pollutants						
pH	s.u.	--	--	6.5	8.5	BP, PO
Biochemical Oxygen Demand (BOD) (5-day@20 Deg. C)	mg/L	20	30	--	--	BPJ
	lbs/day[2]	158	238	--	--	
Total Suspended Solids (TSS)	mg/L	50	75	--	--	BPJ, PO
	lbs/day[2]	396	595	--	--	
Non-Conventional Pollutants						
Bacteria	MPN/100 mL	[3]				BP, PO
Oil and Grease	mg/L	10	15	--	--	BPJ, PO
	lbs/day[2]	79	119	--	--	
Settleable Solids	ml/L	0.1	0.3	--	--	BPJ, PO
Temperature	°F	--	--	--	86	TP, PO
Turbidity	NTU	50	75	--	--	BPJ, PO
Total Residual Chlorine	mg/L	--	0.1	--	--	BPJ, PO
	lbs/day[2]	--	0.8	--	--	
Priority Pollutants						
Copper, Total Recoverable	µg/L	2.7	5.8	--	--	CTR, SIP, PO
	lbs/day[2]	0.021	0.046	--	--	
Selenium, Total Recoverable	µg/L	27	94	--	--	CTR, SIP
	lbs/day[2]	0.21	0.74	--	--	

[1] BP = Basin Plan; PO = Prior Order; BPJ = Best Professional Judgment; TP = Thermal Plan; CTR = California Toxic Rule; SIP = ~~o~~ State Implementation Policy.

[2] The mass (lbs/day) limitations are based on a maximum flow of 0.95 MGD and are calculated as follows:
Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor)

[3] Bacteria limits are established for both geometric means and single samples. The Basin Plan includes and implementation provision for geometric means: *"The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period.)*

a. Rolling 30-dayGeometric Mean Limits
   i. Total coliform density shall not exceed 1,000/100 mL;
   ii. Fecal coliform density shall not exceed 200/100 mL; and,
   iii. Enterococcus density shall not exceed 35/100 mL.

b. Single Sample Limits
   i. Total coliform density shall not exceed 10,000/100 mL;
   ii. Fecal coliform density shall not exceed 400/100 mL;
   iii. Enterococcus density shall not exceed 104/100 mL; and,
   iv. Total coliform density shall not exceed 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

E. Interim Effluent Limitations—Not Applicable

F. Land Discharge Specifications—Not Applicable

G. Reclamation Specifications—Not Applicable

REVISED TENTATIVE

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 C.F.R. § 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Basin Plan.

B. Groundwater—Not Applicable

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 C.F.R. section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 C.F.R. section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

Sections 122.41(a)(1) and (b) through (n) of 40 C.F.R. establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) of 40 C.F.R. allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 C.F.R. section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

These provisions are based on 40 C.F.R. section 123 and the previous Order. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new federal regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

Initial Investigation Toxicity Reduction Evaluation Workplan. This provision is based on section 4 of the SIP, Toxicity Control Provisions, which establishes minimum toxicity control requirements for implementing the narrative toxicity objective for aquatic life protection established in the basin plans of the State of California.

3. Best Management Practices and Pollution Prevention

Spill Contingency Plan (SCP). This Order requires the Discharger to update and continue to implement a SCP to control the discharge of pollutants. The SCP shall include a technical report on the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events at the site. This provision is included in this Order to minimize and control the amount of pollutants

REVISED TENTATIVE

discharged in case of a spill. The SCP shall be site specific and shall cover all areas of the Facility.

4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of 40 C.F.R. section 122.41(e) and the previous Order.

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

6. Other Special Provisions—Not Applicable

7. Compliance Schedules—Not Applicable

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

40 C.F.R. section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E, establishes monitoring and reporting requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring—Not Applicable

B. Effluent Monitoring

Monitoring for pollutants expected to be present in the discharge will be required as established in the MRP (Attachment E). To demonstrate compliance with established effluent limitations, the Order includes monitoring requirements from Order No. R4-2009-0067, with the exception of phenols and sulfide. The list of pollutants for which monitoring is required was developed based on parts V and VI of the USEPA Form 2C in the Discharger's report of waste discharge (ROWD), as well as pollutants commonly associated with similar operations. The monitoring requirements for phenols and sulfide were removed in this Order as these pollutants did not have reasonable potential to cause or contribute to an excursion above water quality standards and the Discharger is required to monitor for these pollutants during the annual priority pollutant monitoring.

