February 10, 2017

Mr. Chris Cannon
Director, Environmental Management Division
The Port of Los Angeles, New Dock Street Pump Station
425 South Palos Verdes St.
San Pedro, CA 90733

TRANSMITTAL OF AMENDED WASTE DISCHARGE REQUIREMENTS / NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND TIME SCHEDULE ORDER – THE PORT OF LOS ANGELES, NEW DOCK STREET PUMP STATION, TERMINAL ISLAND, CALIFORNIA) (NPDES NO. CA 0064157, CI NO. 7856)

Dear Mr. Cannon:

On November 21, 2016, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) transmitted the tentative amended Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit, along with the tentative Time Schedule Order (TSO) for the Port of Los Angeles (Discharger), New Dock Street Pump Station (Facility). On January 13, 2017, the Regional Board transmitted to you revised tentative amended WDRs that corrected a date on Page F-4 of the tentative amended requirements.

Pursuant to Division 7 of the California Water Code, the Regional Board at a public hearing held on February 2, 2107, reviewed the revised tentative amended requirements, considered all factors in the case, and adopted Order No. R4-2013-0108-A01. The Regional Board also reviewed the tentative TSO, considered all factors in the case, and adopted Order No. R4-2017-0046.

Order No. R4-2013-0108-A01 serves as an NPDES permit, and it expires on August 30, 2018. Section 13376 of the California Water Code requires that an application/Report of Waste Discharge for a new permit must be filed at least 180 days before the expiration date.

You are required to implement the attached Monitoring and Reporting Program (MRP) on the effective date (April 1, 2017) of Order No. R4-2013-0108-A01. Your first monitoring report for the period of April 1, 2017 through June 30, 2017 is due by August 1, 2017. You are also required to implement the attached TSO on the effective date of Order No. R4-2017-0046. Your first semiannual progress report for the period of April 1, 2017 through June 30, 2017 is due by August 15, 2018. Future semiannual reports shall be submitted to the Regional Board by August 15th and February 15th for the reporting periods of January 1st through June 30th and July 1st through December 31st, respectively.

Please continue to electronically submit Self-Monitoring Reports (SMRs) using the State Water Resource Control 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 is a planned service interruption for electronic submittal. Also, please do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

If you have any further questions, please contact Thomas Siebels at (213) 576-6756.

Sincerely,

Cassandra Owens, Chief
Industrial Permitting Unit

Enclosures

Cc: (via email only—see mailing list)

Mailing List

Ms. Robyn Stuber, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Ms. Becky Mitschele, Environmental Protection Agency, Region 9
Mr. Kenneth Wong, U.S. Army Corps of Engineers
Mr. Bryant Chesney, NOAA, National Marine Fisheries Service
Mr. Jeff Phillips, Department of Interior, U.S. Fish and Wildlife Service
Mr. William Paznokas, Department of Fish and Wildlife, Region 5
Ms. Sutida Bergquist, State Water Resource Control Board, Drinking Water Division
Ms. Teresa Henry, California Coastal Commission, South Coast Region
Mr. Theodore Johnson, Water Replenishment District of Southern California
Mr. Tommy Smith, Los Angeles County, Department of Public Works
Mr. Angelo Bellomo, Los Angeles County, Department of Public Health
Ms. Rita Kampalath, Heal the Bay
Mr. Steven Johnson, Heal the Bay
Mr. Bruce Reznik, Los Angeles WaterKeeper
Ms. Becky Hayat, Natural Resources Defense Council
Ms. Pauling Sun, The Port of Los Angeles
Ms. Heather Benfield, TetraTech
Mr. James Ashby, PG Environmental
Ms. Sarah Torres, PG Environmental
Ms. Mary Welch, PG Environmental

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

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ORDER NO. R4-2013-0108-A01
AMENDING ORDER NO. R4-2013-0108
NPDES NO. CA0064157

WASTE DISCHARGE REQUIREMENTS FOR THE PORT OF LOS ANGELES NEW DOCK STREET PUMP STATION

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

Table 1. Discharger Information

Discharger	The Port of Los Angeles
Name of Facility	New Dock Street Pump Station
Facility Address	New Dock Street/ Pier S Avenue (formerly 151 Henry Ford Avenue)
	Terminal Island, CA 90731
	Los Angeles County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

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

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated Storm Water and Infiltrating Groundwater	33º45'54" N	118º14'23" W	Cerritos Channel

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	**July 11, 2013**
This Order shall become effective on:	**August 30, 2013**
This Order was amended on:	**February 2, 2017**
This amended Order shall become effective on:	**April 1, 2017**
This Order shall expire on:	**August 30, 2018**
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	**180 days prior to the Order expiration date**

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on February 2, 2017.

Samuel Unger

Samuel Unger, P.E., Executive Officer

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I. FACILITY INFORMATION

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

Table 4. Facility Information

Discharger	The Port of Los Angeles
Name of Facility	New Dock Street Pump Station
Facility Address	New Dock Street/Pier S Avenue (formerly 151 Henry Ford Avenue)
	Terminal Island, CA 90731
	Los Angeles County
Facility Contact, Title, and Phone	Manuel Ramirez, Environmental Specialist 310-732-3782
Mailing Address	425 South Palos Verdes Street, San Pedro, CA 90731
Type of Facility	Pump Station
Facility Design Flow	7.25 million gallons per day (MGD)

II. FINDINGS

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

A. Background. The Port of Los Angeles (hereinafter Discharger) is currently discharging pursuant to Order No. R4-2006-0086 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0064157. The Discharger submitted a Report of Waste Discharge, received January 21, 2011, and applied for an NPDES permit renewal to discharge groundwater and storm water from the New Dock Street Pump Station, hereinafter, Facility. Supplemental information was requested on April 20, 2011, May 3, 2011 and September 15, 2011; and was received on May 10, 2011, September 30, 2011, November 7, 2011 and November 22, 2011. The application was deemed complete on October 5, 2011.

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

B. Facility Description. The Discharger is an independent, self-supporting department of the City of Los Angeles. The Discharger serves as a landlord to the port complex, occupying 7,500 acres of waterfront land in the Los Angeles Harbor. The Facility is located at New Dock Street/Pier S Avenue (formerly151 Henry Ford Avenue), Terminal Island, California, on land owned by the City of Long Beach as shown in Attachment B - Map. The Discharger owns and operates the Facility through a legal agreement with the City of Long Beach. The Facility treats and discharges storm water and infiltrating groundwater from adjacent tributary areas.

Within the tributary areas, storm water runoff from roadways and portions of adjacent sites as well as infiltrating groundwater are collected at the New Dock Street Pump Station through three drain lines. Sites adjacent to the Facility include the Southeast Resource Recovery Facility (SERRF), and vacant land west of the Facility formerly occupied by

Matson, a container company. Pier S Avenue (formerly Henry Ford Avenue), New Dock Street and the Terminal Island Freeway are located to the east of the Facility. Vopak, Inc. Terminal is located north of the Facility. Although encompassed by the Facility tributary area, runoff from the SERRF is separately contained and discharged under the general industrial permit (NPDES No. CAS000001, State Board Order No. 97-03-DWQ). Similarly, the majority of storm water runoff from Vopak, Inc. is contained, treated, and discharged under an individual industrial permit (NPDES No. CA0064165, Order No. R4-2010-0018). The total tributary areas are estimated to encompass 53.3 acres and contain 32 storm drain inlets to the three drain line collection system. Based on historical storm water data, the Discharger estimated that maximum storm water flow from the tributary areas is 5.87 MGD.

Groundwater enters the Facility through a French drain/slotted pipe installed underneath the intersection of Pier S Avenue (formerly Henry Ford Avenue) and New Dock Street and through leaks found on other segments of the storm drains. The Discharger estimated that the Facility receives approximately 1.38 MGD of the infiltrating groundwater.

Storm water and infiltrating groundwater is treated by retention and aeration at the Facility pump station as shown in Attachment C – Wastewater Flow Schematic. The pump station is divided into three cells. The first cell collects the water from the three drain lines. A fourth line routes backwash to the influent cell. The water then gravity flows through a triangular shaped section to the second cell, a 10ft x 20ft x 10ft retention basin equipped with an aeration system. From the retention basin, water flows through bar screens into the third cell, a 20ft x 20ft x 20ft holding basin. In the holding basin, the wastewater is pumped via six lift pumps (two 250 gallons per minute (gpm) sump pumps, two 3,700 gpm pumps, and two 19,200 gpm pumps) into the force main, where it is discharged into the Cerritos Channel. Low- and high-water sensors automatically control the pumps and each pump has a dedicated timer that records the total operating time.

The Discharger proposes to discharge up to 7.25 MGD of wastewater from the Pump Station into the Cerritos Channel, a water of the United States via Discharge Point No. 001 (Latitude 33º 45’ 54” N, Longitude 118º 14’ 23” W, coordinates correspond to *Google Earth* Images).

C. Legal Authorities. This Order is 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 California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with Section 13260).

D. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G through J are also incorporated into this Order.

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

F. Technology-based Effluent Limitations. Section 301(b) of the CWA and implementing USEPA permit regulations at Section 122.44, Title 40 of the Code of Federal Regulations[1], require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with Part 125, Section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations. Section 301(b) of the CWA and 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) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that will cause, 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).

H. Watershed Management Approach and Total Maximum Daily Loads (TMDLs)

The Regional Water Board has implemented the Watershed Management Approach to address water quality issues in the region. Watershed management may include diverse issues as defined by stakeholders to identify comprehensive solutions to protect, maintain, enhance, and restore water quality and beneficial uses. To achieve this goal, the Watershed Management Approach integrates the Regional Water Board's many diverse programs, particularly TMDLs, to better assess cumulative impacts of pollutants from all point and nonpoint sources. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby provides the basis to establish water quality based controls. These controls should provide the pollution reduction necessary for a waterbody to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the environmental interests and economic impacts within the watershed. The TMDLs will establish waste load allocations (WLAs) and load allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the waterbody.

[1] All further regulatory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

Certain receiving waters in the Los Angeles watershed do not fully support beneficial uses and therefore have been classified as impaired on the 2010 State Water Resources Control Board (State Water Board) California 303(d) list (2010 303(d) list) and have been scheduled for TMDL development. The USEPA partially approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. The approved portion of the List includes the classification of the Los Angeles/Long Beach Inner Harbor, which includes Cerritos Channel, as impaired due to beach closures related to pathogens, benthic community effects, benzo(a)pyrene, chrysene, copper, dichlorodiphenyltrichloroethane (DDT), polychlorinated biphenyls (PCBs), sediment toxicity, and zinc. The Regional Water Board has developed the *Los Angeles Harbor Bacteria TMDL* (Bacteria TMDL) and the *Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters* (Harbor Toxics TMDL) to improve the water quality of Los Angeles Harbor.

1. **Bacteria TMDL.** The Regional Water Board approved the Bacteria TMDL through Resolution 2004-011 on July 1, 2004. The State Water Board, Office of Administrative Law (OAL), and USEPA approved the TMDL on October 21, 2004, January 5, 2005, and March 1, 2005, respectively. The Bacteria TMDL addresses Inner Cabrillo Beach and the Main Ship Channel of the Los Angeles Inner Harbor The Cerritos Channel is not directly addressed through the TMDL. Therefore, this Order does not contain effluent limitations based on the Bacteria TMDL, but does establish monitoring requirements for bacteria.

2. **Harbor Toxics TMDL.** The Harbor Toxics TMDL was developed by the Regional Water Board, in conjunction with USEPA, to address impairment due to heavy metals, organics, and sediment toxicity in Dominguez Channel and Greater Los Angeles and Long Beach Harbor waters. The Regional Water Board approved the Harbor Toxics TMDL through Resolution R11-008 on May 5, 2011. The State Water Board, Office of Administrative Law (OAL), and USEPA approved the TMDL on February 7, 2012, March 22, 2012, and March 23, 2012, respectively. The Harbor Toxics TMDL contains requirements applicable to this discharge. Therefore, this Order contains effluent limitations and monitoring requirements based on the TMDL.

   For Cerritos Channel which is located within the Long Beach Inner Harbor the Harbor Toxics TMDL included:

   a. Sediment interim concentration-based allocations (in mg/kg sediment) for copper, lead, zinc, DDT, PAHs, and PCBs (Attachment A to Resolution No. R11-008, p. 11).

   b. Water column final concentration-based waste load allocations (WLAs) (ug/L) for copper, lead, zinc, 4,4'-DDT and total PCBs (Attachment A to Resolution No. R11-008, pp. 13-14).

   c. Provisions for monitoring discharges and/or receiving waters during the TMDL's 20 year implementation schedule to determine attainment with waste load and load allocations as appropriate.

The provisions included here are consistent with the assumptions and requirements of the WLAs established in the Harbor Toxics TMDL.

I. Water Quality Control Plans. The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Beneficial uses applicable to the Cerritos Channel are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Cerritos Channel Within Los Angeles/Long Beach Inner Harbor	Existing: Industrial service supply (IND); navigation (NAV); non-contact water recreation (REC-2); commercial and sport fishing (COMM); marine habitat (MAR); rare, threatened, or endangered species (RARE). Potential: Water contact recreation (REC-1); shellfish harvesting (SHELL).

Requirements of this Order implement the Basin Plan.

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

K. 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 water quality criteria for priority pollutants. A list of the priority pollutants is contained in Attachment I.

L. 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 implementation provisions for chronic toxicity control. Requirements of this Order implement the SIP.

M. Compliance Schedules and Interim Requirements. Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Since the May 18, 2010 date has expired, the SIP no longer authorizes compliance schedules for CTR criteria-based limits in NPDES permits. State Water Resources Control Board Resolution No. 2008-0025, *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*, was adopted by the State Water Board on April 15, 2008, and approved by OAL and USEPA on June 26, 2008 and August 27, 2008, respectively. This policy authorizes a Water Board to include compliance schedules in NPDES permits under certain circumstances; however, it does not authorize compliance schedules for permit limitations implementing either criteria promulgated in the CTR (40 CFR 131.38, revised as of July 1, 2005), or water quality objectives identical to CTR criteria that are adopted after promulgation of the CTR.

For new or revised state-adopted water quality standards (WQS) such as TMDLs, Section 303(c) of the CWA requires USEPA to approve or disapprove the regulatory provisions for the implementation of the WQS, including compliance schedule. On November 8, 2012, the Region IX office of USEPA issued an approval that provides authorization to the Regional Water Board to set forth compliance schedule in NPDES permits to existing dischargers for more stringent WQBELS based on WLAs in the Harbor Toxics TMDL.

This Order requires final WQBELs for copper and selenium based on a final concentration-based WLA for copper and selenium converted from the saltwater CTR chronic criterion using the CTR saltwater default translator, and relevant implementation provisions in section 1.4 of the State Implementation Policy. On January 10, 2012, the Discharger requested the Regional Water Board provide extended time for copper and selenium compliance so that it can identify the source of these contaminants and investigate the potential options for eliminating the exceedances. Compliance schedule with interim limits for copper has been provided in this Order and Time Schedule Order (TSO) with interim limits for selenium has been issued with this Order.

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

O. 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 biochemical oxygen demand (BOD), oil and grease, total suspended solids (TSS), methyl tert-butyl ether (MTBE), chlorinated phenols, settleable solids, sulfides, total petroleum hydrocarbons (TPH),

turbidity, and 1,1-dichloroethane. Restrictions on these constituents are discussed in section IV.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

The WQBELs consist of restrictions on pH, acute toxicity, temperature, arsenic, copper, lead, mercury, nickel, selenium, and zinc. Water quality-based effluent limitations 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. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to Section 131.38. The scientific procedures for calculating the individual WQBELs 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. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to Section 131.21(c)(1). The remaining water quality objectives and beneficial uses implemented by this Order (specifically bacteria and ammonia) were approved by USEPA on September 25, 2002 and May 19, 2005, respectively. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

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

Q. Anti-Backsliding Requirements. Section 402(o) of the CWA establishes statutory language prohibiting the backsliding of effluent limits. Section 402(o)(1) prohibits the relaxation of effluent limits (1) when a permittee seeks to revise a technology-based effluent limitation based on best professional judgment to reflect a subsequently promulgated effluent guideline which is less stringent, and (2) when a permittee seeks relaxation of an effluent limitation which is based upon a state treatment standard or water quality standard. Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at Title 40, Code of Federal Regulations Section 122.44(l) outlines specific exception to the general prohibition against establishment of less stringent effluent limitations.

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 for MBAS, xylene, arsenic, cadmium, nickel and selenium are less stringent than in the previous Order. As discussed in the Fact Sheet, this relaxation is consistent with exceptions identified under 40 CFR122.44(l)(2)(i)(B)(2).

R. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code Sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

S. Monitoring and Reporting. Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code Sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

T. Standard and Special Provisions. Standard Provisions, which apply to all NPDES permits in accordance with Section 122.41, and additional conditions applicable to specified categories of permits in accordance with 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. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

U. Notification of Interested Parties. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.

V. 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 of this Order.

THEREFORE, IT IS HEREBY ORDERED, that this Order amends Order No. R4-2013-0108 which supersedes Order No. R4-2006-0086 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 shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

A. Wastes discharged shall be limited to a maximum of 7.25 MGD of treated storm water and groundwater from Discharge Point No. 001, as described in the findings. 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 the Cerritos Channel, or other waters of the State, are prohibited.

C. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or 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 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 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 the Order.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations-Discharge Point No. 001

1. Final Effluent Limitations-Discharge Point No. 001

a. 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 6. Effluent Limitations for Discharge Point No. 001

Parameter	Units	Effluent Limitations				Performance Goals
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Conventional Pollutants						
pH	s.u.	--	--	6.5	8.5	--
Biochemical Oxygen Demand (5-day @ 20 deg. C) (BOD)	mg/L	20	30	--	--	--
	lbs/day[1]	1,209.	1,814.	--	--	--
Oil and Grease	mg/L	10	15	--	--	--
	lbs/day[1]	605	907	--	--	--
Total Suspended Solids (TSS)[4]	mg/L	50	75	--	--	--
	lbs/day[1]	3,023.	4,535.	--	--	--
Non-Conventional Pollutants						
Methyl Tert-butyl Ether (MTBE)	µg/L	--	35	--	--	--
	lbs/day[1]	--	2.1	--	--	--
Phenols, Chlorinated	µg/L	--	1.0	--	--	--
	lbs/day[1]	--	0.06	--	--	--
Settleable Solids	ml/L	0.1	0.3	--	--	--
Sulfides	mg/L	--	1.0	--	--	--
	lbs/day[1]	--	60	--	--	--
Temperature	°F	--	--	--	86	--
Total Petroleum Hydrocarbons (TPH)[2]	µg/L	--	100	--	--	--
	lbs/day[1]	--	6.0	--	--	--
Turbidity	NTU	50	75	--	--	--
Acute Toxicity	% Survival	Section IV.A.1.b.i	Section IV.A.1.b.ii	--	--	--
Chronic Toxicity	TUc	Section IV.A.1.c	--	--	--	--
Priority Pollutants						
Arsenic, Total Recoverable	µg/L	28	63	--	--	--
	lbs/day[1]	1.7	3.8	--	--	--
Copper, Total Recoverable[3, 4]	µg/L	2.9	6.5	--	--	--
	lbs/day[1]	0.17	0.39	--	--	--
Lead, Total Recoverable[3, 4]	µg/L	4.6	14	--	--	--
	lbs/day[1]	0.28	0.87	--	--	--
Mercury, Total Recoverable	µg/L	0.05	0.10	--	--	--
	lbs/day[1]	0.0031	0.0062	--	--	--
Nickel, Total Recoverable	µg/L	7.0	13	--	--	--
	lbs/day[1]	0.42	0.79	--	--	--
Selenium[3], Total Recoverable	µg/L	45	130	--	--	--
	lbs/day[1]	2.7	7.9	--	--	--
Zinc, Total Recoverable[3, 4]	µg/L	51	150	--	--	--
	lbs/day[1]	3.1	9.3	--	--	--

Parameter	Units	Effluent Limitations				Performance Goals
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
1,1-Dichloroethane	µg/L	--	5.0	--	--	--
	lbs/day[1]	--	0.3	--	--	--
4,4'-DDT[3, 4]	µg/L	0.00059	0.0012	--	--	--
	lbs/day[1]	0.000036	0.000072	--	--	--
Total PCBs[3, 4, 5]	µg/L	0.00017	0.00034	--	--	--
	lbs/day[1]	0.00001	0.00002	--	--	--
PAHs						
Benzo(a)pyrene[4]	µg/L	--	--	--	--	0.049[6]
Chrysene[4]	µg/L	--	--	--	--	0.049[6]

1 Mass (lbs/day) limitations are based on a maximum flow of 7.25 MGD and calculated as follows:

Mass (lbs/day) = Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor)

2 TPH equals the sum of TPH gasoline (C_4-C_{12}), TPH diesel (C_{13}-C_{22}), and TPH oil (C_{23+}).

3 The effluent limitations are based on the USEPA approved Harbor Toxics TMDL WLAs and calculated using the CTR-SIP procedures.

4 During each reporting period, if effluent monitoring results exceed both a TSS effluent limit and a CTR TMDL-based effluent limit or performance goal for copper, lead, zinc, 4,4-DDT, total PCBs, benzo(a)pyrene, or chrysene, then the Discharger has not demonstrated attainment with the interim sediment allocations stipulated by the Harbor Toxics TMDL, Resolution No. R11-008, page 11, Item 3, and implementation of the effluent sediment monitoring program is required for that priority pollutant. Sediment monitoring of the effluent shall begin during the first discharge event following the effluent exceedances. An effluent sediment monitoring result at or below the interim sediment allocation in Table 9, page 24 of this Order, demonstrates attainment with the interim sediment allocation and additional sediment monitoring of the effluent is not required. A sediment monitoring result that exceeds the interim sediment allocation requires additional sediment monitoring of the effluent during discharge but not more frequently than once per year until the three-year average concentration for sediment monitoring results is at or below the interim sediment allocation.

5 Total PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resembles those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

6 CTR human health criteria are not promulgated for total PAHs. Therefore, performance goals are based on CTR human health criteria for the individual PAHs, benzo(a)pyrene and chrysene. Benzo(a)pyrene and chrysene are selected because the State's 2010 303(d) List classifies the Los Angeles/Long Beach Inner Harbor as impaired for these PAH compounds. These performance goals are not enforceable effluent limitations. Rather, they act as triggers to determine when sediment monitoring is required for these compounds.