The SIP states that the Regional Water Board will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established. This Order requires the Discharger to conduct annual monitoring for the remaining CTR priority pollutants and TCDD Equivalents. The Regional Water Board will use the additional data to conduct an RPA and determine if additional WQBELs are required. The Regional Water Board may reopen the permit to incorporate additional effluent limitations and requirements, if necessary.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. In 20 toxicity tests reported between September, 2008 and October, 2011 the Facility did not demonstrate reasonable potential for chronic toxicity. In five

REVISED TENTATIVE

toxicity tests reported between September, 2008 and October, 2011 the Facility did not demonstrate reasonable potential for acute toxicity. Therefore, in accordance with the SIP, this Order does not include limitations for acute or chronic toxicity.

Recent information indicates that chronic toxicity is a more stringent measure of the aggregate toxic properties of the discharge. A chemical at a low concentration can have chronic effects but no acute effects. Therefore, based on best professional judgment, annual chronic toxicity monitoring requirements at Discharge Point No. 001 are included in this Order.

D. Receiving Water Monitoring

Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Discharges from the Facility are composed entirely of reconstituted seawater filter backwash water and are a continuous discharge. Therefore, in accordance with the SIP, this Order retains the annual chronic toxicity monitoring at Discharge Point No. 001, however the test specified is the Test for Significant Toxicity.

1. Surface Water

According to the SIP, the Discharger is required to monitor the upstream receiving water for the CTR priority pollutants, to determine reasonable potential. Accordingly, the Regional Water Board is requiring that the Discharger conduct upstream receiving water monitoring of the CTR priority pollutants, TCDD equivalents, and ammonia at Monitoring Location RSW-001. Additionally, the Discharger must analyze pH, and temperature of the upstream receiving water at Monitoring Location RSW-001 at the same time as the samples are collected for priority pollutant analysis.

Surface water monitoring requirements established in the previous Order have been included in this Order to provide data to determine compliance with the receiving water limitations established. Monitoring has been established at downstream Monitoring Location RSW-002 for pH, ammonia, dissolved oxygen, temperature, total coliform, fecal coliform, and enterococcus.

2. Groundwater—Not Applicable

E. Other Monitoring Requirements—Not Applicable

VIII. PUBLIC PARTICIPATION

The Regional Water Board has considered the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Naval Engineering and Expeditionary Warfare Center—Seawater Desalination Test Facility. As a step in the WDR adoption process, the Regional Water Board staff developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through email and public notice.

The public had access to the agenda and any changes in dates and locations through the Regional Water Board's website: http://www.waterboards.ca.gov/losangeles.

REVISED TENTATIVE

B. Written Comments

Interested parties were invited to submit written comments concerning the tentative WDRs as provided through the notification process. Comments were required to be submitted either in person or by mail to the Executive Office at the Regional Water Board at 320 West 4th Street, Suite 200, Los Angeles, CA 90013 or by email to losangeles@waterboards.ca.gov with a copy to thomas.siebels@waterboards.ca.gov.

To be fully responded to by staff and considered by the Regional Water Board, the written comments were due at the Regional Water Board office by 5:00 p.m. on **August 29, 2014**.

C. Public Hearing

The Regional Water Board held a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date:	**October 9, 2014**
Time:	**9:00 AM**
Location:	**City of Simi Valley Council Chambers** **2929 Tapo Canyon Road** **Simi Valley, California**

Interested persons were invited to attend. At the public hearing, the Regional Water Board heard testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

D. Waste Discharge Requirements Petitions

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

The State Water Board's mailing address is the following:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (ROWD), tentative WDRs, comments received, and other information are on file and may be inspected at the Regional Water Board's office at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Viewing and copying of documents may be arranged through the Regional Water Board by calling (213) 576-6600.

F. Register of Interested Parties

Any person interested in being placed on the notification list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, mailing address, email address, and phone number.

REVISED TENTATIVE

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Thomas Siebels at (213) 576-6756 or thomas.siebels@waterboards.ca.gov.

REVISED TENTATIVE

ATTACHMENT G – STATE WATER BOARD MINIMUM LEVELS

The Minimum Levels (MLs) in micrograms/liter (µg/L) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of the State Implementation Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the State Water Board and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides and PCBs.

Table 2a - VOLATILE SUBSTANCES*	GC	GCMS
1,1 Dichloroethane	0.5	1
1,1 Dichloroethylene	0.5	2
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
1,2 Dichlorobenzene (volatile)	0.5	2
1,2 Dichloroethane	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichlorobenzene (volatile)	0.5	2
1,3 Dichloropropene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Methyl Bromide	1.0	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromo-methane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromo-methane	0.5	2
Dichloromethane	0.5	2
Ethylbenzene	0.5	2
Tetrachloroethylene	0.5	2
Toluene	0.5	2
Trans-1,2 Dichloroethylene	0.5	1
Trichloroethene	0.5	2
Vinyl Chloride	0.5	2

*The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

REVISED TENTATIVE

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Benzo (a) Anthracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
Benzo (b) Fluoranthene		10	10	
3-Methyl-Chlorophenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	
Hexachloro-cyclopentadiene	5	5		
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		

REVISED TENTATIVE

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

* With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1,000; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1,000.

** Phenol by colorimetric technique has a factor of 1.

Table 2c – INORGANICS*	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1,000
Arsenic		2	10	2	2	1		20	1,000
Beryllium	20	0.5	2	0.5	1				1,000
Cadmium	10	0.5	10	0.25	0.5				1,000
Chromium (total)	50	2	10	0.5	1				1,000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1,000
Cyanide								5	
Lead	20	5	5	0.5	2				10,000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1,000
Selenium		5	10	2	5	1			1,000
Silver	10	1	10	0.25	2				1,000
Thallium	10	2	10	1	5				1,000
Zinc	20		20	1	10				1,000

* The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

REVISED TENTATIVE

Table 2d – PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
alpha-BHC	0.01
Aldrin	0.005
b-Endosulfan	0.01
Beta-BHC	0.005
Chlordane	0.1
Delta-BHC	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Gamma-BHC (Lindane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

* The normal method-specific factor for these substances is 100; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

Techniques:

GC - Gas Chromatography
GCMS - Gas Chromatography/Mass Spectrometry
HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)
LC - High Pressure Liquid Chromatography
FAA - Flame Atomic Absorption
GFAA - Graphite Furnace Atomic Absorption
HYDRIDE - Gaseous Hydride Atomic Absorption
CVAA - Cold Vapor Atomic Absorption
ICP - Inductively Coupled Plasma
ICPMS - Inductively Coupled Plasma/Mass Spectrometry
SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
DCP - Direct Current Plasma
COLOR – Colorimetric

REVISED TENTATIVE

ATTACHMENT H – LIST OF PRIORITY POLLUTANTS

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
1	Antimony	7440360	[1]
2	Arsenic	7440382	[1]
3	Beryllium	7440417	[1]
4	Cadmium	7440439	[1]
5a	Chromium (III)	16065831	[1]
5a	Chromium (VI)	18540299	[1]
6	Copper	7440508	[1]
7	Lead	7439921	[1]
8	Mercury	7439976	[1]
9	Nickel	7440020	[1]
10	Selenium	7782492	[1]
11	Silver	7440224	[1]
12	Thallium	7440280	[1]
13	Zinc	7440666	[1]
14	Cyanide	57125	[1]
15	Asbestos	1332214	[1]
16	2,3,7,8-TCDD	1746016	[1]
17	Acrolein	107028	[1]
18	Acrylonitrile	107131	[1]
19	Benzene	71432	[1]
20	Bromoform	75252	[1]
21	Carbon Tetrachloride	56235	[1]
22	Chlorobenzene	108907	[1]
23	Chlorodibromomethane	124481	[1]
24	Chloroethane	75003	[1]
25	2-Chloroethylvinyl Ether	110758	[1]
26	Chloroform	67663	[1]
27	Dichlorobromomethane	75274	[1]
28	1,1-Dichloroethane	75343	[1]
29	1,2-Dichloroethane	107062	[1]
30	1,1-Dichloroethylene	75354	[1]
31	1,2-Dichloropropane	78875	[1]
32	1,3-Dichloropropylene	542756	[1]
33	Ethylbenzene	100414	[1]
34	Methyl Bromide	74839	[1]
35	Methyl Chloride	74873	[1]
36	Methylene Chloride	75092	[1]
37	1,1,2,2-Tetrachloroethane	79345	[1]
38	Tetrachloroethylene	127184	[1]
39	Toluene	108883	[1]
40	1,2-Trans-Dichloroethylene	156605	[1]
41	1,1,1-Trichloroethane	71556	[1]
42	1,12-Trichloroethane	79005	[1]
43	Trichloroethylene	79016	[1]