Table 7. Bacteria Effluent Limitations for Discharge Point No. 001

Parameters	Units	Receiving Water Limitations	
		Geometric Mean	Single Sample
Total Coliform	MPN/100 ml	1,000	10,000
Fecal Coliform	MPN/100 ml	200	400
Enterococcus	MPN/100 ml	35	104
If Fecal/Total Coliform > 0.1	MPN/100 ml	- - -	1,000

Table 8. Effluent Limitations for Discharge Point No. 001

Parameter	Units	Interim Effluent Limitations	
		Average Monthly	Maximum Daily
Copper, Total Recoverable	µg/L	7.6	10
	lbs/day[1]	0.46	0.6

[1] Mass limitations are based on a maximum flow of 7.25 MGD and calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

B. Land Discharge Specifications

Not Applicable

C. Reclamation Specifications

Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitation

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 Cerritos Channel.

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 rise 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. State/Regional Water Board Water Contact Standards

In waters designated for Water Contact Recreation (REC-1), the waste discharged shall not cause the following log mean limits of bacteria to be exceeded in the receiving water:

Table 9. Receiving Water Bacteria Limitations

Parameters	Units	Receiving Water Limitations	
		Geometric Mean	Single Sample
Total Coliform	MPN/100 ml	1,000	10,000
Fecal Coliform	MPN/100 ml	200	400
Enterococcus	MPN/100 ml	35	104
If Fecal/Total Coliform > 0.1	MPN/100 ml	- - -	1,000

4. At a minimum, the mean annual dissolved oxygen concentration shall be greater than 7 mg/L, and no single determination shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations.

5. Exceed total ammonia (as N) concentrations specified in the Regional Water Board Resolution No. 2004-022. Resolution No. 2004-022 revised the ammonia water quality objectives for inland surface waters not characteristic of freshwater in the 1994 Basin Plan, to be consistent with USEPA's *"Ambient Water Quality Criteria for Ammonia (Saltwater) - 1989"*. Adopted on March 4, 2004, Resolution No. 2004-022 was approved by State Water Board, OAL and USEPA on July 22, 2004, September 14, 2004, and May 19, 2005, respectively and is now in effect.

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

7. 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.

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

9. 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.

10. Accumulation of bottom deposits or aquatic growths.

11. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

12. The presence of substances that result in increases of BOD that adversely affect beneficial uses.

13. 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.

14. Alteration of turbidity, or apparent color beyond present natural background levels.

15. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.

16. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.

17. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.

18. Create nuisance, or adversely affect beneficial uses of the receiving water.

19. 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 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 storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water

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

c. Discharge of wastes 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 waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal 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 pollutionable 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 production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.

k. The Discharger shall file with the Regional Water Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.

l. 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 intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.

m. 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, copy of which shall be forwarded to the Regional Water Board.

n. 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.

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, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (216)-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 of Water Rights, and receive approval for such a change. (Water Code § 1211.)

B. Monitoring and Reporting Program (MRP) Requirements

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

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 reasonable potential analysis.

c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR 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 Cerritos Channel and/or the Los Angeles/Long Beach Inner 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 a design storm, dilution credits or a mixing zone, as may be appropriate.

f. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for a site-specific translator for any metal (which is not TMDL-based constituent) to evaluate the dissolved to total concentration ratios, as may be appropriate. For any TMDL-based limitations, any changes to the limitations require a TMDL amendment prior to implementation of the requested change.

g. 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

a. Chronic Toxicity Limit and Monitoring Requirements. The Discharger shall monitor the effluent quarterly for chronic toxicity to determine the presence of chronic toxicity. If the chronic toxicity of the effluent exceeds 1.0 TUc monthly median (where TUc = 100/NOEC), the Discharger shall immediately implement accelerated chronic toxicity testing, as required in Section V.B of the Monitoring and Reporting Program (Attachment E).

b. Initial Investigation 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:

i. 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;

ii. 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;

iii. If a 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).

c. Monitoring Thresholds based on Sediment Interim Concentration-based Allocations in Harbor Toxics TMDL for Sediment Monitoring of Effluent. The monitoring thresholds in Table 9 of this Order are based on the TMDL's interim sediment allocations for copper, lead, zinc, DDT, PAHs, and PCBs. Attainment with these thresholds shall be demonstrated in accordance with Footnote 4 to Table 6, page 16 of this Order. Regardless of these monitoring thresholds, the Discharger shall ensure that effluent concentrations and mass discharges do not exceed levels that can be attained by performance of the Facility's treatment technologies existing at the time of permit issuance, reissuance, or modification.

Table 10. Monitoring Thresholds

Pollutant	Monitoring Thresholds (mg/kg sediment)
Copper	142.3
Lead	50.4
Zinc	240.6
PAHs, Total	4.58
DDTs, Total	0.07
PCBs, Total	0.060

d. Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for the Greater Los Angeles and Long Beach Harbor Waters Compliance Monitoring Program. As defined in the Harbor Toxics TMDL, the Discharger is a "responsible party" because it is an "Individual Industrial Permittee". As such, either individually or with a collaborating group, the Discharger shall develop a monitoring and reporting plan (Monitoring Plan) and quality assurance project plan (QAPP) for the water column, sediment, and fish tissue in the Greater Los Angeles and Long Beach Harbor. These plans shall follow the "TMDL Element - Monitoring Plan" provisions in Attachment A to Resolution No. R11-008. The Monitoring Plan and QAPP shall be submitted **20 months** after the effective date of the TMDL for public review and subsequent Executive Officer approval. The Discharger shall begin monitoring **6 months** after the Monitoring Plan and QAPP are approved by the Executive Officer, unless otherwise directed by the Executive Officer.

The compliance monitoring program shall include:

Water Column Monitoring. At the Station IDs in Table 10, parameters in the water column shall be monitored three times per year, during two wet weather events and one dry weather event. During wet weather events, water column samples shall be collected at several depths. Wet weather monitoring must include the first large storm event of the wet season. Sampling shall be designed to collect sufficient volumes of TSS for analyses of bulk sediment priority pollutants in Table 9.

Sediment Monitoring. Sediment quality objective evaluation monitoring, as detailed in SQO Part 1 (sediment triad sampling), shall be performed once per five years and shall include the full chemical suite, two sediment toxicity tests, and four benthic indicies. At the Station IDs in Table 10, and between sediment triad monitoring events, sediment chemistry parameters shall be monitored once per five years.

Table 11. Sediment Chemistry Monitoring Requirements

Water Body Name	Station ID	Station Location	Sample Media	
			Water Column	Sediment
Long Beach Inner Harbor	12	Cerritos Channel between the Heim Bridge and the Turning Basin	Flow, Temperature, DO, pH, Salinity, TSS, Copper, Lead, Zinc, PCBs, DDT	Copper, Lead, Zinc, Toxicity, Benthic Community Effect
	13	Back Channel between Turning Basin and West Basin		
	14	Center of West Basin		
	15	Center of Southeast Basin		

Fish Tissue Monitoring. In Long Beach Inner Harbor, fish tissue shall be monitored once per two years for chlordane, dieldrin, toxaphene, DDT, and PCBs. The three target species shall include white croaker, a sport fish, and a prey fish.

3. Storm Water Pollution Prevention Plan and Best Management Practices

The Discharger shall submit to the Regional Water Board, **within 90 days** of the effective date of this Order:

a. An updated Storm Water Pollution Prevention Plan (SWPPP) that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The SWPPP shall be developed in accordance with the requirements in Attachment G.

b. An updated Best Management Practices Plan (BMPP) that will be implemented to reduce the discharge of pollutants in storm water. The BMPP shall include site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material from being discharged to waters of the State. Further, the Discharger shall assure that the storm water discharges from the

Facility would neither cause, nor contribute to the exceedance of water quality standards and objectives, nor create conditions of nuisance in the receiving water, and that the unauthorized discharges (i.e., spills) to the receiving water have been effectively prohibited. In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material discharge to surface waters.

c. The Discharger shall implement the SWPPP and BMPP **within 10 days** of the approval by the Executive Officer or **no later than 90 days** after submission to the Regional Water Board, whichever comes first. The plans shall be reviewed annually and at the same time. Updated information shall be submitted to the Regional Water Board within 30 days of revision.

Plans shall cover all areas of the Facility and shall include an updated drainage map for the Facility. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge points; describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material.

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.

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 ML (see Reporting Requirement I.G. of the MRP), then the Discharger is out of compliance.

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 Not Detected (ND) or Detected, but Not Quantified (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 and Concentration Effluent Limitations.

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be "Not Detected" (ND) or "Detected, but Not Quantified" (DNQ), the corresponding mass emission rate determined from that sample concentration shall also be reported as ND or DNQ.

E. 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 DNQ or 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.

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.

When one or more sample results are reported as ND or DNQ (see Reporting Requirement I.G. of the MRP), the median value of these four samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.

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 exceeds the MDEL for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

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).

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.

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 Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. 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).

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).

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 Title 40 of the Code of Federal Regulations, 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.

Ocean Waters
The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

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.

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 or Regional Water Board.

Reporting Level (RL)
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. 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 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.

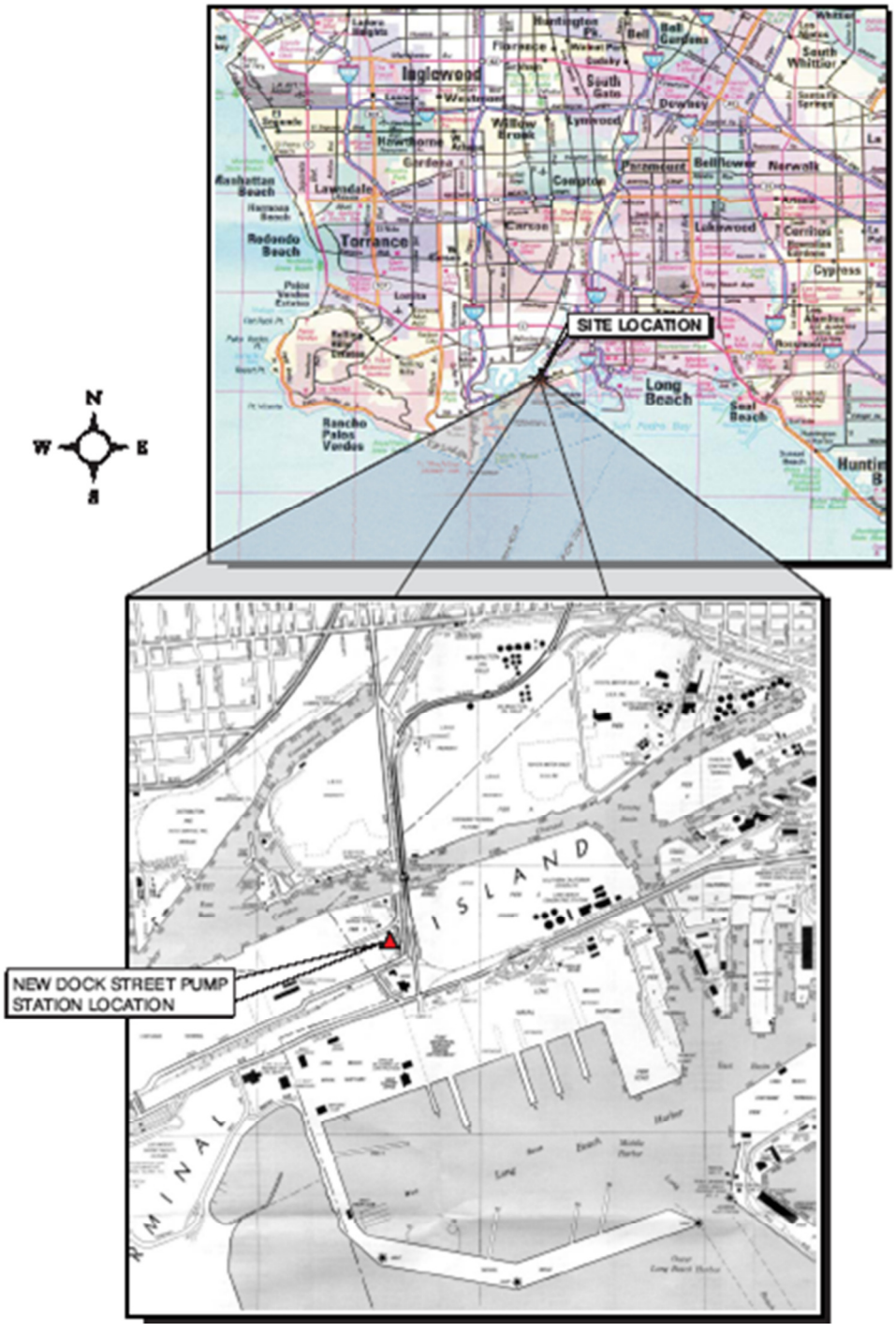
Toxicity Reduction Evaluation (TRE)
TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first 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.)

ACRONYMS AND ABBREVIATIONS

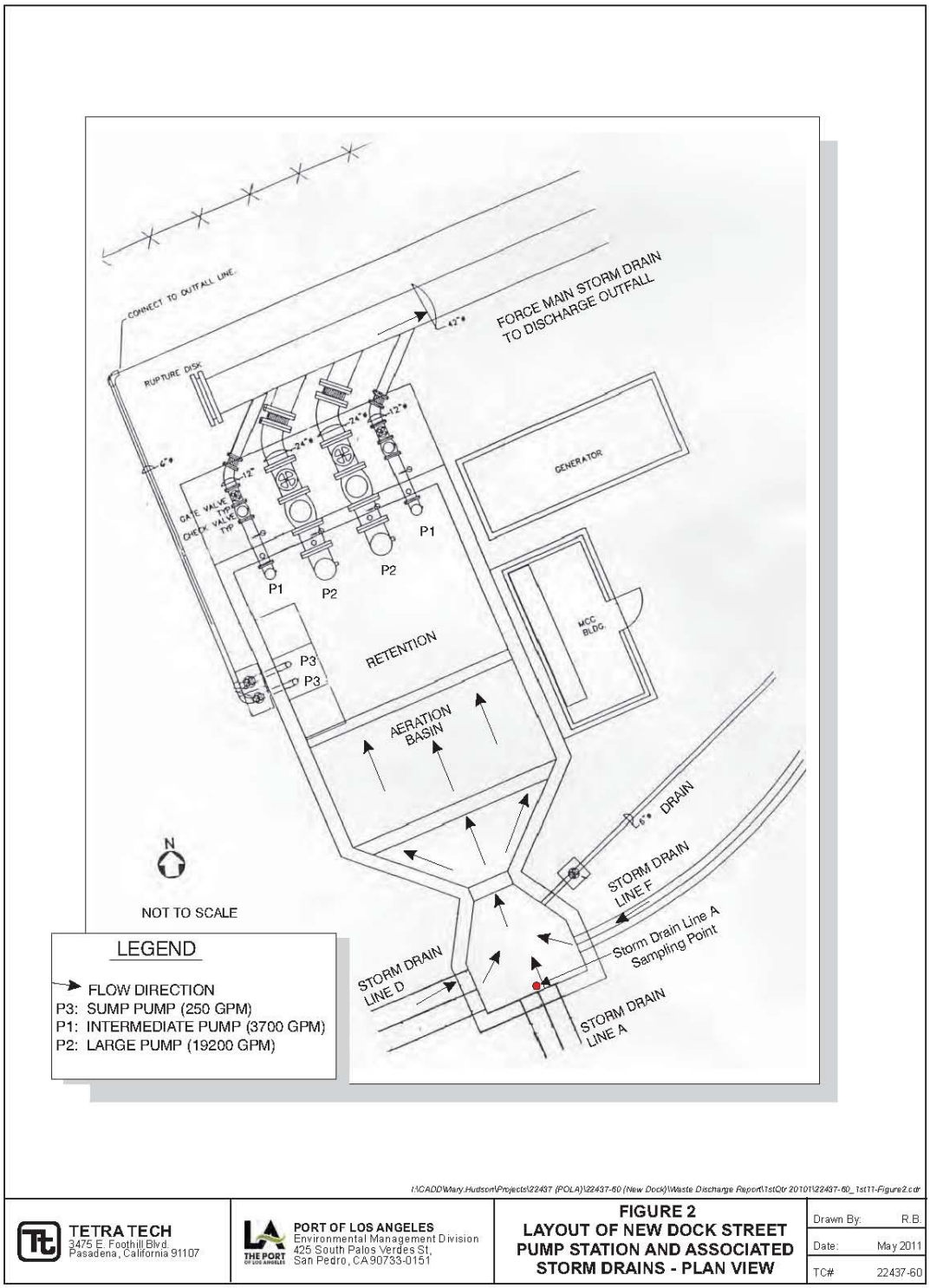
AMEL	Average Monthly Effluent Limitation
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	*Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 ℃
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	California Water Code
Discharger	The Port of Los Angeles
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	New Dock Street Pump Station
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
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
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
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

Attachment B – Map



Attachment C – Flow Schematic



Attachment D – Standard Provisions

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the 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, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [section 122.41(a)].

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 [section 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 [section 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 [section 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 [section 122.41(e)].

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges [section 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 [section 122.5(c)].

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (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 required by law, to [section 122.41(i)] [Water Code section 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 [section 122.41(i)(1)];

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [section 122.41(i)(2)];

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [section 122.41(i)(3)]; 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 [section 122.41(i)(4)].

G. Bypass

1. Definitions

a. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility [section 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 [section 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 [section 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 [section 122.41(m)(4)(i)]:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [section 122.41(m)(4)(i)(A)];

c. 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 [section 122.41(m)(4)(i)(B)]; and

d. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below [section 122.41(m)(4)(i)(C)].

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 [section 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 [section 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) [section 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 [section 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 [section 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 [section 122.41(n)(3)]:

a. An upset occurred and that the Discharger can identify the cause(s) of the upset [section 122.41(n)(3)(i)];

b. The permitted facility was, at the time, being properly operated [section 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) [section 122.41(n)(3)(iii)]; and

d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [section 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 [section 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 notification of planned changes or anticipated noncompliance does not stay any Order condition [section 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 [section 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 [section 122.41(l)(3) and section 122.61].

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [section 122.41(j)(1)].

B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order [section 122.41(j)(4) and section 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 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 [section 122.41(j)(2)].

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements [section 122.41(j)(3)(i)];

2. The individual(s) who performed the sampling or measurements [section 122.41(j)(3)(ii)];

3. The date(s) analyses were performed [section 122.41(j)(3)(iii)];

4. The individual(s) who performed the analyses [section 122.41(j)(3)(iv)];

5. The analytical techniques or methods used [section 122.41(j)(3)(v)]; and

6. The results of such analyses [section 122.41(j)(3)(vi)].

C. Claims of confidentiality for the following information will be denied [section 122.7(b)]:

1. The name and address of any permit applicant or Discharger [section 122.7(b)(1)]; and

2. Permit applications and attachments, permits and effluent data [section 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 [section 122.41(h)] [Water Code section 13267].

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 [section 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. [section 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 [section 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.) [section 122.22(b)(2)]; and

c. The written authorization is submitted to the Regional Water Board and State Water Board [section 122.22(b)(3)].

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 [section 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." [section 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 [section 122.22(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 [section 122.41(l)(4)(i)].

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this 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 [section 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 [section 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 [section 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 [section 122.41(l)(6)(i)].

2. The following shall be included as information that must be reported within 24 hours under this paragraph [section 122.41(l)(6)(ii)]:

a. Any unanticipated bypass that exceeds any effluent limitation in this Order [section 122.41(l)(6)(ii)(A)].

b. Any upset that exceeds any effluent limitation in this Order [section 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 [section 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 [section 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) [section 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 [section 122.41(l)(1)(ii)].

The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [section 122.41(l)(1)(ii)].

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 General Order requirements [section 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 [section 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 [section 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 13385, 13386, and 13387.

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 [*section 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 [*section 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 [*section 122.41(j)(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 [*section 122.41(k)(2)*].

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 [section 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" [section 122.42(a)(1)]:

a. 100 micrograms per liter (µg/L) [section 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 [section 122.42(a)(1)(ii)];

c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [section 122.42(a)(1)(iii)]; or

d. The level established by the Regional Water Board in accordance with section 122.44(f) [section 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" [section 122.42(a)(2)]:

a. 500 micrograms per liter (µg/L) [section 122.42(a)(2)(i)];

b. 1 milligram per liter (mg/L) for antimony [section 122.42(a)(2)(ii)];

c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [section 122.42(a)(2)(iii)]; or

d. The level established by the Regional Water Board in accordance with section 122.44(f) [section 122.42(a)(2)(iv)].

Attachment E – Monitoring and Reporting Program (MRP No. 7856)

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. 7856

The Code of Federal Regulations Title 40 Section 122.48 requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. An effluent sampling station shall be established for Discharge Point No. 001 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. 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.

E. 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.

F. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the Department of Public Health or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP".

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 H) 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, amended February 24, 2005.

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 H 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 H;

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 CFR Part 136 (revised May 18, 2012);

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

4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment H, 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 perjury statement 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 start to finish. A similar frequency shall be maintained for analyzing spiked samples.

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.

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	Final Effluent from the Pump Station at the discharge pipe outfall (Latitude 33º 45' 54" N, Longitude 118º 14' 23" W), but prior to the Cerritos Channel.
--	RSW-001	A sampling station shall be established at a location outside the influence of the effluent discharge location, and at least 50 feet upstream, relative to tidal flow in the Cerritos Channel.
--	RSW-002	A sampling station shall be established at a location 50 feet downstream from the effluent discharge location, relative to tidal flow in the Cerritos Channel.