REVISED TENTATIVE

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
44	Vinyl Chloride	75014	[1]
45	2-Chlorophenol	95578	[1]
46	2,4-Dichlorophenol	120832	[1]
47	2,4-Dimethylphenol	105679	[1]
48	2-Methyl-4,6-Dinitrophenol	534521	[1]
49	2,4-Dinitrophenol	51285	[1]
50	2-Nitrophenol	88755	[1]
51	4-Nitrophenol	100027	[1]
52	3-Methyl-4-Chlorophenol	59507	[1]
53	Pentachlorophenol	87865	[1]
54	Phenol	108952	[1]
55	2,4,6-Trichlorophenol	88062	[1]
56	Acenaphthene	83329	[1]
57	Acenaphthylene	208968	[1]
58	Anthracene	120127	[1]
59	Benzidine	92875	[1]
60	Benzo(a)Anthracene	56553	[1]
61	Benzo(a)Pyrene	50328	[1]
62	Benzo(b)Fluoranthene	205992	[1]
63	Benzo(ghi)Perylene	191242	[1]
64	Benzo(k)Fluoranthene	207089	[1]
65	Bis(2-Chloroethoxy)Methane	111911	[1]
66	Bis(2-Chloroethyl)Ether	111444	[1]
67	Bis(2-Chloroisopropyl)Ether	108601	[1]
68	Bis(2-Ethylhexyl)Phthalate	117817	[1]
69	4-Bromophenyl Phenyl Ether	101553	[1]
70	Butylbenzyl Phthalate	85687	[1]
71	2-Chloronaphthalene	91587	[1]
72	4-Chlorophenyl Phenyl Ether	7005723	[1]
73	Chrysene	218019	[1]
74	Dibenzo(a,h)Anthracene	53703	[1]
75	1,2-Dichlorobenzene	95501	[1]
76	1,3-Dichlorobenzene	541731	[1]
77	1,4-Dichlorobenzene	106467	[1]
78	3,3'-Dichlorobenzidine	91941	[1]
79	Diethyl Phthalate	84662	[1]
80	Dimethyl Phthalate	131113	[1]
81	Di-n-Butyl Phthalate	84742	[1]
82	2,4-Dinitrotoluene	121142	[1]
83	2,6-Dinitrotoluene	606202	[1]
84	Di-n-Octyl Phthalate	117840	[1]
85	1,2-Diphenylhydrazine	122667	[1]
86	Fluoranthene	206440	[1]
87	Fluorene	86737	[1]
88	Hexachlorobenzene	118741	[1]
89	Hexachlorobutadiene	87863	[1]
90	Hexachlorocyclopentadiene	77474	[1]
91	Hexachloroethane	67721	[1]

REVISED TENTATIVE

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
92	Indeno(1,2,3-cd)Pyrene	193395	[1]
93	Isophorone	78591	[1]
94	Naphthalene	91203	[1]
95	Nitrobenzene	98953	[1]
96	N-Nitrosodimethylamine	62759	[1]
97	N-Nitrosodi-n-Propylamine	621647	[1]
98	N-Nitrosodiphenylamine	86306	[1]
99	Phenanthrene	85018	[1]
100	Pyrene	129000	[1]
101	1,2,4-Trichlorobenzene	120821	[1]
102	Aldrin	309002	[1]
103	alpha-BHC	319846	[1]
104	beta-BHC	319857	[1]
105	gamma-BHC	58899	[1]
106	delta-BHC	319868	[1]
107	Chlordane	57749	[1]
108	4,4'-DDT	50293	[1]
109	4,4'-DDE	72559	[1]
110	4,4'-DDD	72548	[1]
111	Dieldrin	60571	[1]
112	alpha-Endosulfan	959988	[1]
113	beta-Endosulfan	33213659	[1]
114	Endosulfan Sulfate	1031078	[1]
115	Endrin	72208	[1]
116	Endrin Aldehyde	7421934	[1]
117	Heptachlor	76448	[1]
118	Heptachlor Epoxide	1024573	[1]
119	PCB-1016	12674112	[1]
120	PCB-1221	11104282	[1]
121	PCB-1232	11141165	[1]
122	PCB-1242	53469219	[1]
123	PCB-1248	12672296	[1]
124	PCB-1254	11097691	[1]
125	PCB-1260	11096825	[1]
126	Toxaphene	8001352	[1]

[1] Pollutants shall be analyzed using the methods described in 40 C.F.R. part 136.

REVISED TENTATIVE

ATTACHMENT I – REASONABLE POTENTIAL ANALYSIS AND CALCULATION OF EFFLUENT LIMITATIONS