III. INFLUENT MONITORING REQUIREMENTS

Not Applicable

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

1. The Discharger shall monitor treated storm water and groundwater at Monitoring Location EFF-001 as follows.

Table E-2. Effluent Monitoring at Monitoring Location EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency[1]	Required Analytical Test Method
Flow	gal/day	Recorder[2]	Continuous	--
Conventional Pollutants				
pH	s.u.	Grab	1/Quarter	[3]
Biochemical Oxygen Demand (5-day @ 20 deg. C) (BOD)	mg/L	Grab	1/Quarter	[3]
Oil and Grease	mg/L	Grab	1/Quarter	[3]
Total Suspended Solids (TSS)	mg/L	Grab	1/Quarter	[3]
Non-Conventional Pollutants				
Ammonia, Total (as N)	mg/L	Grab	1/Quarter	[3]
Enterococcus	MPN/100 ml	Grab	1/Quarter[4]	[3]
Fecal Coliform	MPN/100 ml	Grab	1/Quarter[4]	[3]
Total Coliform	MPN/100 ml	Grab	1/Quarter[4]	[3]
Ethylene Dibromide (EDB)	µg/L	Grab	2/Year	[3]
Methylene Blue Active Substances (MBAS)	µg/L	Grab	2/Year	[3]
Methyl Tert-butyl Ether (MTBE)	µg/L	Grab	1/Quarter	EPA Method 502.2 or 524.3
Phenols	mg/L	Grab	1/Quarter	[3]
Phenols, Chlorinated	mg/L	Grab	1/Quarter	[3]
Settleable Solids	ml/L	Grab	1/Quarter	[3]
Sulfides	mg/L	Grab	1/Quarter	[3]
Temperature	°F	Grab	1/Quarter	[3]
Total Petroleum Hydrocarbons (TPH) as Gasoline (C_4-C_{12})	µg/L	Grab	2/Year	EPA Method 503.1 or 8015B
TPH as Diesel (C_{13}-C_{22})	µg/L	Grab	2/Year	EPA Method 503.1, 8015B, or 8270
TPH as Oil (C_{23+})	µg/L	Grab	2/Year	EPA Method 503.1, 8015B, or 8270
Turbidity	NTU	Grab	1/Quarter	[3]
Xylene	µg/L	Grab	2/Year	[3]
Acute Toxicity	% Survival	Grab	2/Year	[5]
Chronic Toxicity	TUc	Grab	1/Quarter[6]	[5]
Priority Pollutants				
Arsenic, Total Recoverable	µg/L	Grab	1/Month	[3]
Chromium (III), Total Recoverable	µg/L	Grab	1/Month	[3]
Chromium (VI), Total Recoverable	µg/L	Grab	1/Month	[3]

Parameter	Units	Sample Type	Minimum Sampling Frequency[1]	Required Analytical Test Method
Copper, Total Recoverable	µg/L	Grab	1/Month	[3]
Lead, Total Recoverable	µg/L	Grab	1/Month	[3]
Mercury, Total Recoverable	µg/L	Grab	1/Month	[3]
Nickel, Total Recoverable	µg/L	Grab	1/Month	[3]
Selenium, Total Recoverable	µg/L	Grab	1/Month	[3]
Zinc, Total Recoverable	µg/L	Grab	1/Month	[3]
4,4'-DDT	µg/L	Grab	1/Quarter	[3]
Total PCBs[7]	µg/L	Grab	1/Quarter	[3]
Benzo(a)pyrene	µg/L	Grab	1/Quarter	[3]
Chrysene	µg/L	Grab	1/Quarter	[3]
Benzene	µg/L	Grab	2/Year	[3]
Carbon Tetrachloride	µg/L	Grab	2/Year	[3]
1,4-Dichlorobenzene	µg/L	Grab	2/Year	[3]
1,1-Dichloroethane (1,1-DCA)	µg/L	Grab	1/Quarter	[3, 8]
1,2-Dichloroethane	µg/L	Grab	2/Year	[3]
1,1-Dichloroethylene	µg/L	Grab	2/Year	[3]
Ethylbenzene	µg/L	Grab	2/Year	[3]
Tetrachloroethylene	µg/L	Grab	2/Year	[3]
Trichloroethylene	µg/L	Grab	2/Year	[3]
Toluene	µg/L	Grab	2/Year	[3]
Vinyl Chloride	µg/L	Grab	2/Year	[3]
Remaining Priority Pollutants[9]	µg/L	Grab	1/Year	[3]
TCDD Equivalents[10]	µg/L	Grab	1/Year	[3]

[1] When the sample frequency is 1/month or 1/quarter, water samples shall be collected during a discharge or storm event during that month or quarter, unless no storm event occurs. A storm event is defined as an event that produces 0.5 inches or more precipitation with a 48 hour or greater period between storm events. During periods of storm water discharge, samples shall be taken during the first 30 minutes of discharge. If no storm event occurs during the month or quarter, samples shall be collected from existing discharge.

[2] Flow shall be reported in MGD, based on records of operating time of pumps.

[3] Pollutants shall be analyzed using the analytical methods described in 40 CFR 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.

[4] Five samples shall be collected that are equally spaced in a 30-day period.

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

[6] The Chronic Toxicity monitoring frequency is reduced to annually if 4 consecutive samples demonstrate compliance with the effluent limitation. Subsequently, an exceedance of the limitations causes the testing

frequency to revert to quarterly until 4 consecutive samples demonstrate compliance.

[7] Total PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resembles those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

[8] If 1,1-DCA is detected in effluent, then the minimum monitoring frequency shall increase to 1/Month until at least three consecutive test results are not detected, after which the frequency of analysis shall revert to 1/Quarter.

[9] Priority Pollutants are defined by CWA and included as Attachment I.

[10] To determine compliance with effluent limitations or to conduct Reasonable Potential Analysis (RPA), this Order requires the Discharger to calculate and report dioxin-toxicity equivalencies (TEQs) using the following formula, where the toxicity equivalency factors (TEFs) are as listed in the Table below:

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

where:

C_X = concentration of dioxin or furan congener x

TEF_X = TEF for congener x

Toxicity Equivalency Factors

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

2. Sediment Monitoring of Effluent at Monitoring Location EFF-001

At a minimum, once during the five year permit term, the Discharger must sample the first flush of the discharge for sediment at the point following final treatment and prior to the discharge entering the receiving water. Sufficient sample must be collected to analyze the sediment for the constituents listed in Table E-3.

During each quarterly reporting period, if effluent monitoring results exceed both a TSS effluent limit and a CTR TMDL-based effluent limit or performance goal for copper, lead, zinc, 4,4-DDT, total PCBs, benzo(a)pyrene, or chrysene, then the Discharger has not demonstrated attainment with the interim sediment allocations stipulated by the Harbor Toxics TMDL, Resolution No. R11-008, Attachment A, page 11, Item 3, and implementation of the effluent sediment monitoring program is

required for that priority pollutant. Sediment monitoring of the effluent shall begin during the first discharge event following the effluent exceedances. An effluent sediment monitoring result at or below the interim sediment allocation in Table 9, page 24 of this Order demonstrates attainment with the interim sediment allocation and additional sediment monitoring of the effluent is not required. A sediment monitoring result that exceeds the interim sediment allocation triggers an once per year sediment monitoring of the effluent during discharge until the three-year average concentration for sediment monitoring results is at or below the interim sediment allocation.

The exact location of the sampling point must be stipulated in the initial self-monitoring report. All samples shall be tested in accordance with USEPA or ASTM methodologies where such methods exist. Where no USEPA or ASTM methods exist, the State Water Board or Regional Water Board (collectively Water Boards) shall approve the use of other methods. Analytical tests shall be conducted by laboratories certified by the California Department of Public Health in accordance with Water Code Section 13176.

Table E-3. Sediment Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency
Copper	mg/kg	Grab	1/permit term or 1/year[1]
Lead	mg/kg	Grab	1/permit term or 1/year[1]
Zinc	mg/kg	Grab	1/permit term or 1/year[1]
PAHs	mg/kg	Grab	1/permit term or 1/year[1]
DDT	mg/kg	Grab	1/permit term or 1/year[1]
PCBs	mg/kg	Grab	1/permit term or 1/year[1]

1. Once per year monitoring is only required during years in which exceedances occur as specified above.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity

1. Definition of Acute Toxicity

Acute toxicity is a measure of primarily lethal effects that occur over a 96-hour period. Acute toxicity shall be measured in percent survival measured in undiluted (100%) effluent.

a. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and

b. No single test shall produce less than 70% survival.

2. Acute Toxicity Effluent Monitoring Program

a. Method. The Discharger shall conduct acute toxicity tests (96-hour static renewal toxicity tests) on effluent grab samples, by methods specified in 40 CFR Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, October 2002, USEPA, Office of Water, Washington D.C. (EPA/821/R-02/012) or a more recent edition to ensure compliance. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.

b. Test Species. The topsmelt, *Atherinops affinis*, shall be used as the test species for brackish effluent. However, if the salinity of the receiving water is between 1 to 32 parts per thousand (ppt), the Discharger may have the option of using the inland silverside, *Menidia beryllina* (Acute Toxicity Test Method 2006.0), instead of the topsmelt. The method for topsmelt (Larval Survival and Growth Test Method 1006.0) is found in USEPA's *Short-term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, First Edition, August 1995* (EPA/600/R-95/136).

c. Test Approach. The critical acute instream waste concentration (IWC) is set at 100% effluent. A 100% effluent sample and a control shall be tested.

d. Alternate Reporting. For the acute toxicity testing with topsmelt, the Discharger may elect to report the results or endpoint from the first 96 hours of the chronic toxicity test as the results of the acute toxicity test, using USEPA's August 1995 Method (EPA600/R-95/136) to conduct the chronic toxicity test.

e. Acute Toxicity Accelerated Monitoring. If either of the requirements in Order sections IV.A.1.b.i or ii is not met, the Discharger shall conduct six additional tests, approximately every two weeks, over a 12-week period. The Discharger shall ensure that they receive results of a failing toxicity test within 24 hours of the close of the test and the additional tests shall begin within 5 business days of the receipt of the result. If the additional tests indicate compliance with the toxicity limitation, the Discharger may resume regular testing.

f. Toxicity Identification Evaluation

The Discharger shall immediately begin a Toxicity Identification Evaluation (TIE) and implement the Initial Investigation Toxicity Reduction Evaluation (TRE) workplan under either of the two following conditions:

i. If the results of any two of the six accelerated tests are less than 90% survival, or

ii. the initial test and any of the additional six acute toxicity tests results are less than 70% survival.

Once the sources are identified the Discharger shall take all reasonable steps to reduce toxicity to meet the 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. Chronic toxicity shall be measured in TUc, where TUc = 100/NOEC. The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

This Order includes a chronic toxicity effluent limit defined as an exceedance of 1.0 TUc in a critical life stage test of 100% effluent. (The monthly median for chronic toxicity of 100% effluent shall not exceed 1 TUc in a critical life stage test.)

2. Chronic Toxicity Effluent Monitoring Program

a. Test Species and Methods:

i. For this discharge, the critical chronic IWC is set at 100% effluent. A series of at least five effluent dilutions (including 100% effluent) and a control shall be tested. For effluent discharge to brackish receiving water, the Discharger shall conduct the chronic toxicity test in accordance with USEPA's *Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, First Edition, August 1995,* (EPA/600/R-95/136), or *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition, October 2002*, (EPA/821-R-02-014), or a more recent edition.

ii. The Discharger shall conduct tests as follows: with a vertebrate, an invertebrate, and a plant for the first three suites of tests. After the screening period, monitoring shall be conducted using the most sensitive species.

iii. Re-screening is required every 24 months. The Discharger shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive one, then the re-screening does not need to include more than one suite of tests. If a different species is the most sensitive one 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.

iv. After the screening period, monitoring shall be conducted quarterly using the most sensitive species.

v. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.

3. Chronic Toxicity Accelerated Monitoring.

a. If the chronic toxicity of the effluent exceeds the monthly median of 1.0 TUc, the Discharger shall conduct six additional tests, approximately every two weeks, over a 12-week period. The Discharger shall ensure that they receive results of a failing chronic toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 5 business days of the receipt of the result.

i. If any three out of the initial test and the six additional tests results exceed 1.0 TUc, the Discharger shall immediately implement the Initial Investigation TRE workplan.

ii. 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 this MRP.

iii. If all of the six additional tests required above do not exceed 1 TUc, then the Discharger may return to the normal sampling frequency.

iv. 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.

C. Quality Assurance

1. If the organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).

2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manuals (EPA/600/4-91/002, EPA/821-R-02-014, and EPA/600/R-95/136), then the Discharger must re-sample and re-test at the earliest time possible.

3. Control and dilution water should be receiving water (if non-toxic) or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the water the test species are grown in (culture water), a second control using culture water shall be used.

4. The Discharger shall review the concentration-response relationship for each multi-concentration test to ensure that calculated test results are interpreted appropriately. All WET test results should be reviewed and reported following *Method Guidance and Recommendations for WET Testing* (EPA/821/B-00-004, 2000).

5. Because this permit requires sublethal hypothesis testing endpoints from the 1995 West Coast marine and estuarine WET test methods manual and the 2002 East Coast marine and estuarine WET test methods manual, within test variability must be reviewed and variability criteria [e.g., Minimum Significance Difference (MSD) bound, Percent, Minimum Significance Difference (PMSD) bounds] must be applied, as specified in the test methods manuals. The calculated MSD (or PMSDs) for both reference toxicant test and effluent toxicity test results must meet the MDS bound (or PMSD bounds) variability criteria specified in the test methods manuals.

6. pH drift during the toxicity test may contribute to artifactual toxicity when pH-dependent toxicants (e.g., ammonia, metals) are present in an effluent. To determine whether or not pH drift during the toxicity test is contributing to artifactual toxicity, the Discharger shall conduct three sets of parallel toxicity tests, in which the pH of one treatment is controlled at the pH of the effluent and the pH of the other treatment is not controlled, as described in section 11.3.6.1 of the test methods manual, *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002). Toxicity is confirmed to be artifactual and due to pH drift when no toxicity above the chronic toxicity effluent limit is observed in the treatments controlled at the pH of the effluent. If toxicity is confirmed to be artifactual and due to pH drift, then following written approval by the permitting authority, the Discharger may use the procedures outlined in section 11.3.6.2 of the test methods manual to control sample pH during the toxicity test.

D. Preparation of an Initial Investigation TRE Workplan

The Discharger shall prepare and submit a copy of the Discharger's initial investigation TRE workplan to the Executive Officer of the Regional Water Board for approval within **90 days** of the effective date of this permit. If the Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use USEPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

1. 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.

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

3. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP Section V.E.3 for guidance manuals.

E. Steps in TRE and TIE Procedures

1. If results of the implementation of the facility's initial investigation TRE workplan indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 30 days of completion of the initial investigation TRE. The detailed workplan shall include, but not be limited to:

a. Further actions to investigate and identify the cause of toxicity;

b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity;

c. A schedule for these actions.

2. The following section summarizes the stepwise approach used in conducting the TRE:

a. Step 1 includes basic data collection. Data collected for the accelerated monitoring requirements may be used to conduct the TRE;

b. Step 2 evaluates optimization of the treatment system operation, facility housekeeping, and the selection and use of in-plant process chemicals;

c. If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity;

d. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options;

e. Step 5 evaluates in-plant treatment options; and,

f. Step 6 consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of compliance with those requirements may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there are no longer toxicity (e.g. six consecutive chronic toxicity test results are less than or equal to 1.0 TUc or six consecutive acute toxicity test results are greater than 90% survival).

3. The Discharger shall initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute manual, chronic manual, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III), as guidance.

4. If a TRE/TIE is initiated prior to completion of the accelerated testing required in section V.A.2.d and V.B.2.b of this program, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

5. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance determination, if appropriate.

6. The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Regional Water Board will be based, in part, on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

F. Ammonia Removal

1. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Discharger must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.

b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.

c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.

d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

2. When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water Board, and receiving written permission expressing approval from the Executive Officer of the Regional Water Board.

G. Reporting

The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month as required by this permit. Test results shall be reported as % survival for acute toxicity test results or Chronic Toxicity Units (TUc), as required, with the self monitoring reports (SMR) for the month in which the test is conducted. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to sections V.A.2.d. and V.B.3, then those results also shall be submitted with the SMR for the period in which the investigation occurred.

1. The full report shall be submitted on or before the end of the month in which the SMR is submitted.

2. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the toxicity limit; and (4) the printout of the ToxCalc or CETIS (Comprehensive Environmental Toxicity Information System) program results.

3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test:

a. Sample date(s);

b. Test initiation date;

c. Test species;

d. End point values for each dilution (e.g., number of young, growth rate, percent survival);

e. Reference toxicity test results;

f. NOEC value(s) in percent effluent;

g. TU_c values $\left(TU_c = \frac{100}{NOEC} \right)$;

h. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);

i. NOEC and LOEC values for reference toxicant test(s);

j. IC_{25} value for reference toxicant test(s);

k. Any applicable charts;

l. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia, chlorine); and

m. TRE/TIE testing results.

4. The Discharger shall provide a compliance summary, which includes a summary table of toxicity data from at least 11 of the most recent samples.

5. The Discharger shall notify this Regional Water Board of any toxicity by telephone or electronically within 24 hours of receipt of the results, followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

Not Applicable

VII. RECLAMATION MONITORING REQUIREMENTS

Not Applicable

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

A. Monitoring Location RSW-001

1. The Discharger shall monitor the Cerritos Channel, at Monitoring Location RSW-001, within 50 feet upstream of Discharge Point No. 001, relative to tidal flow, as follows:

Table E-4. Receiving Water Monitoring Requirements at Monitoring Location RSW-001

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]
Dissolved Oxygen	mg/L	Grab	1/Year	[1]
Salinity	mg/L	Grab	1/Year	[1]
Temperature	ºF	Grab	1/Year	[1]
Total Coliform	MPN/100 ml	Grab	1/Year[3]	[1]
Fecal Coliform	MPN/100 ml	Grab	1/Year[3]	[1]
Enterococcus	MPN/100 ml	Grab	1/Year[3]	[1]
Priority Pollutants[2]	µg/L	Grab	1/Year	[1]
TCDD Equivalents[4]	µg/L	Grab	1/Year	[1]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR 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.

[2] Priority Pollutants as defined by the CTR, defined in Finding II.I of the Limitations and Discharge Requirements of this Order, and included as Attachment I.

[3] Five samples shall be collected that are equally spaced in a 30-day period.

[4] To determine compliance with effluent limitations or to conduct Reasonable Potential Analysis (RPA), this Order requires the Discharger to calculate and report dioxin-toxicity equivalencies (TEQs) using the following formula, where the toxicity equivalency factors (TEFs) are as listed in the Table below:

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

where:

C_X = concentration of dioxin or furan congener x

TEF_X = TEF for congener x

Toxicity Equivalency Factors

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

B. Monitoring Location RSW-002

1. The Discharger shall monitor the Cerritos Channel, at Monitoring Location RSW-002, within 50 feet downstream of Discharge Point No. 001, relative to tidal flow, as follows:

Table E-5. Receiving Water Monitoring Requirements at Monitoring Location RSW-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	s.u.	Grab	1/Year	[1]
Dissolved Oxygen	mg/L	Grab	1/Year	[1]
Temperature	ºF	Grab	1/Year	[1]
Total Coliform	MPN/100 ml	Grab	1/Year[2]	[1]
Fecal Coliform	MPN/100 ml	Grab	1/Year[2]	[1]
Enterococcus	MPN/100 ml	Grab	1/Year[2]	[1]
Chronic Toxicity	TUc	Grab	1/Quarter[3]	[4]

[1] Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136.

[2] Five samples shall be collected that are equally spaced in a 30-day period.

[3] The Chronic Toxicity monitoring frequency is reduced to annually if 4 consecutive samples demonstrate compliance with the effluent limitation. Subsequently, an exceedance of the limitations causes the testing frequency to revert to quarterly until 4 consecutive samples demonstrate compliance.

[4] See Section V, Whole Effluent Toxicity Testing Requirements.

IX. OTHER MONITORING REQUIREMENTS

A. Visual Monitoring of Upstream and Downstream Receiving Water Sampling Points

1. A visual observation station shall be established in the vicinity of the discharge point of the storm drain to the receiving water, the Cerritos Channel.

2. General observations of the receiving water shall be made at each discharge point when discharges occur. During months of no discharge, the receiving water observations shall be made on a monthly basis. All receiving water observations shall be reported in the quarterly monitoring report. If no discharge occurred during the observation period, this shall be reported. Observations shall be descriptive where applicable, such that colors, approximate amounts, or types of materials are apparent. The following observations shall be made:

a. Tidal stage, time, and date of monitoring
b. Weather conditions
c. Color of water
d. Appearance of oil films or grease, or floatable materials
e. Extent of visible turbidity or color patches
f. Direction of tidal flow
g. Description of odor, if any, of the receiving water
h. Presence and activity of California Least Tern and California Brown Pelican.

B. Storm Water Monitoring

1. Rainfall Monitoring. The Discharger shall measure and record the rainfall on each day of the month. This information shall be included in the monitoring report for that month.

2. Visual Observation. The Discharger shall make visual observations of all storm water discharge locations on at least one storm event per month that produces a significant storm water discharge to observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity, and odor. A “significant storm water discharge” is a continuous discharge of storm water for a minimum of one hour, or the intermittent discharge of storm water for a minimum of 3 hours in a 12-hour period.

C. Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices Plan (BMPP) Effectiveness Report

1. As required under Special Provision VI.C.3 of this Order, the Discharger shall submit an updated SWPPP and BMPP to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this Order.

2. Annually the Discharger shall report the status of the implementation and the effectiveness of the SWPPP and BMPP required under Special Provision VI.C.3 of this Order. The SWPPP and BMPP shall be reviewed at a minimum once per year and updated as needed to ensure all actual or potential sources of pollutants in wastewater and storm water discharged from the facility are addressed in the SWPPP and BMPP Status. All changes or revisions to the SWPPP and BMPP will be summarized in the 4th Quarter Self Monitoring Report required under Attachment E, Monitoring and Reporting, section X.B.

D. Regional Monitoring

The Discharger may be required to participate in the development of Regional Monitoring program(s) to address pollutants as specified in the Harbor Toxics TMDL.

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 report shall so state.

3. Each monitoring report shall contain a separate section titled “Summary of Non-Compliance” which discusses the compliance record and corrective actions taken or 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 acute and chronic toxicity testing, TRE and TIE as required in the Attachment E, Monitoring and Reporting, Section V.F.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (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 directions for SMR submittal in the event there will be service interruption for electronic submittal. Until such notification is given, the Discharger shall submit a searchable Portable Document Format (PDF) copy SMRs. Documents that are less than 10 MB should be emailed to losanqeles@waterboards.ca.gov. Documents that are 10 MB or larger should be transferred to a disk and mailed to the address below.

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 SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. 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-6. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
1/Day	**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/Month	**Permit Effective Date**	1st day of calendar month through last day of calendar month	May 1 August 1 November 1 February 1
1/Quarter	**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
2/Year	**Permit Effective Date**	January 1 through June 30 July 1 through December 31	August 1 February 1
1/Year	**Permit Effective Date**	January 1 through December 31	February1

4. Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 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 reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

b. Sample results less than the Reporting Limit (RL), but greater than or equal to the laboratory's MDL, shall be reported as 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 as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). 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 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 RL.

7. Multiple Sample Data. When determining compliance with an Average Monthly Effluent Limitation (AMEL) or Maximum Daily Effluent Limitation (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 DNQ or 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.

b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements (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. Discharge Monitoring Reports (DMRs)

On August 1, 2014, notification was given specifically for the electronic submittal of DMRs. Therefore, the Discharger shall submit DMRs electronically via CIWQS.

D. Other Reports

1. Within 90 days of the effective date of Order No. R4-2013-0108, the Discharger was required to submit the following to the Regional Water Board:

a. Initial Investigation TRE workplan

b. Updated SWPPP

c. Updated BMPP

The plans were submitted to the Regional Water Board on November 26, 2013.

Attachment F – Fact Sheet

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ATTACHMENT F – FACT SHEET

As described in section II 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	4B191310001
Discharger	The Port of Los Angeles
Name of Facility	New Dock Street Pump Station
Facility Address	New Dock Street/Pier S Avenue (formerly 151 Henry Ford Avenue)
	Terminal Island, CA 90731
	Los Angeles County
Facility Contact, Title and Phone	Manny Ramirez, Environmental Specialist 310-732-3782
Authorized Person to Sign and Submit Reports	Chris Cannon, Director Environmental Management Division (310) 732-3675
Mailing Address	425 South Palos Verdes Street, San Pedro, CA 90731
Billing Address	Same as Mailing Address
Type of Facility	Pump Station
Major or Minor Facility	Major
Threat to Water Quality	Category 3
Complexity	Category B
Pretreatment Program	Not Applicable
Reclamation Requirements	Not Applicable
Facility Permitted Flow	7.25 million gallons per day (MGD)
Facility Design Flow	7.25 MGD
Watershed	Los Angeles/Long Beach Harbor
Receiving Water	Cerritos Channel
Receiving Water Type	Coastal Water

A. The Port of Los Angeles (hereinafter Discharger) is the owner and operator of the New Dock Street Pump Station (hereinafter Facility).

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

B. The Facility discharges wastewater to the Cerritos Channel, a water of the United States, and is currently regulated by Order No. R4-2006-0086 which was adopted on November 9, 2006 and expired on October 10, 2011.

C. The Discharger filed a Report of Waste Discharge (ROWD) and submitted an application for renewal of its waste discharge requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on January 21, 2011. Supplemental information was requested on April 20, 2011, May 3, 2011, and September 15, 2011; and received on May 10, 2011 and September 30, 2011. The application was deemed complete on October 5, 2011.

D. Order R4-2013-0108 included effluent limitations for bacteria for Discharge Point 001 in Section II of the WDRs. The Fact Sheet (Attachment F), however, included conflicting language that indicated no effluent limitations for bacteria would be established. Order R4-2013-0108 was therefore amended by this Order on February 2, 2017, to correct the language in the Fact Sheet that conflicted with the numeric effluent limitations for bacteria included in Section II of the WDRs. This Order also includes other conforming administrative changes.

II. FACILITY DESCRIPTION

The Facility receives and treats groundwater and storm water from an area of approximately 53 acres and discharges it to the Cerritos Channel. The Discharger is an independent, self-supporting department of the City of Los Angeles that serves as a landlord to the port complex, occupying 7,500 acres of waterfront land in the Los Angeles Harbor. The Facility is located at New Dock Street and Pier S Avenue (formerly151 Henry Ford Avenue), Terminal Island, California, on land owned by the City of Long Beach. The Discharger owns and operates the Facility through a legal agreement with the City of Long Beach. In the previous NPDES permit cycles, the Discharger estimated a maximum discharge of approximately 0.725 MGD of treated water that consists of approximately 0.650 MGD of storm water runoff and 0.075 MGD of infiltrating groundwater. However, a maximum wet-season discharge of 5.87 MGD for a six-day rain event was recorded between December 19, 2010, and December 24, 2010. In June 2011, the Discharger conducted a video investigation of the storm drain lines and discovered several leaks into the system. In addition, the discharger opened a previously closed valve from a storm water vault located underground at the intersection of Pier S Street and New Dock Street. On November 4, 2011, the Discharger requested that the flow limit established as a Prohibition be increased from 0.725 MGD to 7.25 MGD to account for a maximum wet-season rain event and increases in groundwater infiltration, resulting from leaks and the opening of the control valve.

A. Description of Wastewater and Biosolids Treatment or Controls

Storm water runoff from roadways and adjacent sites and infiltrating groundwater are collected in the Facility through three drain lines. Sites adjacent to the Facility include the Southeast Resource Recovery Facility (SERRF), and vacant land west of the Facility formerly occupied by Matson, a container company. Pier S. Avenue (formerly Henry Ford Avenue), New Dock Street and the Terminal Island Freeway are located to

the east of the Facility. The Vopak, Inc. Terminal is located north of the Facility. Although encompassed by the Facility tributary area, runoff from the SERRF is separately contained and discharged under the general industrial permit (NPDES No. CAS000001, State Board Order No. 97-03-DWQ). Similarly, the majority of storm water runoff from the Vopak, Inc. Terminal is contained, treated, and discharged under an individual industrial permit (NPDES No. CA0064165, Regional Board Order No. R4-2010-0018).

A French drain/slotted pipe installed underneath the intersection of Pier S Avenue (formerly Henry Ford Avenue) and New Dock Street contributes approximately 0.0144 MGD of the infiltrating groundwater. Leaks on other segments of the storm drains contribute approximately 0.060 MGD of infiltration. Extracted water from the French drain is conveyed via gravity flow to storm drain Line A which directs the discharge to the New Dock Street Pump Station. In December 1996, 1,1-dichloroethane (1,1-DCA) was detected in the groundwater flowing into the Pump Station. Since then, 1,1-DCA has been monitored in the effluent from storm drain Line A and the Pump Station. An investigation conducted during the Third Quarter 1998 and further evaluation determined that the water discharging into catch basin #19 was probably shallow groundwater that could be contributing the 1,1-DCA contamination in the groundwater flowing into the Pump Station. In December 2003, an aeration system was installed in the retention basin and is permitted by the South Coast Air Quality Management District [Permit No. F64128 (A/N 417520)]. Since installation of aeration equipment, 1,1-DCA has been intermittently detected in the effluent at concentrations below the permitted effluent limitation.

The Pump Station is divided into three cells as shown in Attachment C – Wastewater Flow Schematic. The first cell collects the water from the three drain lines. A fourth line routes backwash to the influent cell. Water from the influent cell gravity flows through a triangular shaped section to the second cell, a 10ft x 20ft x 10ft retention basin equipped with an aeration system. From the retention basin, water flows through bar screens into the third cell, a 20ft x 20ft x 20ft holding basin. In the holding basin, the wastewater is pumped via six (6) lift pumps (two 250 gallons per minute (gpm) sump pumps, two 3,700 gpm pumps, and two 19,200 gpm pumps) into the force main, where it is discharged into the Cerritos Channel. Low- and high-water sensors automatically control the pumps and each pump has a dedicated timer that records the total operating time.

B. Discharge Points and Receiving Waters

The Discharger proposes to discharge up to 7.25 MGD of wastewater from the Pump Station into the Cerritos Channel, a water of the United States via Discharge Point No. 001 (Latitude 33º 45’ 54” N, Longitude 118º 14’ 23” W, coordinates correspond to *Google Earth* Images).

Attachment B depicts a topographic map of the area around the Facility. Attachment C depicts the schematic diagram of the wastewater flow.

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

Effluent limitations contained in the existing Order (No. R4-2006-0086), for discharges from Discharge Point No. 001 (Monitoring Location EFF-001), and representative monitoring data from the term of the existing Order are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data for Discharge Point No. 001.

Parameter	Units	Effluent Limitation		Monitoring Data (12/15, 2006 –12/31, 2012)	
		Average Monthly	Maximum Daily	Highest AMEL Discharge	Highest MDEL Discharge
Conventional Pollutants					
Biochemical Oxygen Demand (5-day @ 20 Deg. C) (BOD)	mg/L	20	30	18	18
	lbs/day	120.93	181.40	19.19	19.19
Oil and Grease	mg/L	10	15	< 5.0	< 5.0
	lbs/day	60.47	90.70	0	0
pH	s.u.	6.5-8.5[1]		7.79-8.38[2]	
Settleable Solids	ml/L	0.1	0.3	< 0.1	< 0.1
Total Suspended Solids (TSS)	mg/L	50	75	69	69
	lbs/day	302.32	453.49	96.90	96.90
Non-Conventional Pollutants					
Acute Toxicity	% Survival	[3]		32[4]	
Chronic Toxicity- *Atherinops affinis* (Topsmelt)	TU_c	--		2^5	
Chronic Toxicity-*Menidia beryllina* (Inland Silverside)	TU_c	--		2^5	
Chronic Toxicity-*Mytilus galloprovincialis* (bivalve)	TU_c	--		4^6	
Chronic Toxicity-*Macrocystis pyrifera* (Giant Kelp)	TU_c	--		2^7	
Methyl Tert-butyl Ether (MTBE)	µg/L	--	35	--	< 3.0
	lbs/day	--	0.212	--	0
Methylene Blue Active Substances (MBAS)	mg/L	--	0.5	--	3.35
	lbs/day	--	3.02	--	1.15

Parameter	Units	Effluent Limitation		Monitoring Data (12/15, 2006 –12/31, 2012)	
		Average Monthly	Maximum Daily	Highest AMEL Discharge	Highest MDEL Discharge
Phenols, Chlorinated	µg/L	--	1	--	< 1
	lbs/day	--	0.006	--	0
Sulfides	mg/L	--	1	--	< 0.1
	lbs/day	--	6.04		0
Temperature	ºF	--	86[8]	--	78[8]
Total Petroleum Hydrocarbons (TPH) (C_5-C_{14})	µg/L	--	100	--	< 0.1
	lbs/day	--	0.605	--	0
Turbidity	NTU	50	75	24.5	24.5
Xylene	µg/L	--	1,750	--	< 0.5
	lbs/day	--	10.58	--	0
Priority Pollutants					
Arsenic, Total Recoverable	µg/L	22.98	50	30[9]	32.0[9]
	lbs/day	0.14	0.302	0.079[9]	0.105[9]
Arsenic, Total Recoverable Interim[10]	µg/L	32.5	--	31.0[11]	--
	lbs/day	0.197	--	0.032[11]	--
Cadmium, Total Recoverable	µg/L	--	5	--	0.17[9]
	lbs/day	--	0.030	--	0.0001[9]
Cadmium, Total Recoverable-Interim[10]	µg/L	--	7.2	--	0.53[11]
	lbs/day	--	0.044	--	0.001[11]
Copper, Total Recoverable	µg/L	3.06	5.78	8.13[9]	19[9]
	lbs/day	0.019	0.035	0.0205[9]	0.1894[9]
Copper, Total Recoverable-Interim[10]	µg/L	13.91	17.94	20[11]	20[11]
	lbs/day	0.084	0.11	0.044[11]	0.044[11]
Mercury, Total Recoverable	µg/L	0.051	0.102	0.02[9]	0.04[9]
	lbs/day	0.00031	0.00062	0.0000[9]	0.0000[9]
Mercury, Total Recoverable-Interim[10]	µg/L	--	0.112	--	0.163[11,12]
	lbs/day	--	0.0007	--	0.00008[11]
Nickel, Total Recoverable	µg/L	6.71	13.8	9.72[9]	11.0[9]
	lbs/day	0.041	0.083	0.021[9]	0.026[9]

Parameter	Units	Effluent Limitation		Monitoring Data (12/15, 2006 –12/31, 2012)	
		Average Monthly	Maximum Daily	Highest AMEL Discharge	Highest MDEL Discharge
Nickel, Total Recoverable-Interim[10]	µg/L	13.13	15.67	6.15[11]	6.15[11]
	lbs/day	0.079	0.095	0.011[11]	0.011[11]
Selenium, Total Recoverable	µg/L	--	10	--	150[9]
	lbs/day	--	0.061	--	0.228[9]
Selenium, Total Recoverable-Interim[10]	µg/L	--	107	--	3.50[11]
	lbs/day	--	0.65	--	0.0060[11]
Zinc, Total Recoverable	µg/L	31.28	95.14	30[9]	99[9]
	lbs/day	0.19	0.58	0.128[9]	0.404[9]
Zinc, Total Recoverable-Interim[10]	µg/L	258.73	336.73	235.00[11]	235.00[11]
	lbs/day	1.56	2.04	0.514[11]	0.514[11]
1,1-Dichloroethane (1,1-DCA)	µg/L	--	5	--	2.65
	lbs/day	--	0.03	--	0.0042

1 The pH shall remain in this range at all times.

2 Range of instantaneous values.

3 Average survival in effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70% survival.

4 Lowest observed percent survival.

5 Based on survival endpoint.

6 Highest chronic toxicity observed as reduced development.

7 Highest chronic toxicity observed for both germination and growth measurements.

8 Instantaneous maximum.

9 Based on monitoring data collected November 13, 2009 through December 31, 2012.

10 Effective November 9, 2006-November 12, 2009.

11 Based on monitoring data collected November 9, 2006 through November 12, 2009.

12 Average of duplicates, where one result below detection is assumed as ½ the detection limit for calculation purposes.

D. Compliance Summary

Based on monitoring data submitted from the third quarter 2006 through the fourth quarter 2012 the following violations are noted.

Table F-3. Summary of Compliance History

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
12/31/2006	4th Quarter 2006	Monthly Average	TSS	51	50	mg/L
09/07/2007	3rd Quarter 2007	Daily Maximum	MBAS	3.35	0.5	mg/L
02/14/2008	1st Quarter 2008	Daily Maximum	Copper	20	17.94	µg/L
02/28/2008	1st Quarter 2008	Monthly Average	Copper	20	13.91	µg/L
02/10/2010	1st Quarter 2010	Daily Maximum	Copper	7.4	5.78	µg/L
02/28/2010	1st Quarter 2010	Monthly Average	Copper	7.4	3.06	µg/L
02/28/2010	1st Quarter 2010	Monthly Average	Copper	0.0205	0.019	lbs/day
03/19/2010	1st Quarter 2010	Daily Maximum	Copper	7.3	5.78	µg/L
03/31/2010	1st Quarter 2010	Monthly Average	Copper	4.675	3.06	µg/L
09/30/2010	3rd Quarter 2010	Monthly Average	Total Suspended Solids	69	50	mg/L
10/31/2010	4th Quarter 2010	Monthly Average	Copper	4.0	3.06	µg/L
11/17/2010	4th Quarter 2010	Daily Maximum	Selenium	73	10	µg/L
11/17/2010	4th Quarter 2010	Daily Maximum	Selenium	0.2	0.061	lbs/day
11/30/2010	4th Quarter 2010	Monthly Average	Nickel	6.95	6.71	µg/L
12/01/2010	4th Quarter 2010	Daily Maximum	Selenium	80.5	10	µg/L
12/01/2010	4th Quarter 2010	Daily Maximum	Selenium	0.221	0.061	lbs/day
12/10/2010	4th Quarter 2010	Daily Maximum	Selenium	79.5	10	µg/L
12/10/2010	4th Quarter 2010	Daily Maximum	Selenium	0.218	0.061	lbs/day
12/31/2010	4th Quarter 2010	Monthly Average	Copper	3.9	3.06	µg/L
01/19/2011	1st Quarter 2011	Daily Maximum	Copper	6.35	5.78	µg/L
01/19/2011	1st Quarter 2011	Daily Maximum	Selenium	51.5	10	µg/L
01/19/2011	1st Quarter 2011	Daily Maximum	Selenium	0.169	0.061	lbs/day
01/31/2011	1st Quarter 2011	Daily Maximum	Copper	12	5.78	µg/L

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
01/31/2011	1st Quarter 2011	Daily Maximum	Copper	0.0394	0.035	lbs/day
01/31/2011	1st Quarter 2011	Monthly Average	Copper	6.73	3.06	µg/L
01/31/2011	1st Quarter 2011	Monthly Average	Copper	0.022	0.019	lbs/day
02/15/2011	1st Quarter 2011	Daily Maximum	Copper	6.3	5.78	µg/L
02/15/2011	1st Quarter 2011	Daily Maximum	Selenium	69.5	10	µg/L
02/15/2011	1st Quarter 2011	Daily Maximum	Selenium	0.228	0.061	lbs/day
02/21/2011	1st Quarter 2011	Daily Maximum	Copper	6.4	5.78	µg/L
02/22/2011	1st Quarter 2011	Daily Maximum	Copper	6.2	5.78	µg/L
02/23/2011	1st Quarter 2011	Daily Maximum	Copper	5.8	5.78	µg/L
02/24/2011	1st Quarter 2011	Daily Maximum	Copper	6.3	5.78	µg/L
02/28/2011	1st Quarter 2011	Monthly Average	Copper	6.2	3.06	µg/L
02/28/2011	1st Quarter 2011	Monthly Average	Copper	0.020	0.019	lbs/day
03/11/2011	1st Quarter 2011	Daily Maximum	Selenium	79	10	µg/L
03/11/2011	1st Quarter 2011	Daily Maximum	Selenium	0.260	0.061	lbs/day
04/06/2011	2nd Quarter 2011	Daily Maximum	Selenium	65.5	10	µg/L
04/14/2011	2nd Quarter 2011	Daily Maximum	Copper	6.3	5.78	µg/L
04/30/2011	2nd Quarter 2011	Monthly Average	Copper	4.8	3.06	µg/L
05/16/2011	2nd Quarter 2011	Daily Maximum	Copper	7.4	5.78	µg/L
05/16/2011	2nd Quarter 2011	Daily Maximum	Selenium	85.5	10	µg/L
05/31/2011	2nd Quarter 2011	Monthly Average	Copper	4.1	3.06	µg/L
06/15/2011	2nd Quarter 2011	Daily Maximum	Selenium	87.5	10	µg/L
06/15/2011	2nd Quarter 2011	Daily Maximum	MBAS	0.88	0.5	mg/L
06/30/2011	2nd Quarter 2011	Monthly Average	Copper	3.7	3.06	µg/L

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
07/12/2011	3rd Quarter 2011	Daily Maximum	Selenium	110	10	µg/L
07/12/2011	3rd Quarter 2011	Daily Maximum	Selenium	0.06249	0.061	lbs/day
07/31/2011	3rd Quarter 2011	Monthly Average	Copper	4.1	3.06	µg/L
07/31/2011	3rd Quarter 2011	Monthly Average	Arsenic	25.67	22.98	µg/L
08/03/2011	3rd Quarter 2011	Daily Maximum	Selenium	110	10	µg/L
08/03/2011	3rd Quarter 2011	Daily Maximum	Selenium	0.0734	0.061	µg/L
08/31/2011	3rd Quarter 2011	Monthly Average	Copper	4.27	3.1	µg/L
08/31/2011	3rd Quarter 2011	Monthly Average	Arsenic	27	22.98	µg/L
09/20/2011	3rd Quarter 2011	Daily Maximum	Selenium	110	10	µg/L
09/20/2011	3rd Quarter 2011	Daily Maximum	Selenium	0.0692	0.061	lbs/day
09/30/2011	3rd Quarter 2011	Monthly Average	Copper	3.3	3.1	µg/L
09/30/2011	3rd Quarter 2011	Monthly Average	Arsenic	31	22.98	µg/L
10/11/2011	4th Quarter 2011	Daily Maximum	Selenium	115	10	µg/L
10/11/2011	4th Quarter 2011	Daily Maximum	Selenium	0.0828	0.061	lbs/day
11/01/2011	4th Quarter 2011	Daily Maximum	Selenium	95.5	10	µg/L
11/14/2011	4th Quarter 2011	Daily Maximum	Copper	6.6	5.8	µg/L
11/21/2011	4th Quarter 2011	Daily Maximum	Copper	9.4	5.8	µg/L
11/30/2011	4th Quarter 2011	Daily Maximum	Selenium	97	10	µg/L
11/30/2011	4th Quarter 2011	Daily Maximum	Selenium	0.0633	0.061	lbs/day
11/30/2011	4th Quarter 2011	Monthly Average	Copper	5.91	3.1	µg/L
12/05/2011	4th Quarter 2011	Daily Maximum	Selenium	105	10	µg/L
12/05/2011	4th Quarter 2011	Daily Maximum	Selenium	0.0673	0.061	Lbs/day
12/05/2011	4th Quarter 2011	Daily Maximum	MBAS	1.34	0.5	mg/L
12/12/2011	4th Quarter 2011	Daily Maximum	Copper	19	5.8	µg/L

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
12/12/2011	4th Quarter 2011	Daily Maximum	Copper	0.1894	0.035	lbs/day
12/31/2011	4th Quarter 2011	Monthly Average	Nickel	7.67	6.71	µg/L
12/31/2011	4th Quarter 2011	Monthly Average	Copper	8.13	3.1	µg/L
01/23/2012	1st Quarter 2012	Daily Maximum	Copper	18	5.78	µg/L
01/23/2012	1st Quarter 2012	Daily Maximum	Copper	0.159	0.035	Lbs/day
01/31/2012	1st Quarter 2012	Monthly Average	Copper	7.43	3.06	µg/L
01/31/2012	1st Quarter 2012	Monthly Average	Copper	0.042	0.019	Lbs/day
02/16/2012	1st Quarter 2012	Daily Maximum	Copper	10	5.78	µg/L
02/29/2012	1st Quarter 2012	Daily Maximum	Copper	7.4	5.78	µg/L
02/29/2012	1st Quarter 2012	Monthly Average	Copper	6.04	3.06	µg/L
02/29/2012	1st Quarter 2012	Monthly Average	Zinc	42	32.28	µg/L
03/06/2012	1st Quarter 2012	Daily Maximum	MBAS	1.21	0.5	Mg/L
03/30/2012	1st Quarter 2012	Monthly Average	Copper	4	3.06	µg/L
03/30/2012	1st Quarter 2012	Monthly Average	Nickel	8.5	6.71	µg/L
04/12/2012	2nd Quarter 2012	Daily Maximum	Copper	5.8	5.78	µg/L
04/26/2012	2nd Quarter 2012	Daily Maximum	Copper	15	5.78	µg/L
04/30/2012	2nd Quarter 2012	Monthly Average	Copper	7.4	3.06	µg/L
04/30/2012	2nd Quarter 2012	Monthly Average	Nickel	7.45	6.71	µg/L
05/31/2012	2nd Quarter 2012	Monthly Average	Arsenic	23.83	22.98	µg/L
05/31/2012	2nd Quarter 2012	Monthly Average	Copper	4.2	3.06	µg/L
06/30/2012	2nd Quarter 2012	Monthly Average	Copper	4.2	3.06	µg/L
06/30/2012	2nd Quarter 2012	Monthly Average	Nickel	9.7	6.71	µg/L
06/30/2012	2nd Quarter 2012	Daily Maximum	Phenols, (Chlorinated)	2.8	1.0	µg/L
07/13/2012	3rd Quarter 2012	Daily Maximum	Copper	9.9	5.78	µg/L

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
07/13/2012	3rd Quarter 2012	Daily Maximum	Zinc	99	95.14	µg/L
07/13/2012	3rd Quarter 2012	Daily Maximum	Zinc	0.6	0.58	Lbs/day
07/25/2012	3rd Quarter 2012	Monthly Average	Copper	5.27	3.06	µg/L
07/25/2012	3rd Quarter 2012	Monthly Average	Nickel	9.1	6.71	µg/L
07/25/2012	3rd Quarter 2012	Monthly Average	Nickel	0.059	0.041	Lbs/day
07/25/2012	3rd Quarter 2012	Monthly Average	Zinc	36.3	32.28	µg/L
07/25/2012	3rd Quarter 2012	Monthly Average	Zinc	0.23	0.19	Lbs/day

Historical effluent violations have been settled in enforcement actions. An Administrative Civil Liability Complaint No. R4-2010-0169-M was issued on December 17, 2010 by the Regional Water Board for the Discharger's noncompliance from March 28, 2000 to March 31, 2010. After a hearing held on March 17, 2011, the Regional Water Board issued Administrative Civil Liability Order No. R4-2010-0169-M (Directive) on June 9, 2011 which directed the Discharger to pay $42,000 for the violations subject to mandatory minimum penalties. The Discharger complied with the Directive and a full payment was received by the Regional Water Board on August 19, 2011. On September 12, 2011, the Regional Water Board issued Settlement Offer No. R4-2011-0156-M (Offer) for $108,000 for violations of waste discharge requirements of Order R4-2006-0086 from September 30, 2010 to June 30, 2011. A Stipulated Order on the Offer issued by the Regional Water Board on January 6, 2012 indicates that the Discharger waived its right to a hearing and accepted an amended penalty of $93,000. The Board received a payment of $93,000 from the Discharger on December 15, 2011.

The more recent violations are being evaluated for enforcement action.

In the revised ROWD submitted September 20, 2011, the Discharger described the following activities to identify potential sources of high concentrations of metals in the discharge:

- video inspection of storm drain lines, which led to identification of several leaks;
- sampling of storm drain pipe inlets to the Facility to characterize influent sources;
- plans to sample groundwater to determine if repair of the pipeline can correct exceedances of effluent limitations;
- completion of surface improvements;
- implementation of BMPs; and
- evaluation of alternative use, flow diversion, and water treatment technologies.

E. Planned Changes

The Discharger does not currently have any planned changes to the existing treatment system. The discharges have resulted in effluent violations for copper and selenium. The Work Plan submitted for the Time Schedule Order No. R4-2013-0109 enumerated plans to investigate the sources of these pollutants, select, and implement a control or treatment technology.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

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

B. California Environmental Quality Act (CEQA)

Under Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code Sections 21100 through 21177.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** 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 beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Beneficial uses applicable to the Cerritos Channel are as follows:

Table F-4. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Cerritos Channel Within Los Angeles/Long Beach Inner Harbor	Existing: Industrial service supply (IND); navigation (NAV); non-contact water recreation (REC-2); commercial and sport fishing (COMM); marine habitat (MAR); rare, threatened, or endangered species (RARE) Potential: Water contact recreation (REC-1); shellfish harvesting (SHELL)

Requirements of this Order implement the Basin Plan.

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 Resources Control Board (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 Facility discharges to the Cerritos Channel, within the Los Angeles/Long Beach Inner Harbor, the wastewater is comprised primarily of storm water runoff and infiltrating groundwater 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.

2. **Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, 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,* 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.

3. **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 water quality criteria for priority pollutants. A list of the priority pollutants is contained in Attachment I.

4. **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 implementation provisions for chronic toxicity control. Requirements of this Order implement the SIP.

5. **Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Since the May 18, 2010 date has expired, the SIP no longer authorizes compliance schedules for CTR criteria-based limits in NPDES permits. State Water Resources Control Board Resolution No. 2008-0025, *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*, was adopted by the State Water Board on April 15, 2008, and approved by OAL and USEPA on June 26, 2008 and August 27, 2008, respectively. This policy authorizes a Water Board to include compliance schedules in NPDES permits under certain circumstances; however, it does not authorize compliance schedules for permit limitations implementing either criteria promulgated in the CTR (40 CFR 131.38, revised as of July 1, 2005), or water quality objectives identical to CTR criteria that are adopted after promulgation of the CTR.

   This Order requires final WQBELs for copper based on a final concentration-based WLA for copper converted from the saltwater CTR chronic criterion using the CTR saltwater default translator, and relevant implementation provisions in section 1.4 of the State Implementation Policy. It also requires final WQBELs for selenium based on the saltwater CTR chronic criterion using the CTR saltwater default translator, and relevant implementation provisions in section 1.4 of the State Implementation Policy. On January 10, 2012, the Discharger requested the Regional Water Board issue a Time Schedule Order (TSO) with interim limits for copper and selenium. The Discharger stated that a TSO would provide time to identify the source of these contaminants and investigate the potential options for eliminating the exceedances. A TSO has been issued with this Order.

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

7. **Antidegradation Policy.** 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 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 permitted discharge must be consistent with the antidegradation provision of Section 131.12 and State Water Board Resolution No. 68-16.

8. **Anti-Backsliding Requirements.** Sections 402(o) of the CWA establishes statutory language prohibiting the backsliding of effluent limits. CWA Section 402(o) and federal regulations at Title 40, Code of Federal Regulations[1] Section 122.44(l) outline specific exceptions to the general prohibition against establishment of less stringent effluent limitations.

D. Impaired Water Bodies on CWA 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 303(d)-listed water bodies and pollutants, the Regional Water Board plans to develop and adopt total maximum daily loads (TMDLs) that will specify waste load allocations (WLAs) for point sources and load allocations (LAs) for non-point sources, as appropriate. The USEPA approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. Certain receiving waters in the Los Angeles watershed do not fully support beneficial uses and therefore have been classified as impaired on the 2010 303(d) list and have been scheduled for TMDL development.

The Los Angeles/Long Beach Harbors are located in the southern portion of the Los Angeles Basin in the greater San Pedro Bay. These harbors receive discharges from highly industrialized areas. The 2010 State Water Resources Control Board (State Water Board) California 303(d) List includes the Los Angeles/Long Beach Inner Harbor. The Facility discharges into Cerritos Channel, within the Los Angeles/Long Beach Inner Harbor. The pollutants/stressors of concern for Los Angeles/Long Beach Inner Harbor include beach closures due to bacteria, benthic community effects, benzo(a)pyrene (3,4-benzopyrene-7-d), chrysene (C1-C4), copper, dichlorodiphenyltrichloroethane (DDT), polychlorinated biphenyls PCBs (PCBs), sediment toxicity, and zinc.

1. **Bacteria TMDL.** The Regional Water Board approved the *Los Angeles Harbor Bacteria TMDL* (Bacteria TMDL) through Resolution 2004-011 on July 1, 2004. The State Water Board, Office of Administrative Law) OAL, and USEPA approved the TMDL on October 21, 2004, January 5, 2005, and March 1, 2005, respectively. The Bacteria TMDL addresses Inner Cabrillo Beach and the Main Ship Channel of the

[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

Los Angeles Inner Harbor. The Cerritos Channel is not directly addressed through the TMDL. The discharge is treated groundwater and storm water runoff and it is not expected to contribute to elevated bacterial densities. Therefore, no effluent limitations for bacteria are included in this Order. However, this Order requires the Discharger to monitor the effluent for bacteria to ensure that water quality objectives for REC-1 are met within the Cerritos Channel.

2. **Harbor Toxics TMDL.** The Regional Water Board adopted Resolution No. R11-008 on May 5, 2011, that amended the Basin Plan to incorporate the *TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbors Waters* (Harbor Toxics TMDL). The Harbor Toxic TMDL was approved by the State Water Board on February 7, 2012, the OAL on March 22, 2012, and the USEPA on March 23, 2012. The Harbor Toxics TMDL contains requirements applicable to this discharge. Therefore, this Order contains effluent limitations and monitoring requirements based on the TMDL.

   For Cerritos Channel which is located within the Long Beach Inner Harbor the Harbor Toxics TMDL included:

   a. Sediment interim concentration-based allocations (in mg/kg sediment) for copper, lead, zinc, DDT, PAHs, and PCBs (Attachment A to Resolution No. R11-008, p. 11).

   b. Water column final concentration-based waste load allocations (WLAs) (ug/L) for copper, lead, zinc, 4,4'-DDT and total PCBs (Attachment A to Resolution No. R11-008, pp. 13-14).

   c. Provisions for monitoring discharges and/or receiving waters during the TMDL's 20 year implementation schedule to determine attainment with waste load and load allocations as appropriate.

   The provisions included here are consistent with the assumptions and requirements of the WLAs established in the Harbor Toxics TMDL.

   Implementation of the Harbor Toxics TMDL

   This Order requires final WQBELs that are statistically-calculated based on salt water column final concentration-based WLAs (in µg/L, total metal) for copper (3.73), lead (8.52), zinc (85.6), 4,4'-DDT (0.00059), and total PCBs (0.00017) (referred to in this Order as CTR TMDL-based WLAs), converted from saltwater CTR criteria using CTR saltwater default translators, and relevant implementation provisions in section 1.4 of the State Implementation Policy. The TMDL includes provisions for a 20 year implementation schedule when warranted. However, this Order requires final WQBELs (referred to in this Order as CTR TMDL-based effluent limits) because compliance schedules for these permit limits cannot be authorized under Clean Water Act section 303(c)(2) approval received from the USEPA on November 8, 2012, as the Discharger does not meet the qualification requirements.

This Order also includes monitoring thresholds based on the TMDL's interim sediment allocations (in mg/kg sediment) for copper (142.3), lead (50.4), zinc (240.6), PAHs (4.58), DDT (0.070), and PCBs (0.060), and associated sediment monitoring requirements for the effluent. Regardless of these monitoring thresholds, the Discharger shall ensure that effluent concentrations and mass discharges do not exceed levels that can be attained by performance of the Facility's treatment technologies existing at the time of permit issuance, reissuance, or modification. The TMDL's interim sediment allocations were developed to ensure that the beneficial uses of the Cerritos Channel within the Los Angeles/Long Beach Inner Harbor are preserved.

The water column CTR TMDL-based WLAs for copper, lead, zinc, 4,4'-DDT, and total PCBs were developed to ensure that the beneficial uses of the Cerritos Channel are preserved. However, no water column CTR TMDL-based WLAs were assigned for PAHs in the Greater Harbor Waters (includes Los Angeles/Long Beach Inner and Outer Harbors). Therefore, this Order sets performance goals for the PAHs; benzo(a)pyrene and chrysene, to ensure proper implementation of the TMDL's interim sediment allocations for this discharge. During each reporting period, if effluent monitoring results exceed both a TSS effluent limit and a CTR TMDL-based effluent limit or performance goal for copper, lead, zinc, 4,4-DDT, total PCBs, benzo(a)pyrene, or chrysene, then the Discharger has not demonstrated attainment with the interim sediment allocations stipulated by the Harbor Toxics TMDL, Resolution No. R11-008, page 11, Item 3, and implementation of the effluent sediment monitoring program is required for that priority pollutant. Sediment monitoring of the effluent shall begin during the first discharge event following the effluent exceedances. An effluent sediment monitoring result at or below the interim sediment allocation in Table 7, page 25 of this Order, demonstrates attainment with the interim sediment allocation and additional sediment monitoring of the effluent is not required. A sediment monitoring result that exceeds the interim sediment allocation requires additional sediment monitoring of the effluent during discharge, but not more frequently than once per year, until the three-year average concentration for sediment monitoring results is at or below the interim sediment allocation.

This permit also requires the Discharger to monitor the effluent sediment at least once during the five year permit term to provide a direct measure of the contaminant concentrations associated with sediment for copper, lead, zinc, PAHs, DDT, and PCBs.

Performance Goals for Individual PAHs: Benzo(a)pyrene and Chrysene

The performance goals for benzo(a)pyrene and chrysene are intended to ensure that effluent concentrations and mass discharges do not exceed levels that can be attained by performance of the Facility's treatment technologies existing at the time of permit issuance, reissuance, or modification. These performance goals are not enforceable effluent limitations. They act as triggers to determine when sediment monitoring of the effluent is required for these compounds.

CTR human health criteria are not promulgated for total PAHs. Therefore, performance goals are based on CTR human health criteria for the individual PAHs, benzo(a)pyrene (0.049 µg/L) and chrysene (0.049 µg/L). Benzo(a)pyrene and chrysene are selected because the State's 2010 303(d) List classifies the Los Angeles/Long Beach Inner Harbor as impaired for these PAH compounds. See also the May 5, 2011, Final Staff Report for the Harbor Toxics TMDL (Staff Report).

Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for Greater Los Angeles and Long Beach Harbor Waters Compliance Monitoring Program

The TMDL's implementation schedule to demonstrate attainment of WLAs and load allocations is 20 years after the TMDL effective date for a Discharger who justifies the need for an associated time included in a compliance plan. During this period, the Discharger is required, either individually or with a collaborating group, to develop a monitoring and reporting plan (Monitoring Plan) and quality assurance project plan (QAPP) for the water column, sediment, and fish tissue in the Greater Los Angeles and Long Beach Harbor. These plans shall follow the "TMDL Element – Monitoring Plan" provisions in Attachment A to Resolution No. R11-008. The Monitoring Plan and QAPP shall be submitted 20 months after the effective date of the TMDL for public review and subsequent Executive Officer approval. The Discharger shall begin monitoring 6 months after the Monitoring Plan and QAPP are approved by the Executive Officer, unless otherwise directed by the Executive Officer. The compliance monitoring program shall include water column, sediment, and fish tissue monitoring.

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: Section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 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.

The list of pollutants of concern was developed based on constituents that were historically found in the effluent or are common pollutants from storm water discharges, site-specific information and monitoring data. Pollutants commonly associated with storm water discharges include pH, BOD, oil and grease, TSS, ammonia, settleable solids, turbidity, temperature, and metals. Order No. R4-2006-0086 identified sulfides, MBAS, and several organics as pollutants of concern based on effluent limitations in the previous Order (97-138). These constituents remain pollutants of concern, except for MBAS and xylene.

Generally, mass-based effluent limitations ensure that proper treatment, 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 limitation on a case-by-case basis limitation 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 CFR 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 Water Code, and previous permit provisions, and are consistent with the requirements set for other discharges to the Cerritos Channel regulated by an NPDES permit.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at Section 122.44, Title 40 of the Code of Federal Regulations, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards.

The 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 performance by plants 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 limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and section 125.3 of the Code of Federal Regulations 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 permit writer must consider specific factors outlined in Section 125.3.

2. Applicable Technology-Based Effluent Limitations

Currently, no technology-based ELGs exist that apply to the Facility. The technology-based requirements in the Order are based on case-by-case numeric limitations, developed in the existing Order (No. R4-2006-086), using BPJ. The technology-based effluent limitations are carried over from the existing Order for BOD, oil and grease, TSS, MTBE, chlorinated phenols, settleable solids, sulfides, TPH, and turbidity (Table F-5). These BPJ limitations are consistent with those established for similar facilities within the Los Angeles Region and continue to be appropriate for this Facility.

The pollutant 1,1-dichloroethane is a constituent of concern that has been detected in the effluent. The Discharger provides aeration as a treatment technology to remove 1,1-dichloroethane. In order to ensure that effective treatment is employed to prevent impairment of the receiving water, this Order includes a technology-based effluent limitation for 1,1-dichloroethane, based on BPJ. The effluent limitation is based on the Regional Water Board General NPDES Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters (Order No. R4-2008-0032), which includes 5 µg/L as a daily maximum for discharges to freshwater and saltwater, including waters not designated as MUN. Effluent monitoring results from December 15, 2006 through December 7, 2012 exhibited a maximum 1,1-dichloroethane concentration of 2.7 µg/L, indicating the Discharger is able to meet the limitation. Moreover, the daily maximum effluent limit of 5 µg/L for 1,1-dichloroethane complies with the water quality standard as well.

Order No. R4-2006-0086 requires the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). This Order requires the Discharger to update the SWPPP. The revised SWPPP will reflect current operations, treatment activities, and staff responsible for implementing and supporting the SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water contamination and for preventing contaminated storm water from being discharged directly into the storm drain. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water. This Order requires the Discharger to update the SWPPP consistent with requirements in Attachment G.

As a component of the SWPPP, the Discharger must identify Best Management Practices (BMPs) that address specific areas that are considered sources of pollutants. The BMPs shall include measures to minimize the amount of pollutants entering the discharge. Further discussion of SWPPP and BMP requirements are provided in VII.B.3.a of this Fact Sheet and Attachment G.

The combination of the SWPPP and Best Management Practices Plan (BMPP) and existing Order limitations reflecting BPJ will serve as the equivalent of technology-based effluent limitations, in the absence of established ELGs, in order to carry out the purposes and intent of the CWA. Table F-5 summarizes the technology-based effluent limitations for Discharge Point No. 001.

Table F-5. Summary of Technology-based Effluent Limitations for Discharge Point No. 001.

Parameter	Units	Average Monthly	Maximum Daily
BOD	mg/L	20	30
	lbs/day[1]	1209	1814
Oil and Grease	mg/L	10	15
	lbs/day[1]	605	907
TSS	mg/L	50	75
	lbs/day[1]	3023	4535
Methyl Tert-butyl Ether (MTBE)	µg/L	--	35
	lbs/day[1]	--	2.1
Phenols, Chlorinated	µg/L	--	1
	lbs/day[1]	--	0.06
Settleable Solids	ml/L	0.1	0.3
Sulfides	mg/L	--	1
	lbs/day[1]	--	60
Total Petroleum Hydrocarbons (TPH)[2]	µg/L	--	100
	lbs/day[1]	--	6.0
1,1-Dichloroethane	µg/L	--	5
	lbs/day[1]	--	0.3
Turbidity	NTU	50	75

[1] The mass emissions rate is based on a maximum flow of 7.25 MGD and is calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

[2] TPH equals the sum of TPH gasoline (C_4-C_{12}), TPH diesel (C_{13}-C_{23}), and TPH oil (C_{23+}).

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and 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) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including narrative water quality criteria/objectives. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in Section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the beneficial 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 SIP.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in section II of the Limitations and Discharge Requirements, 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 Cerritos Channel within Los Angeles/Long Beach Inner 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 Cerritos Channel. The CTR contains aquatic life criteria for saltwater and freshwater, and human health criteria for consumption of water and organism and for consumption of organism only. Section 131.38(c)(3) provides that saltwater criteria apply at

salinities of 10 part per thousand (ppt) and greater at locations where this occurs 95 percent or more of the time. Therefore, the CTR criteria for saltwater 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 Cerritos Channel within Los Angeles/Long Beach Inner Harbor, a water of the United States in the vicinity of the discharge. For parameters for which reasonable potential could not be established, WQBELs were not developed based on CTR water quality criteria.

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

Table F-6. Applicable Water Quality Criteria

CTR No.	Constituent	Selected Criteria	CTR/NTR Water Quality Criteria		
			Saltwater		Human Health for Consumption of Organisms only
			Acute	Chronic	
		µg/L	µg/L	µg/L	µg/L
2	Arsenic	36	69	36	--
4	Cadmium	9.4	42	9.4	Narrative
6	Copper	3.7	5.8	3.7	--
7	Lead	8.5	220	8.5	Narrative
8	Mercury	0.051	--	--	0.051
9	Nickel	8.3	75	8.3	4,600
10	Selenium	71	290	71	Narrative
11	Silver	2.2	2.2	--	--
13	Zinc	86	95	86	--

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. If TMDL WLAs approved by USEPA, then WQBELs are developed using these WLAs. Otherwise, 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, NTR, and water quality objectives

specified in the Basin Plan when applicable. To conduct the RPA, the Regional Water Board identifies the MEC and B 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:

1) Trigger 1 – If the MEC ≥ C, a limit is needed.
2) Trigger 2 – If the background concentration (B) > C and the pollutant is detected in the effluent, a limit is needed.
3) Trigger 3 – If other related information such as CWA 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 for the priority pollutants regulated in the CTR for which data are available. Effluent data from SMRs and annual reports from the period of December 15, 2006 through December 7, 2012 were available for inclusion in the RPA. Upstream receiving water data were available for five annual samples collected from December 15, 2006 through November 17, 2010.

Table F-7. Summary Reasonable Potential Analysis

CTR No.	Constituent	Applicable C	MEC	B	Need Limit?	Reason
2	Arsenic	36	32	49	Yes	B>C, Detected in Effluent
4	Cadmium	9.4	0.94	< 0.5	No	MEC<C, B<C
6	Copper	3.7	20	15	Yes	MEC>C
7	Lead	8.5	22	< 1.0	Yes	MEC>C
8	Mercury	0.051	0.075	< 0.05	Yes	MEC>C
9	Nickel	8.3	7.6	8.5	Yes	B>C, Detected in Effluent
10	Selenium	71	82	180	Yes	MEC>C, B>C
11	Silver	2.2	1.2	< 1.0	No	MEC<C, B<C
13	Zinc	86	240	16	Yes	MEC>C

4. WQBEL Calculations

If a 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 maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).

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

b. Water quality-based effluent limits for arsenic, copper, lead, mercury, nickel, selenium, and zinc 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 mixing zone and nor dilution credit are being allowed. However, in accordance with the reopener provision in section VI.C.1.e in the Order, this Order may be reopened upon the submission by the Discharger of adequate information to establish appropriate mixing zone or dilution credits , as determined by the Regional Water Board.

d. WQBELs Calculation Example

Using nickel as an example, the following demonstrates how WQBELs were established for this Order. The process for developing these limits is in accordance with Section 1.4 of the SIP. Two sets of AMEL and MDEL values are calculated separately, one set for the protection of aquatic life and the other for the protection of human health. The AMEL and MDEL limitations for aquatic life and human health are compared, and the most restrictive AMEL and the most restrictive MDEL are selected as the WQBEL. 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, for this Order, dilution was not allowed; therefore:

$ECA = C$

For nickel the applicable ECAs are (reference Table F-6)

ECA_{acute} = 75 µg/L

$ECA_{chronic}$= 8.3 µg/L

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. For nickel, the calculated CV of 0.53 was used.

For nickel, the following data were used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP:

No. of Samples	CV	ECA Multiplier$_{acute}$	ECA Multiplier$_{chronic}$
38	0.53	0.35	0.56

LTA_{acute} = 75 µg/L x 0.35 = 26 µg/L

$LTA_{chronic}$ = 8.3 µg/L x 0.56 = 4.6 µg/L

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

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

For nickel, the most limiting LTA was the $LTA_{chronic}$

$LTA_{nickel} = LTA_{chronic} = 4.6$ µg/L

Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as AMEL and 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 a 95th percentile occurrence probability, and the 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).

For nickel, 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	$Multiplier_{MDEL\ 99}$	$Multiplier_{AMEL\ 95}$
4	0.53	2.8	1.5

$AMEL = 4.6$ µg/L $\times$ 1.5 = 6.9 µg/L

$MDEL = 4.6$ µg/L $\times$ 2.8 = 13 µg/L

Step 5: For the ECA based on human health(Consumption of Organism Only), set the AMEL equal to the $ECA_{human\ health}$

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

For nickel,

$AMEL_{human\ health}$ = 4,600 µg/L

Step 6: Calculate the MDEL for human health by multiplying the AMEL by the ratio of the $Multiplier_{MDEL}$ 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 nickel, the following data were used to develop the $MDEL_{human\ health}$:

No. of Samples Per Month	CV	$Multiplier_{MDEL\ 99}$	$Multiplier_{AMEL\ 95}$	Ratio
4	0.53	2.8	1.5	1.9

For nickel:

$MDEL_{human\ health}$= 4,600 µg/L x 1.9 = 8,740 µg/L

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

$AMEL_{aquatic\ life}$	$MDEL_{aquatic\ life}$	$AMEL_{human\ health}$	$MDEL_{human\ health}$
6.9	13	4,600	8,740

For nickel, the lowest (most restrictive) effluent limits are based on aquatic life criteria and are incorporated into this Order. Note that the monthly average effluent limitation contained in Order No. R4-2006-0086 for nickel is slightly more stringent than the newly calculated effluent limitations (6.71 µg/L versus 6.9 µg/L). This is the result of the new data which yields a new CV. Since we have new information, it is appropriate to include the calculated monthly average effluent limitation.

For arsenic and selenium, there are no human health (Consumption of Organism Only) criteria, therefore the established effluent limitations are based on aquatic life criteria. For mercury, there are no aquatic life criteria, therefore the established effluent limitations are based on human health criteria. For copper, lead, and zinc, there are no human health (Consumption of Organism Only) criteria, and WLAs have been established based on the Harbor Toxics TMDL, therefore the established effluent limitations are based on aquatic life criteria used for the Harbor Toxics TMDL WLAs. For DDTs and PCBs, there are no aquatic live criteria and WLAs have been established based on the Harbor Toxics TMDL, therefore the established effluent limitations are based on human

health criteria used for the Harbor Toxics TMDL WLAs. These limitations are expected to be protective of the beneficial uses.

5. WQBELs Based on Basin Plan Objectives

Clarify that if the discharge has RP for a Basin Plan objective, then a WQBEL is required in the permit. If the discharge does not have RP for a Basin Plan objective, then receiving water limits may be used in permit.

The Basin Plan Objectives applicable to the Discharger are identified in Table F-8. These objectives were evaluated with respect to effluent monitoring data and Facility operations.

Table F-8. Applicable Basin Plan Numeric Water Quality 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.
Ammonia	mg un-ionized NH_3/L	*For Waters where Salinity is equal to or greater than 10 parts per thousand (ppt) more than 95% of the time:* 4-day average = 0.035 un-ionized NH_3/L 1-hour average = 0.233 un-ionized NH_3/L
Bacteria	MPN/100ml	*Marine Waters Designated for Water Contact Recreation (REC-1)* **Geometric Mean Limitations:** 1. Total coliform density shall not exceed 1,000/100 ml. 2. Fecal coliform density shall not exceed 200/100 ml. 3. Enterococcus density shall not exceed 35/100 ml. **Single Sample Limitations:** 1. Total coliform density shall not exceed 10,000/100 ml. 2. Fecal coliform density shall not exceed 400/100 ml. 3. Enterococcus density shall not exceed 104/100 ml. 4. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal to total coliform exceeds 0.1.
Dissolved Oxygen	mg/L	For all waters, the mean annual dissolved oxygen concentration shall be greater than 7 mg/L, and no single determination shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations.
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.

b. Bacteria. The Basin Plan establishes water quality objectives for bacteria in receiving waters designated for water contact recreation (REC-1) that are applicable to the discharge from this Facility. As the discharge is to the Cerritos

Channel, the following water quality objectives for marine waters designated for water contact recreation apply:

i. *Geometric Mean Limits*

(a) *Total coliform density shall not exceed 1,000/100 ml.*

(b) *Fecal coliform density shall not exceed 200/100 ml.*

(c) *Enterococcus shall not exceed 35/100 ml.*

ii. *Single Sample Limits*

(a) *Total coliform density shall not exceed 10,000/100 ml.*

(b) Fecal coliform density shall not exceed 400/100 ml.

(c) *Enterococcus shall not exceed 104/100 ml.*

(d) *Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.*

This Order establishes the applicable Basin Plan water quality objectives for bacteria as effluent limitations.

c. Dissolved Oxygen. This Order applies the water quality objective for dissolved oxygen as a receiving water limitation.

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.

e. Temperature. The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. A white paper entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region* was developed by Regional Water Board staff, which evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. Based on the requirements of the Thermal Plan and the white paper, a maximum effluent temperature limitation of 86°F is included in the permit.

f. Ammonia. No effluent or receiving water data were available to evaluate the discharge with respect to ammonia concentrations in the receiving water. Since ammonia is a pollutant of concern, this Order includes more stringent receiving water monitoring requirements for ammonia to obtain the data needed for the development of ammonia effluent limits.

6. Whole Effluent Toxicity

Consistent with Basin Plan requirements, this Order carries over the acute monitoring requirements from the existing Order, and expresses the acute toxicity limitations as average monthly and maximum daily limitations. Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. 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.

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. This Order contains acute toxicity limitations and monitoring requirements in accordance with the Basin Plan, in which the acute toxicity objective for discharges dictates 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.

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. The chronic toxicity narrative effluent limitation and 1.0 monthly median limit of the effluent from the Facility were exceeded for in 2009, 2010, and 2011 with a highest chronic toxicity of 4 TUc on *Mytilus galloprovincialis* (bivalve) in December 2010. Regional Water Board staff determined that, pursuant to the SIP, reasonable potential exists for chronic toxicity. As such, the permit contains effluent limitations for chronic toxicity.

The toxicity numeric effluent limitations are based on:

a. 40 CFR part 122.44(d)(v) – limits on whole effluent toxicity are necessary when chemical-specific limits are not sufficient to attain and maintain applicable numeric or narrative water quality standards;

b. 40 CFR part 122.44(d)(vi)(A) – where a State has not developed a water quality criterion for a specific pollutant that is present in the effluent and has reasonable potential, the permitting authority can establish effluent limits using numeric water quality criterion;

c. Basin Plan objectives and implementation provisions for toxicity;

d. Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Programs Final May 31, 1996;

e. Whole Effluent Toxicity (WET) Control Policy July 1994; and,

f. Technical Support Document (several chapters and Appendix B).

Acute Toxicity Limitation:

The Dischargers may test for acute toxicity by using USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, October 2002 (EPA-821-R-02-012). Acute toxicity provisions in the accompanying Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate acute toxicity monitoring and take further actions to identify the source of toxicity and to reduce acute toxicity.

Chronic Toxicity Limitation and Requirements:

Chronic toxicity provisions in the accompanying Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate chronic toxicity monitoring and take further actions to identify the source of toxicity and to reduce chronic toxicity. The monthly median limit of 1.0 TU_c for chronic toxicity is based on *USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs* Final May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8). In cases where effluent receives no dilution or where mixing zones are not allowed, the 1.0 TU_c chronic criterion should be expressed as a monthly median. The "median" is defined as the middle value in a distribution, above which and below which lie an equal number of values. For example, if the results of the WET testing for a month were 1.5, 1.0, and 1.0 TU_c, the median would be 1.0 TU_c.

The *USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs* Final May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8) recommends two alternatives for setting up maximum daily limit: using 2.0 TUc as the maximum daily limit; or using a statistical approach outlined in the TSD to develop a maximum daily effluent limitation. In this permit, a maximum daily limitation is not prescribed. However, a limit for chronic toxicity of 1 TUc is prescribed.

7. Numeric criterion for TCDD equivalents:

The CTR establishes numeric water quality objectives for 2,3,7,8-tetrachloro-dibenzo-p-dioxin (2,3,7,8-TCDD) for the protection of human health for the consumption of aquatic organisms only, and the consumption of water and aquatic organisms, respectively. When the CTR was promulgated, USEPA stated its support of the regulation of other dioxin and dioxin-like compounds through the use of toxicity equivalencies (TEQs) in NPDES permits. For California waters, USEPA

stated specifically, *"if the discharge of dioxin or dioxin-like compounds has reasonable potential to cause or contribute to a violation of a narrative criterion, numeric water quality-based effluent limitations for dioxin or dioxin-like compounds should be included in NPDES permits and should be expressed using a TEQ scheme"* [65 Fed. Reg. 31682, 31695 (2000)]. This procedure, developed by the World Health Organization (WHO) in 1988, uses a set of toxicity equivalency factors (TEFs) to convert the concentration of any congener of dioxin or furan into an equivalent concentration of 2,3,7,8-TCDD. When the CTR was promulgated, USEPA also stated that the Agency would continue to assess the risks posed by dioxin to public health and the water quality criteria for dioxin that it had promulgated. To determine if the discharge of dioxin or dioxin-like compounds from the Facility has reasonable potential to cause or contribute to a violation of the Basin Plan's narrative water quality objective regarding bioaccumulation, Regional Water Board staff have therefore used TEFs to express the measured concentrations of 17 dioxin congeners in effluent and background samples as 2,3,7,8-TCDD. These "equivalent" concentrations are then compared to the numeric criterion, established by the CTR for 2,3,7,8-TCDD of 1.4×10^{-8} µg/L.

Dioxin-TEQ (TCDD-equivalent) values reflect the combined effect of numerous dioxin and furan compounds (congeners). The effluent limits implement the *Los Angeles Region (Region 4) Water Quality Control Plan's* (Basin Plan's) bioaccumulation objective:

> *"Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health."*

According to 40 CFR 122.44(d), where reasonable potential exists for a discharge to cause or contribute to violations of water quality objectives, WQBELs must be established. If the potentially violated objective is narrative, the narrative objective must be translated into an effluent limit. The dioxin-TEQ (TCDD-equivalent) effluent limitations in the permit are numeric translations of the Basin Plan narrative bioaccumulation objective.

The translations are based on relevant scientific information used to weight the congener concentrations with respect to their relative toxicities compared to the toxicity of a particular dioxin congener: 2,3,7,8-TCDD. The World Health Organization developed toxicity equivalency factors (TEFs) to convert congener concentrations into equivalent concentrations of 2,3,7,8-TCDD, which when added together are expressed as dioxin-TEQ (TCDD-equivalent). The SIP specifies that the WHOs 1998 TEFs are to be used to calculate dioxin-TEQs. To complete the translation of the Basin Plan's narrative bioaccumulation objective into a numeric effluent limit, dioxin-TEQ limits are derived from the CTR numeric water quality objective for 2,3,7,8-TCDD (numeric objectives do not exist for the other congeners), where the TEFs are as listed in Table F-10:

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

where:

C_x = concentration of dioxin or furan congener x

TEF_x = TEF for congener x

Table F-9. Toxicity Equivalency Factors

Dioxin or Furan Congener	Toxicity Equivalency Factor (TEF)
2,3,7,8-TCDD	1.0
1,2,3,7,8-PeCDD	1.0
1,2,3,4,7,8-HxCDD	0.1
1,2,3,6,7,8-HxCDD	0.1
1,2,3,7,8,9-HxCDD	0.1
1,2,3,4,6,7,8-HpCDD	0.01
OCDD	0.0001
2,3,7,8-TCDF	0.1
1,2,3,7,8-PeCDF	0.05
2,3,4,7,8-PeCDF	0.5
1,2,3,4,7,8-HxCDF	0.1
1,2,3,6,7,8-HxCDF	0.1
1,2,3,7,8,9-HxCDF	0.1
2,3,4,6,7,8-HxCDF	0.1
1,2,3,4,6,7,8-HpCDF	0.01
1,2,3,4,7,8,9-HpCDF	0.01

8. Final WQBELs

Based on the RPA, pollutants that demonstrate reasonable potential are arsenic, copper, lead, mercury, nickel, selenium, and zinc, while effluent monitoring data did not exhibit reasonable potential for cadmium. Approved Harbor Toxics TMDL WLAs for copper, lead, zinc, 4,4'-DDT, and Total PCBs are also available for the discharge. Therefore, effluent limitations for arsenic, copper, lead, mercury, nickel, selenium, zinc, 4,4'-DDT, and Total PCBs are included in this Order. Refer to Attachment J for a summary of the RPA and associated effluent limitation calculations, and Attachment K for a summary of calculation of effluent limitations based on the WLAs for copper, lead, zinc, 4,4'-DDT, and total PCBs in the Harbor Toxics TMDL.

This Order discontinues effluent limitations for MBAS and xylene because the MUN beneficial use designation of the local groundwater that supported the establishment of the MBAS and xylene WQBELs in the previous Orders was removed, as discussed in detail in the Fact Sheet section IV.D. that follows. No numeric CTR criteria exist for these pollutants; therefore reasonable potential to exceed water quality criteria has not been established.

Table F-10. Summary of Final WQBELs for Discharge Point No. 001

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	s.u.	--	--	6.5	8.5
Acute Toxicity	% Survival	[1]			
Temperature	°F	--	--	--	86
Bacteria	[4]				
Arsenic, Total Recoverable	µg/L	28	63	--	--
	lbs/day[2]	1.7	3.8	--	--
Copper, [3] Total Recoverable	µg/L	2.9	6.5	--	--
	lbs/day[2]	0.17	0.39	--	--
Lead, [3] Total Recoverable	µg/L	4.6	14	--	--
	lbs/day[2]	0.28	0.87	--	--
Mercury, Total Recoverable	µg/L	0.051	0.10	--	--
	lbs/day[2]	0.0031	0.0062	--	--
Nickel, Total Recoverable	µg/L	7.0	13	--	--
	lbs/day[2]	0.42	0.79	--	--
Selenium, [3] Total Recoverable	µg/L	45	130	--	--
	lbs/day[2]	2.7	7.9	--	--
Zinc, [3] Total Recoverable	µg/L	51	150	--	--
	lbs/day[2]	3.1	9.3	--	--
4,4'-DDT [3]	µg/L	0.00059	0.0012	--	--
	lbs/day[1]	0.000036	0.000072	--	--
Total PCBs [3]	µg/L	0.00017	0.00034	--	--
	lbs/day[1]	0.00001	0.00002	--	--

[1] The acute toxicity of the effluent shall be such that:

i. 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

ii. No single test shall produce less than 70% survival. Compliance with the toxicity objectives will be determined by the method described in section V of the MRP (Attachment E).

[2] Based on a maximum flow of 7.25 MGD and is calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

[3] The effluent limitations are based on the WLAs in the USEPA recently approved Harbor Toxics TMDL and calculated using the CTR/SIP procedures. The exception to anti-backsliding is appropriate due to recent information that was not available at the time of issuance of Order No. R4-2006-0086 and is consistent with Section 402(o)(2) of the CWA.

[4]Bacteria Effluent Limitations for Discharge Point No. 001

Parameters	Units	Receiving Water Limitations	
		Geometric Mean	Single Sample
Total Coliform	MPN/100 ml	1,000	10,000
Fecal Coliform	MPN/100 ml	200	400
Enterococcus	MPN/100 ml	35	104
If Fecal/Total Coliform > 0.1	MPN/100 ml	- - -	1,000

D. Final Effluent Limitations

Section 402(o) of the CWA and Section 122.44(l) require that effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders based on the submitted sampling data. Most effluent limitations are being carried over from the previous Order No. R4-2006-0086. Removal of these numeric limitations would constitute backsliding under CWA section 402(o).

This Order does not include effluent limitations for cadmium, as the effluent did not demonstrate reasonable potential to exceed the water quality criteria for the protection of aquatic life. This Order discontinues the effluent limitations for MBAS and xylene. Order No. R4-2006-0086 carried over effluent limitations for these parameters from the previous Order (No. 97-138). These limitations were based on MCLs, which are inappropriate for the beneficial uses of the Cerritos Channel, that do not include MUN.

This Order includes new effluent limitations for arsenic, nickel, and selenium based on the Reasonable Potential Analysis, and effluent limitations for copper, lead, zinc, 4,4'-DDT, and total PCBs based on the Harbor Toxics TMDL, as discussed in section IV.C.3 of this Fact Sheet. The newly calculated effluent limitations for arsenic (MDEL) and selenium are based on aquatic life criteria and are less stringent than the limitations in Order No. R4-2006-0086, which were based on MCLs. This Order includes AMELs for arsenic and nickel that are slightly less stringent than those in Order No. R4-2006-0086, due to more recent hardness and CV measurements used when calculating the effluent limitations. The less stringent limitations for MBAS, xylene, arsenic, nickel, and selenium are allowable under 40 CFR 122.44(l)(2)(i)(B)(1) as discussed further in Fact Sheet section IV.D.1.

1. Satisfaction of Anti-Backsliding Requirements

Effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of MBAS, xylene, arsenic, nickel, and selenium. As discussed below, this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

Order No. R4-2006-0086 carried over the maximum daily effluent limitation for selenium from the previous Order No. 97-138. Order No. 97-138 established the

selenium maximum daily effluent limitation based on "Gold Book[2]" criteria for the consumption of water and organisms, presumably, based on a MUN designation of the underlying groundwater. Similarly, the effluent limitations for MBAS, arsenic (MDEL), xylene, and 1,1-dichloroethane were based on MCLs. At the time of issuance of Order No. 97-138, the groundwater under the Cerritos Channel had a beneficial use designation of MUN. Resolution R4-1998-018, adopted on November 2, 1998 by the Regional Water Board, was approved by the State Water Board on February 18, 1999, and OAL on February 9, 2000 removed the MUN beneficial use designation. Therefore, the water quality criteria/objectives for MUN are not applicable to the current beneficial uses, and effluent limitations based on MCLs are no longer appropriate. This Order replaces the arsenic and selenium effluent limitations in Order No. R4-2006-0086 based on MCLs with the ones based on CTR criteria protective of saltwater aquatic life and human health for consumption of organism.

Monitoring data from November 9, 2009 (effective date of final effluent limitations) to December 7, 2012 indicate that effluent concentrations of MBAS and xylene were below the effluent limitations established in Order No. R4-2006-0086. The CTR does not include criteria for MBAS or xylene, thus no effluent limitations are calculated based on SIP procedures.

This Order includes new AMELs for arsenic and nickel that are calculated using recent hardness and CV values, according to SIP procedures. The resulting limitations are slightly less stringent than the limitations included in Order No. R4-2006-0086. The AMELs for arsenic, selenium, and nickel are based on recent information that was not available at the time of issuance of Order No. R4-2006-0086, and are allowable under Section 303(d)(4)(A) and 402(o)(2)(B)(i) of the CWA, and 40 CFR 122.44(l)(2)(i)(B)(1).

2. Satisfaction of Antidegradation Policy

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.

As discussed in the Fact Sheet section IV.D.1, effluent limitations for arsenic and selenium are less stringent than in the previous Order due to change in the CV of the data set. Effluent limitations for MBAS and xylene have not been retained since they were based on the municipal and domestic supply beneficial use which has been removed. These changes will not result in a reduced level of treatment. The

[2] USEPA. Quality Criteria for Water, 1986. EPA 440/5-86-001. Office of Water Regulations and Standards, Washington, D.C.

new effluent limitations for arsenic and selenium are protective of aquatic life and human health (consumption of organism only) beneficial uses within the Cerritos Channel. As such, the relaxed effluent limitations are not expected to result in a lowering of water quality.

The final limitations in this Order meet the requirements of the SIP because these limits hold the Discharger to performance levels that will not cause or contribute to water quality impairment. This Order does not result in an increase in permitted design flow. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The requirements protect existing beneficial uses as per 40 CFR Section 131.12. Therefore, the permitted discharge is consistent with the antidegradation provision of Section 131.12 and State Water Board Resolution No. 68-16.

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, oil and grease, TSS, MTBE, chlorinated phenols, settleable solids, sulfides, TPH, turbidity, and 1,1-dichloroethane 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. These limitations are not more stringent than required by the CWA.

This Order includes WQBELs for pH, temperature, acute toxicity, arsenic, copper, mercury, nickel, lead, selenium, zinc, 4,4'-DDT, total PCBs, and chronic toxicicy at Discharge Point No. 001. Water quality-based effluent limitations 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. The remaining water quality objectives and beneficial uses implemented by this Order (specifically bacteria and ammonia) were approved by USEPA on September 25, 2002 and May 19, 2005, respectively. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

Table F-11. Summary of Final Effluent Limitations for Discharge Point No. 001

Parameter	Units	Effluent Limitations				Performance Goals[7]	Basis[1]
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum		
Conventional Pollutants							
pH	s.u.	--	--	6.5	8.5	--	BP, E
Biochemical Oxygen Demand (5-day @ 20 deg. C) (BOD)	mg/L	20	30	--	--	--	BPJ, E
	lbs/day[2]	1,209.	1,814.	--	--	--	
Oil and Grease	mg/L	10	15	--	--	--	BPJ, E
	lbs/day[2]	605	907	--	--	--	
Total Suspended Solids (TSS)[6]	mg/L	50	75	--	--	--	BPJ, E
	lbs/day[2]	3,023.	4,535.	--	--	--	
Non-Conventional Pollutants							
Acute Toxicity	% Survival	[3]					BP, E
Methyl Tert-butyl Ether (MTBE)	ug/L	--	35				BPJ, E
	lbs/day[2]	--	2.1				
Phenols, Chlorinated	ug/L	--	1.0				BPJ, E
	lbs/day[2]	--	0.06				
Settleable Solids	ml/L	0.1	0.3	--	--	--	BPJ, E
Temperature	°F	--	--	--	86	--	BPJ, E
Total Petroleum Hydrocarbons (TPH)[4]	µg/L	--	100	--	--	--	BP, TP, WP, E
	lbs/day[2]	--	6.0	--	--	--	
Turbidity	NTU	50	75	--	--	--	BPJ, E
Bacteria	[10]						BP
Priority Pollutants							
Arsenic, Total Recoverable	µg/L	28	63	--	--	--	CTR, SIP
	lbs/day[2]	1.7	3.8	--	--	--	
Copper, Total Recoverable[5, 6]	µg/L	2.9	6.5	--	--	--	TMDL, SIP
	lbs/day[2]	0.17	0.39	--	--	--	
Lead, Total Recoverable[5, 6]	µg/L	4.6	14	--	--	--	TMDL, SIP
	lbs/day[2]	0.28	0.87	--	--	--	
Mercury, Total Recoverable	µg/L	0.051	0.10				CTR, SIP
	lbs/day[2]	0.0031	0.0062				
Nickel, Total Recoverable	µg/L	7.0	13	--	--	--	CTR, SIP[5]
	lbs/day[2]	0.42	0.79	--	--	--	
Selenium, Total Recoverable	µg/L	45	130				CTR, SIP[5]
	lbs/day[2]	2.7	7.9				
Zinc, Total Recoverable[5, 6]	µg/L	51	150	--	--	--	TMDL, SIP
	lbs/day[2]	3.1	9.3	--	--	--	
1,1-Dichloroethane	µg/L	--	5.0	--	--	--	BPJ
	lbs/day[2]	--	0.3	--	--	--	

Parameter	Units	Effluent Limitations				Performance Goals[7]	Basis[1]
		Average Monthly	Maximum Daily	Instantaneous			
				Minimum	Maximum		
4,4'-DDT[5, 6]	µg/L	0.00059	0.0012	--	--	--	TMDL, SIP
	lbs/day[2]	0.000036	0.000072	--	--	--	
Total PCBs[5, 6, 8]	µg/L	0.00017	0.00034	--	--	--	TMDL. SIP
	lbs/day[2]	0.00001	0.00002	--	--	--	
PAHs							
Benzo(a)pyrene[6]	µg/L	--	--	--	--	0.049[9]	CTR
Chrysene[6]	µg/L	--	--	--	--	0.049[9]	CTR

1 BP = Basin Plan; TP = Thermal Plan; E = Existing Order; BPJ = Best Professional Judgment; CTR = California Toxic Rule; SIP = State Implementation Policy, and WP = White Paper.

2 Based on a maximum flow of 7.25 MGD and is calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

3 The acute toxicity of the effluent shall be such that:

i. 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

ii. No single test shall produce less than 70% survival. Compliance with the toxicity objectives will be determined by the method described in section V of the MRP (Attachment E).

4 TPH equals the sum of TPH gasoline (C_4-C_{12}), TPH diesel (C_{13}-C_{22}), and TPH oil (C_{23+}).

5 The effluent limitations are based on the WLAs in the USEPA recently approved Harbor Toxics TMDL and calculated following the CTR/SIP procedures. The exception to anti-backsliding is appropriate due to recent information that was not available at the time of issuance of Order No. R4-2006-0086 and is consistent with Section 402(o)(2) of the CWA.

6 During each reporting period, if effluent monitoring results exceed both a TSS effluent limit and a CTR TMDL-based effluent limit or performance goal for copper, lead, zinc, 4,4-DDT, total PCBs, benzo(a)pyrene, or chrysene, then the Discharger has not demonstrated attainment with the interim sediment allocations stipulated by the Harbor Toxics TMDL, Resolution No. R11-008, page 11, Item 3, and implementation of the effluent sediment monitoring program is required for that priority pollutant. Sediment monitoring of the effluent shall begin during the first discharge event following the effluent exceedance. An effluent sediment monitoring result at or below the interim sediment allocation in Table 7, page 25 of this Order, demonstrates attainment with the interim sediment allocation and additional sediment monitoring of the effluent is not required. A sediment monitoring result that exceeds the interim sediment allocation requires additional sediment monitoring of the effluent during discharge but not more frequently than once per year until the three-year average concentration for sediment monitoring results is at or below the interim sediment allocation.

7 Performance goals are intended to ensure that effluent concentrations and mass discharges do not exceed levels currently achieved by the permitted facility. These performance goals are not considered as limitations or standards for the regulation of the facility. They act as triggers to determine when sediment monitoring is required for this category of pollutants.

8 Total PCBs (polychlorinated biphenyls) means the sum of chlorinated biphenyls whose analytical characteristics resembles those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

9 CTR human health criteria were not established for total PAHs. Therefore, the performance goals are based on the CTR human health criteria for the individual PAHs; benzo(a)pyrene and chrysene. The benzo(a)pyrene and chrysene were selected because the State's 2010 303(d) List classifies the Los Angeles/Long Beach Inner Harbor as impaired for these PAH compounds.

[10]Bacteria Effluent Limitations for Discharge Point No. 001

Parameters	Units	Receiving Water Limitations	
		Geometric Mean	Single Sample
Total Coliform	MPN/100 ml	1,000	10,000
Fecal Coliform	MPN/100 ml	200	400
Enterococcus	MPN/100 ml	35	104
If Fecal/Total Coliform > 0.1	MPN/100 ml	- - -	1,000

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)

E. Interim Effluent Limitations

Order R4-2006-0086 included interim effluent limits for arsenic, cadmium, copper, mercury, nickel, selenium, and zinc which were effective from December 9, 2006 to November 12, 2009. The Discharger was required to develop a plan to come into full compliance with the final effluent limits at the end of stipulated compliance period. Monitoring data collected from December 15, 2006 to December 31, 2012 indicate that exceedances of the copper and selenium discharge limitations have occurred numerous times.

The Discharger completed a number of studies since the effective date of Order R4-2006-0086. An Alternative Flow Diversion Analysis was completed in June 2008, which covers a hydraulic study to model the pump station drainage basin to predict the discharge volume for 20-, 50-, and 100-year storms, a feasibility study for connecting the discharge to Terminal Island Wastewater Reclamation Plant, and a study of water reuse for irrigation and dust control. The Discharger also completed a Metal Analysis project in December 2008, which indicated that there was no correlation between total metal concentration and total suspended solids. The study concluded that most metals detected in the effluent do not bind to the solids and are in dissolved form. A Metals Treatment Evaluation was completed in June 2009, in which three filtration systems and different in-line treatment media were evaluated; bench scale testing was conducted and the highest metal removal efficiency was obtained in bone char media. Pilot testing at the Facility with bone char was conducted from November 2009 through February 2010; inclusive results were obtained with inconsistent metal removal. The Discharger conducted a Metal Source Identification study which includes Stormdrain Line Sampling – before rain, Stormdrain Line Sampling – 10 days after rain, Storm Runoff Sampling,

Surface Water (Cerritos Channel) Sampling, Stormdrain Surface Sediment Sampling, and groundwater sampling from 14 locations along the storm drains, in the asphalt parking area, at Tidelands near the shore, and at the Pasha Terminal from January 2012 to July 2012. The Discharger is currently conducting additional research on possible tenant discharge(s), selenium speciation, historical land use, and other potential sources that may be identified, which are scheduled to be completed by March 2013. In order to control the multiple sources of copper and selenium, the Discharger has proposed to take the following meausres: Cleanout of stormdrain inlet and pump station basin, Implementation of BMPs for all 32 storm drains which include those located on Port of Long Beach property, Storm drains repairs to prevent leaks, and further research on the best available treatment and BMP technologies to reduce the copper and selenium in the effluent. On January 10, 2012, the Discharger requested the Regional Water Board to extend the time required for compliance of copper and selenium effluent limitations.

A reasonable potential analysis was completed utilizing the data collected from December 15, 2006 to December 31, 2012 and the discharge limitations for copper were derived from the copper WLAs in Harbor Toxics TMDL with calculation procedures from the SIP. The table below shows the newly calculated copper effluent limitations and those in Order R4-2006-0086. The average monthly effluent limitation becomes more stringent from 3.06 µg/L to 2.9 µg/L.

Parameter	Units	Effluent Limitations			
		R4-2006-0086		R4-2013-0108	
		AMEL	MDEL	AMEL	MDEL
Copper, Total Recoverable	µg/L	3.06	5.78	2.9	6.5
	lbs/day*	0.019	0.035	0.17	0.39

* The mass limitations in lbs/day were calculated using the concentration limits and the maximum flow rate of 0.725 MGD for the Order R4-2006-0086 and 7.25 MGD for the Order R4-2013-0108.

In Order R4-2006-0086, some of the discharge limits were based on the MUN beneficial use designation of the groundwater under the Cerritos Channel, which is the receiving water for the discharge from the New Dock Street Pump Station. The Regional Water Board removed the MUN beneficial use in accordance with Resolution R4-1998-018. Therefore, the limit for selenium based on MUN (MDEL = 10 µg/L) has not been included in Order R4-2013-0108.

Pursuant to the authority vested by USEPA Region IX in its November 8, 2012 decision, Interim Effluent Limitations for copper under a Compliance Schedule are established in the Order. The authority allows the Regional Water Board to set forth a compliance schedule in NPDES permits issued to existing dischargers for more stringent WQBELS based on WLAs in the Harbor Toxics TMDL. The compliance schedule for copper set forth in the Order is also in accordance with guidance regarding compliance schedule authorizing provisions and the requirements at 40 CFR 122.47. The Regional Water Board considers the compliance schedule necessary and appropriate for this

Discharger and it will result in compliance as soon as possible within the timeframe allowed by the compliance schedule authorizing provisions.

This Order includes limits for selenium based on CTR/SIP. The historical data indicates that selenium concentrations detected in the discharge will not be able to meet the applicable limits. Since the limit for selenium is not associated with Harbor Toxics TMDL but is associated with CTR, a Time Schedule Order (TSO) with interim AMEL for selenium is set forth with the Order.

According to the SIP procedures (Section 2.2.1., Interim Requirements under a Compliance Schedule), when compliance schedules are established in an Order, interim limitations must be included based on current treatment facility performance or existing permit limitations, whichever is more stringent to maintain existing water quality. The interim AMEL and MDEL were calculated based on the 95th and 99th percentiles, respectively, of the performance data collected from December 15, 2006 to December 31, 2012.

The interim effluent limitations for copper and selenium are shown in the following table. These interim limitations are in effect from the effective date of this Order until July 11, 2017, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

Table F-12. Summary of Interim Effluent Limitations for Discharge Point No. 001

Parameter	Units	Interim Effluent Limitations	
		Average Monthly	Maximum Daily
Copper, Total Recoverable [1]	µg/L	7.6	10
	lbs/day[2]	0.46	0.6
Selenium, Total Recoverable [3]	µg/L	116	130
	lbs/day[2]	7.0	7.9

[1] Included in this Order.

[2] The interim mass emissions rate is based on a maximum flow of 7.25 MGD and is calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) .= lbs/day

[3] Included in Time Schedule Order No. R4-2013-0109.

F. Land Discharge Specifications

Not Applicable

G. Reclamation Specifications

Not Applicable

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 (section 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 MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code Sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The MRP, Attachment E of this Order, establishes monitoring and reporting requirements to 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) and as required in the SIP.

To demonstrate compliance with established effluent limitations, the Order carries over the monitoring requirements from Order No. R4-2006-0086, with the exception of nickel. This Order also includes effluent monitoring for nickel at a frequency of once per month and monitoring requirements for bacteria and ammonia, as they are considered pollutants of concern in the discharge.

Order No. R4-2006-0086, required effluent monitoring at a frequency of once per quarter for the following organics: phenols (non-chlorinated), benzene, ethylbenzene, toluene, xylene, trichloroethylene, ethylene dibromide, carbon tetrachloride, tetrachloroethylene, 1,4-dichlorobenzene, 1,2-dichloroethane, 1,1-dichloroethylene, and vinyl chloride. Monitoring results for these parameters were all non-detect during the term of the Order; therefore, this Order reduces the monitoring frequency to twice per year for the limited pollutants.

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 all CTR priority pollutants and TCDD Equivalents, as listed in the MRP (Attachment E), in the effluent for the life of the permit. 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. This Order includes limitations for acute toxicity and therefore, monitoring requirements are included in the MRP to determine compliance with the effluent limitations established in Limitations and Discharge Requirements, Effluent Limitations, section IV.A.

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. Chronic toxicity monitoring results contained in SMRs from the term of Order No. R4-2006-0086 include chronic toxicity results as high as 4 TUc. This Order includes chronic toxicity monitoring requirements and an effluent limitation to further assess the impact of the discharge on the receiving water.

D. Receiving Water Monitoring

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 (renamed from R-001). Additionally, the Discharger must analyze pH of the upstream receiving water at the same time as the samples are collected for priority pollutants analysis. This Order discontinues monitoring for hardness at RSW-001, as saltwater criteria are independent of hardness.

This Order carries over the monitoring requirements for R-002, renamed RSW-002. In addition, to adjust the ammonia water quality objective, expressed as un-ionized ammonia, to total ammonia, this Order establishes receiving water monitoring for pH and temperature at RSW-002.

2. Groundwater

Not Applicable

E. Sediment Monitoring of the Effluent

The Harbor Toxics TMDL requires attainment with the TMDL's interim sediment allocations. This Order implements this requirement in a framework of effluent limits, effluent performance goals, sediment monitoring thresholds, and effluent monitoring requirements. Attainment with the interim sediment allocations shall be demonstrated, as specified in Footnote 4 to Table 6, page 16 of this Order. These requirements will ensure that discharges from the Facility do not contribute significantly to contaminant sediment concentrations in Cerritos Channel within the Los Angeles/Long Beach Inner Harbor.

This Order also requires the Discharger, at a minimum, once during the permit term to collect enough sediment during a discharge event to analyze for the targeted contaminants in sediment enumerated in the Harbor Toxics TMDL.

F. Other Monitoring Requirements

Storm water monitoring (section IX.A of the MRP) is required to assess the effectiveness of the SWPPP and BMPs and to characterize the impacts of the storm water discharge on receiving waters.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with Section 122.41, and additional conditions applicable to specified categories of permits in accordance with 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.

Section 122.41(a)(1) and (b) through (n) 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) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with Section 123.25, this Order omits federal conditions that address enforcement authority specified in 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 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

a. Initial Investigation Toxicity Reduction Evaluation Workplan. This provision is based on section 4 of the SIP, Toxicity Control Provisions.

3. Best Management Practices and Pollution Prevention

a. Storm Water Pollution Prevention Plan (SWPPP). Order R4-2006-0086 required the Discharger to develop and implement a SWPPP. This Order will require the Discharger to update and continue to implement a SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into the storm drain and/or the Cerritos Channel. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water. SWPPP requirements are included as Attachment G, based on 40 CFR Section 122.44(k).

b. Best Management Practices Plan (BMPP). This Order requires the Discharger to update and continue to implement the BMPP, consistent with Order No. R4-2006-0086. The BMPP may be included as a component of the SWPPP. The purpose of the BMPP is to establish site-specific procedures that ensure proper operation and maintenance of equipment, to ensure that unauthorized non-storm water discharges (i.e. spills) do not occur at the Facility.

4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of 40 CFR 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

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of WDRs that will serve as a NPDES permit for The Port of Los Angeles, New Dock Street Pump Station. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their 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 at http://www.waterboards.ca.gov/losangeles.

B. Written Comments

Interested persons were invited to submit written comments concerning the tentative amendment to the WDRs as provided through the notification process electronically at 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, written comments must be received at the Regional Water Board offices by 5:00 p.m. on December 23, 2016.

C. Public Hearing

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

Date:	**February 2, 2017**
Time:	**9 AM**
Location:	**Metropolitan Water Districts of Southern California** **700 North Alameda Street** **Los Angeles, California**

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is **http://www.waterboards.ca.gov/losangeles** where you can access the current agenda for changes in dates and locations.

D. Nature of Hearing

This will be a formal adjudicative hearing pursuant to section 648 et seq. of Title 23 of the California Code of Regulations. Chapter 5 of the California Administrative Procedure Act (commencing with Section 11500 of the Government Code) will not apply to this proceeding.

Ex Parte Communications Prohibited: As a quasi-adjudicative proceeding, no board member may discuss the subject of this hearing with any person, except during the public hearing itself. Any communications to the Regional Water Board must be directed to staff.

E. Parties to the Hearing

The following are the parties to this proceeding:

1. The applicant/permittee

Any other persons requesting party status must submit a written or electronic request to staff not later than 20 business days before the hearing. All parties will be notified if other persons are so designated.

F. Public Comments and Submittal of Evidence

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to the above address. To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments must be received no later than close of business on May 28, 2013. Comments or evidence received after that date will be submitted, ex agenda, to the Board for consideration, but only included in administrative record with express approval of the Chair during the hearing. Additionally, if the Board receives only supportive comments, the permit may be placed on the Board's consent calendar, and approved without an oral testimony.

G. Hearing Procedure

The meeting, in which the hearing will be a part of, will start at 9:00 a.m. Interested persons are invited to attend. Staff will present the matter under consideration, after which oral statements from parties or interested persons will be heard. For accuracy of the record, all important testimony should be in writing. The Board will include in the administrative record written transcriptions of oral testimony that is actually presented at the hearing. Oral testimony may be limited to 3 minutes maximum or less for each speaker, depending on the number of persons wishing to be heard. Parties or persons with similar concerns or opinions are encouraged to choose one representative to speak. At the conclusion of testimony, the Board will deliberate in open or close session, and render a decision.

Parties or persons with special procedural requests should contact staff. Any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of

the California Code of Regulations. Objections to any procedure to be used during this hearing must be submitted in writing not later than close of 15 business days prior to the date of the hearing. Procedural objections will not be entertained at the hearing.

H. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

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

For instructions on how to file a petition for review, see:

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

I. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative WDRs and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (213) 576 – 6600. The tentative WDRs and comments received are also available on the Regional Water Board's website at http://www.waterboards.ca.gov/losangeles.

J. Register of Interested Persons

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

K. Additional Information

Requests for additional information or questions regarding this order should be directed to **Thomas Siebels at (213) 576-6756.**

Attachment G – Storm Water Pollution Prevention Plan Requirements

I. Implementation Schedule

A storm water pollution prevention plan (SWPPP) shall be developed and submitted to the Regional Water Board within 90 days following the adoption of this Order. The SWPPP shall be implemented for each facility covered by this Permit within 10 days of approval from the Regional Water Board, or 90 days from the date of the submittal of the SWPPP to the Regional Water Board (whichever comes first).

II. Objectives

The SWPPP has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility; and (b) to identify and implement site- specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. BMPs may include a variety of pollution prevention measures or other low-cost and pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, over-head coverage.) To achieve these objectives, facility operators should consider the five phase process for SWPPP development and implementation as shown in Table A.

The SWPPP requirements are designed to be sufficiently flexible to meet the needs of various facilities. SWPPP requirements that are not applicable to a facility should not be included in the SWPPP.

A facility's SWPPP is a written document that shall contain a compliance activity schedule, a description of industrial activities and pollutant sources, descriptions of BMPs, drawings, maps, and relevant copies or references of parts of other plans. The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Water Board inspectors.

III. Planning and Organization

A. Pollution Prevention Team

The SWPPP shall identify a specific individual or individuals and their positions within the facility organization as members of a storm water pollution prevention team responsible for developing the SWPPP, assisting the facility manager in SWPPP implementation and revision, and conducting all monitoring program activities required in Attachment E of this Permit. The SWPPP shall clearly identify the Permit related responsibilities, duties, and activities of each team member. For small facilities, storm water pollution prevention teams may consist of one individual where appropriate.

B. Review Other Requirements and Existing Facility Plans

The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. Facility operators should review all local, State, and Federal requirements that impact, complement, or are consistent with the requirements of this permit. Facility operators should identify any existing facility plans that contain storm water pollutant control measures or relate to the requirements of this Permit. As examples, facility operators whose facilities are subject to Federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials. Similarly, facility operators whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

IV. Site Map

The SWPPP shall include a site map. The site map shall be provided on an 8-½ x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, facility operators may provide the required information on multiple site maps.

TABLE A
FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL STORM WATER POLLUTION PREVENTION PLANS

PLANNING AND ORGANIZATION
Form Pollution Prevention Team Review other plans

ASSESSMENT PHASE
Develop a site map Identify potential pollutant sources Inventory of materials and chemicals List significant spills and leaks Identify non-storm water discharges Assess pollutant risks

BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE
Non-structural BMPs Structural BMPs Select activity and site-specific BMPs

IMPLEMENTATION PHASE

Train employees
Implement BMPs
Conduct recordkeeping and reporting

EVALUATION / MONITORING

Conduct annual site evaluation
Review monitoring information
Evaluate BMPs
Review and revise SWPPP

The following information shall be included on the site map:

A. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, and ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.

B. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.

C. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.

D. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section A.6.a.iv. below have occurred.

E. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

V. List of Significant Materials

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

VI. Description of Potential Pollutant Sources

A. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section A.4.e above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:

1. **Industrial Processes.** Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

2. **Material Handling and Storage Areas.** Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

3. **Dust and Particulate Generating Activities.** Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.

4. **Significant Spills and Leaks.** Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges since April 17, 1994. Include toxic chemicals (listed in 40 CFR, Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (USEPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 Code of Federal Regulations [CFR], Parts 110, 117, and 302).

   The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken

to ensure spill or leaks do not reoccur. Such list shall be updated as appropriate during the term of this Permit.

5. **Non-Storm Water Discharges.** Facility operators shall investigate the facility to identify all non-storm water discharges and their sources. As part of this investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

   All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area.

   Non-storm water discharges that contain significant quantities of pollutants or that do not meet the conditions provided in Special Conditions D of the storm water general permit are prohibited by this Permit (Examples of prohibited non-storm water discharges are contact and non-contact cooling water, rinse water, wash water, etc.). Non-storm water discharges that meet the conditions provided in Special Condition D of the general storm water permit are authorized by this Permit. The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

6. **Soil Erosion.** Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.

B. The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. This information should be summarized similar to Table B. The last column of Table B, "Control Practices", should be completed in accordance with Section A.8. below.

VII. Assessment of Potential Pollutant Sources

A. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in A.6. above to determine:

1. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and

2. Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. Facility operators shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.

B. Facility operators shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be present in storm water discharges and authorized non-storm water discharges.

Facility operators are required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in section VIII below.

VIII. Storm Water Best Management Practices

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections A.6. and 7. above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

TABLE B

EXAMPLE
ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND CORRESPONDING BEST MANAGEMENT PRACTICES
SUMMARY

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Vehicle & Equipment Fueling	Fueling	Spills and leaks during delivery. Spills caused by topping off fuel tanks. Hosing or washing down fuel oil fuel area. Leaking storage tanks. Rainfall running off fuel oil and rainfall running onto and off fueling area.	Fuel oil	Use spill and overflow protection. Minimize run-on of storm water into the fueling area. Cover fueling area. Use dry cleanup methods rather than hosing down area. Implement proper spill prevention control program. Implement adequate preventative maintenance program to preventive tank and line leaks. Inspect fueling areas regularly to detect problems before they occur. Train employees on proper fueling, cleanup, and spill response techniques.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

Facility operators shall consider the following BMPs for implementation at the facility:

A. Non-Structural BMPs

Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. Facility operators should consider all possible non-structural BMPs options before considering additional structural BMPs (see Section A.8.b. below). Below is a list of non-structural BMPs that should be considered:

1. **Good Housekeeping.** Good housekeeping generally consists of practical procedures to maintain a clean and orderly facility.

2. **Preventive Maintenance.** Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.

3. **Spill Response.** This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.

4. **Material Handling and Storage.** This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.

5. **Employee Training.** This includes training of personnel who are responsible for (1) implementing activities identified in the SWPPP, (2) conducting inspections, sampling, and visual observations, and (3) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.

6. **Waste Handling/Recycling.** This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

7. **Recordkeeping and Internal Reporting.** This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.

8. **Erosion Control and Site Stabilization.** This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.

9. **Inspections.** This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPPs are made.

10. **Quality Assurance.** This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.

B. Structural BMPs.

Where non-structural BMPs as identified in Section A.8.a. above are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:

1. **Overhead Coverage.** This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.

2. **Retention Ponds.** This includes basins, ponds, surface impoundments, bermed areas, etc. that do not allow storm water to discharge from the facility.

3. **Control Devices.** This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.

4. **Secondary Containment Structures.** This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.

5. **Treatment.** This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc. that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

IX. Annual Comprehensive Site Compliance Evaluation

The facility operator shall conduct one comprehensive site compliance evaluation (evaluation) in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

A. A review of all visual observation records, inspection records, and sampling and analysis results.

B. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.

C. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.

D. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in Section A.10.e, for implementing SWPPP revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that the facility operator is in compliance with this Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this General Permit. The evaluation report shall be submitted as part of the 4th Quarter Self Monitoring Report, retained for at least five years, and signed and certified in accordance with Standard Provisions V.D.5 of Attachment D.

X. SWPPP General Requirements

A. The SWPPP shall be retained on site and made available upon request of a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.

B. The Regional Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this Section. As requested by the Regional Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.

C. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.

D. The SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a facility operator determines that the SWPPP is in violation of any requirement(s) of this Permit.

E. When any part of the SWPPP is infeasible to implement due to proposed significant structural changes, the facility operator shall submit a report to the Regional Water Board prior to the applicable deadline that (i) describes the portion of the SWPPP that is infeasible to implement by the deadline, (ii) provides justification for a time extension, (iii) provides a schedule for completing and implementing that portion of the SWPPP, and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or

modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.

F. The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

Attachment H – 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.

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		

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.

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

Table 2d – PESTICIDES – PCBs*	GC
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

Attachment I – List of Priority Pollutants

CTR Number	Parameter	CAS Number	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]
11	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	117028	[1]
18	Acrylonitrile	117131	[1]
19	Benzene	71432	[1]
20	Bromoform	75252	[1]
21	Carbon Tetrachloride	56235	[1]
22	Chlorobenzene	118907	[1]
23	Chlorodibromomethane	124481	[1]
24	Chloroethane	75003	[1]
25	2-Chloroethylvinyl Ether	111758	[1]
26	Chloroform	67663	[1]
27	Dichlorobromomethane	75274	[1]
28	1,1-Dichloroethane	75343	[1]
29	1,2-Dichloroethane	117062	[1]
30	1,1-Dichloroethylene	75354	[1]
31	1,2-Dichloropropane	78875	[1]
32	1,3-Dichloropropylene	542756	[1]
33	Ethylbenzene	110414	[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	118883	[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]
44	Vinyl Chloride	75014	[1]

CTR Number	Parameter	CAS Number	Analytical Methods
45	2-Chlorophenol	95578	[1]
46	2,4-Dichlorophenol	120832	[1]
47	2,4-Dimethylphenol	115679	[1]
48	2-Methyl-4,6-Dinitrophenol	534521	[1]
49	2,4-Dinitrophenol	51285	[1]
50	2-Nitrophenol	88755	[1]
51	4-Nitrophenol	110027	[1]
52	3-Methyl-4-Chlorophenol	59507	[1]
53	Pentachlorophenol	87865	[1]
54	Phenol	118952	[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	118601	[1]
68	Bis(2-Ethylhexyl)Phthalate	117817	[1]
69	4-Bromophenyl Phenyl Ether	111553	[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	116467	[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]
92	Indeno(1,2,3-cd)Pyrene	193395	[1]
93	Isophorone	78591	[1]

CTR Number	Parameter	CAS Number	Analytical Methods
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]
110	Pyrene	129000	[1]
111	1,2,4-Trichlorobenzene	120821	[1]
112	Aldrin	309002	[1]
113	alpha-BHC	319846	[1]
114	beta-BHC	319857	[1]
115	gamma-BHC	58899	[1]
116	delta-BHC	319868	[1]
117	Chlordane	57749	[1]
118	4,4'-DDT	50293	[1]
119	4,4'-DDE	72559	[1]
111	4,4'-DDD	72548	[1]
111	Dieldrin	60571	[1]
112	alpha-Endosulfan	959988	[1]
113	beta-Endosulfan	33213659	[1]
114	Endosulfan Sulfate	1131178	[1]
115	Endrin	72208	[1]
116	Endrin Aldehyde	7421934	[1]
117	Heptachlor	76448	[1]
118	Heptachlor Epoxide	1124573	[1]
119	PCB-1116	12674112	[1]
120	PCB-1221	11114282	[1]
121	PCB-1232	11141165	[1]
122	PCB-1242	53469219	[1]
123	PCB-1248	12672296	[1]
124	PCB-1254	11197691	[1]
125	PCB-1260	11196825	[1]
126	Toxaphene	8001352	[1]

[1] Pollutants shall be analyzed using the methods described in 40 CFR Part 136

Attachment J – RPA Analysis for CTR Constituent

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)						Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?
					Freshwater		Saltwater		Human Health for consumption of:						
					C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only					
1	Antimony	ug/L		0.5						4300.00	4300.00	No	No	Y	N
2	Arsenic	ug/L	0.767	32			69.00	36.00			36.00	No	No	Y	N
3	Beryllium	ug/L		No Criteria						Narrative	No Criteria	No Criteria	No Criteria	Y	Y
4	Cadmium	ug/L		0.94			42.25	9.36		Narrative	9.36	No	No	Y	Y
5a	Chromium (III)			No Criteria						Narrative	No Criteria	No Criteria	No Criteria	Y	N
5b	Chromium (VI)	ug/L		0.2			1107.75	50.35		Narrative	50.35	No	No	Y	Y
6	Copper	ug/L	0.773	20			5.78	3.73			3.73	Yes	Yes	Y	N
7	Lead	ug/L	2.272	22			220.82	8.52		Narrative	8.52	Yes	Yes	Y	N
8	Mercury	ug/L	0.6	0.075			Reserved	Reserved		0.051	0.051	Yes	Yes	Y	Y
9	Nickel	ug/L	0.517	9.2			74.75	8.28		4600.00	8.28	Yes	Yes	Y	N
10	Selenium	ug/L	1.494	120			290.58	71.14		Narrative	71.14	Yes	Yes	Y	N
11	Silver	ug/L		1.2			2.24				2.24	No	No	Y	N
12	Thallium	ug/L		1.7						6.30	6.30	No	No	Y	Y
13	Zinc	ug/L	1.773	240			95.14	85.62			85.62	Yes	Yes	Y	N
14	Cyanide	ug/L					1.00	1.00		220000	1.00			Y	Y
15	Asbestos	Fibers/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
16	2,3,7,8 TCDD	ug/L								0.000000014	0.000000014			Y	Y
	TCDD Equivalents	ug/L	0							0.000000014	0.000000014			N	
17	Acrolein	ug/L		5						780	780	No	No	Y	Y
18	Acrylonitrile	ug/L								0.66	0.660			Y	Y
19	Benzene	ug/L		2						71	71.0	No	No	Y	Y
20	Bromoform	ug/L		2						360	360.0	No	No	Y	Y
21	Carbon Tetrachloride	ug/L		2						4.4	4.40	No	No	Y	Y
22	Chlorobenzene	ug/L		2						21000	21000	No	No	Y	Y
23	Chlorodibromomethane	ug/L		2						34	34.00	No	No	Y	Y
24	Chloroethane	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
25	2-Chloroethylvinyl ether	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
26	Chloroform	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
27	Dichlorobromomethane	ug/L		1						46	46.00	No	No	Y	Y
28	1,1-Dichloroethane	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
29	1,2-Dichloroethane	ug/L		2						99	99.00	No	No	Y	Y
30	1,1-Dichloroethylene	ug/L		2						3.2	3.200	No	No	Y	Y
31	1,2-Dichloropropane	ug/L		1						39	39.00	No	No	Y	Y
32	1,3-Dichloropropylene	ug/L		2						1700	1700	No	No	Y	Y
33	Ethylbenzene	ug/L		2						29000	29000	No	No	Y	Y
34	Methyl Bromide	ug/L		0.69						4000	4000	No	No	Y	Y
35	Methyl Chloride	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
36	Methylene Chloride	ug/L		0.5						1600	1600.0	No	No	Y	Y
37	1,1,2,2-Tetrachloroethane	ug/L		1						11	11.00	No	No	Y	Y
38	Tetrachloroethylene	ug/L		2						8.85	8.9	No	No	Y	Y
39	Toluene	ug/L		2						200000	200000	No	No	Y	Y
40	1,2-Trans-Dichloroethylene	ug/L		1						140000	140000	No	No	Y	Y
41	1,1,1-Trichloroethane	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
42	1,1,2-Trichloroethane	ug/L		2						42	42.0	No	No	Y	Y
43	Trichloroethylene	ug/L		2						81	81.0	No	No	Y	Y
44	Vinyl Chloride	ug/L		2						525	525	No	No	Y	Y
45	2-Chlorophenol	ug/L		5						400	400	No	No	Y	Y
46	2,4-Dichlorophenol	ug/L		5						790	790	No	No	Y	Y
47	2,4-Dimethylphenol	ug/L		2						2300	2300	No	No	Y	Y
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L		5						765	765.0	No	No	Y	Y
49	2,4-Dinitrophenol	ug/L		5						14000	14000	No	No	Y	Y

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)									
					Freshwater		Saltwater		Human Health for consumption of:					
					C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?
50	2-Nitrophenol	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
51	4-Nitrophenol	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
53	Pentachlorophenol	ug/L		5			13.00	7.90		8.2	7.90	No	No	Y	Y
54	Phenol	ug/L		1						4600000	4600000	No	No	Y	Y
55	2,4,6-Trichlorophenol	ug/L								6.5	6.5			Y	Y
56	Acenaphthene	ug/L		1						2700	2700	No	No	Y	Y
57	Acenaphthylene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
58	Anthracene	ug/L		10						110000	110000	No	No	Y	Y
59	Benzidine	ug/L								0.00054	0.00054			Y	Y
60	Benzo(a)Anthracene	ug/L								0.049	0.0490			Y	Y
61	Benzo(a)Pyrene	ug/L								0.049	0.0490			Y	Y
62	Benzo(b)Fluoranthene	ug/L								0.049	0.0490			Y	Y
63	Benzo(ghi)Perylene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
64	Benzo(k)Fluoranthene	ug/L								0.049	0.0490			Y	Y
65	Bis(2-Chloroethoxy)Methane	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
66	Bis(2-Chloroethyl)Ether	ug/L		1						1.4	1.400	No	No	Y	Y
67	Bis(2-Chloroisopropyl)Ether	ug/L		5						170000	170000	No	No	Y	Y
68	Bis(2-Ethylhexyl)Phthalate	ug/L		5						5.9	5.9	No	No	Y	Y
69	4-Bromophenyl Phenyl Ethe	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
70	Butylbenzyl Phthalate	ug/L		10						5200	5200	No	No	Y	Y
71	2-Chloronaphthalene	ug/L		10						4300	4300	No	No	Y	Y
72	4-Chlorophenyl Phenyl Ethe	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
73	Chrysene	ug/L								0.049	0.0490			Y	Y
74	Dibenzo(a,h)Anthracene	ug/L								0.049	0.0490			Y	Y
75	1,2-Dichlorobenzene	ug/L		2						17000	17000	No	No	Y	Y
76	1,3-Dichlorobenzene	ug/L		1						2600	2600	No	No	Y	Y
77	1,4-Dichlorobenzene	ug/L		1						2600	2600	No	No	Y	Y
78	3,3 Dichlorobenzidine	ug/L								0.077	0.08			Y	Y
79	Diethyl Phthalate	ug/L		2						120000	120000	No	No	Y	Y
80	Dimethyl Phthalate	ug/L		2						2900000	2900000	No	No	Y	Y
81	Di-n-Butyl Phthalate	ug/L		10						12000	12000	No	No	Y	Y
82	2,4-Dinitrotoluene	ug/L		5						9.10	9.10	No	No	Y	Y
83	2,6-Dinitrotoluene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
84	Di-n-Octyl Phthalate	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
85	1,2-Diphenylhydrazine	ug/L								0.54	0.540			N	
86	Fluoranthene	ug/L		1						370	370	No	No	Y	Y
87	Fluorene	ug/L		10						14000	14000	No	No	Y	Y
88	Hexachlorobenzene	ug/L								0.00077	0.00077			Y	Y
89	Hexachlorobutadiene	ug/L		1						50	50.00	No	No	Y	Y
90	Hexachlorocyclopentadiene	ug/L		5						17000	17000	No	No	Y	Y
91	Hexachloroethane	ug/L		1						8.9	8.9	No	No	Y	Y
92	Indeno(1,2,3-cd)Pyrene	ug/L								0.049	0.0490			Y	Y
93	Isophorone	ug/L		1						600	600.0	No	No	Y	Y
94	Naphthalene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
95	Nitrobenzene	ug/L		1						1900	1900	No	No	Y	Y
96	N-Nitrosodimethylamine	ug/L		5						8.10	8.10000	No	No	Y	Y
97	N-Nitrosodi-n-Propylamine	ug/L								1.40	1.400			Y	Y
98	N-Nitrosodiphenylamine	ug/L		1						16	16.0	No	No	Y	Y
99	Phenanthrene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
100	Pyrene	ug/L		10						11000	11000	No	No	Y	Y

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)										
					Freshwater		Saltwater		Human Health for consumption of:						
					C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?
101	1,2,4-Trichlorobenzene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
102	Aldrin	ug/L					1.30			0.00014	0.00014			Y	Y
103	alpha-BHC	ug/L		0.01						0.013	0.0130	No	No	Y	Y
104	beta-BHC	ug/L		0.005						0.046	0.046	No	No	Y	Y
105	gamma-BHC	ug/L		0.02			0.16			0.063	0.063	No	No	Y	Y
106	delta-BHC	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Y	Y
107	Chlordane	ug/L					0.09	0.004		0.00059	0.00059			Y	Y
108	4,4'-DDT	ug/L	Enter Y				0.13	0.001		0.00059	0.00059			Y	Y
109	4,4'-DDE (linked to DDT)	ug/L								0.00059	0.00059			Y	Y
110	4,4'-DDD	ug/L								0.00084	0.00084			Y	Y
111	Dieldrin	ug/L					0.71	0.0019		0.00014	0.00014			Y	Y
112	alpha-Endosulfan	ug/L					0.034	0.0087		240	0.0087			Y	Y
113	beta-Endolsulfan	ug/L					0.034	0.0087		240	0.0087			Y	Y
114	Endosulfan Sulfate	ug/L		0.05						240	240	No	No	Y	Y
115	Endrin	ug/L					0.037	0.0023		0.81	0.0023			Y	Y
116	Endrin Aldehyde	ug/L		0.01						0.81	0.81	No	No	Y	Y
117	Heptachlor	ug/L					0.053	0.0036		0.00021	0.00021			Y	Y
118	Heptachlor Epoxide	ug/L					0.053	0.0036		0.00011	0.00011			Y	Y
119-125	**PCBs sum (2)**	ug/L	Enter Y	0				0.03		0.00017	0.00017	No	No	Y	Y
126	Toxaphene	ug/L					0.21	0.0002		0.00075	0.0002			Y	Y

Notes:
Ud = Undetermined due to lack of data
Uc = Undetermined due to lack of CTR Water Quality Criteria
C = Water Quality Criteria
B = Background receiving water data

CTR#	Parameters	REASONABLE POTENTIAL ANALYSIS (RPA)							HUMAN HEALTH CALCULATIONS		
									Organisms only		
		If all data points ND Enter the min detection limit (MDL) (ug/L)	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?	Reason	AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh
1	Antimony		1.2		B<=C, Step 7		No	MEC<C & B<=C			
2	Arsenic		51		Limit required, B>C & pollutant		Yes	B>C & pollutant detected in ef		2.25	
3	Beryllium	0.5		N	No Criteria	No Criteria	Uc	No Criteria			
4	Cadmium	0.5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
5a	Chromium (III)		0.37		No Criteria	No Criteria	Uc	No Criteria			
5b	Chromium (VI)	0.3		N	No detected value of B, Step 7		No	MEC<C & B is ND			
6	Copper		15		Limit required, B>C & pollutant		Yes	MEC>=C		2.26	
7	Lead		0.62		B<=C, Step 7		Yes	MEC>=C		3.14	
8	Mercury	0.05		N	No detected value of B, Step 7		Yes	MEC>=C	0.051	2.01	0.102
9	Nickel		12		Limit required, B>C & pollutant		Yes	MEC>=C	4600	1.87	8617
10	Selenium		220		Limit required, B>C & pollutant		Yes	MEC>=C		2.88	
11	Silver		0.49		B<=C, Step 7		No	MEC<C & B<=C			
12	Thallium	1		N	No detected value of B, Step 7		No	MEC<C & B is ND			
13	Zinc		20		B<=C, Step 7		Yes	MEC>=C		3.00	
14	Cyanide	5		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
15	Asbestos	0.2		N	No Criteria	No Criteria	Uc	No Criteria			
16	2,3,7,8 TCDD	0.000005		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
	TCDD Equivalents				No detected value of B, Step 7		Ud	No effluent data & no B			
17	Acrolein	8.7		N	No detected value of B, Step 7		No	MEC<C & B is ND			
18	Acrylonitrile	2.1		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
19	Benzene	0.29		N	No detected value of B, Step 7		No	MEC<C & B is ND			
20	Bromoform	0.87		N	No detected value of B, Step 7		No	MEC<C & B is ND			
21	Carbon Tetrachloride	0.4		N	No detected value of B, Step 7		No	MEC<C & B is ND			
22	Chlorobenzene	0.19		N	No detected value of B, Step 7		No	MEC<C & B is ND			
23	Chlorodibromomethane	2		N	No detected value of B, Step 7		No	MEC<C & B is ND			
24	Chloroethane	0.46		N	No Criteria	No Criteria	Uc	No Criteria			
25	2-Chloroethylvinyl ether	0.51		N	No Criteria	No Criteria	Uc	No Criteria			
26	Chloroform				No Criteria	No Criteria	Uc	No Criteria			
27	Dichlorobromomethane	0.33		N	No detected value of B, Step 7		No	MEC<C & B is ND			
28	1,1-Dichloroethane	0.5		N	No Criteria	No Criteria	Uc	No Criteria			
29	1,2-Dichloroethane	0.5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
30	1,1-Dichloroethylene	2		N	No detected value of B, Step 7		No	MEC<C & B is ND			
31	1,2-Dichloropropane	0.4		N	No detected value of B, Step 7		No	MEC<C & B is ND			
32	1,3-Dichloropropylene	2		N	No detected value of B, Step 7		No	MEC<C & B is ND			
33	Ethylbenzene	0.19		N	No detected value of B, Step 7		No	MEC<C & B is ND			
34	Methyl Bromide	2		N	No detected value of B, Step 7		No	MEC<C & B is ND			
35	Methyl Chloride	0.5		N	No Criteria	No Criteria	Uc	No Criteria			
36	Methylene Chloride	0.5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
37	1,1,2,2-Tetrachloroethane	0.19		N	No detected value of B, Step 7		No	MEC<C & B is ND			
38	Tetrachloroethylene	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND			
39	Toluene	0.35		N	No detected value of B, Step 7		No	MEC<C & B is ND			
40	1,2-Trans-Dichloroethylene	0.6		N	No detected value of B, Step 7		No	MEC<C & B is ND			
41	1,1,1-Trichloroethane	0.46		N	No Criteria	No Criteria	Uc	No Criteria			
42	1,1,2-Trichloroethane	0.42		N	No detected value of B, Step 7		No	MEC<C & B is ND			
43	Trichloroethylene	0.48		N	No detected value of B, Step 7		No	MEC<C & B is ND			
44	Vinyl Chloride	0.35		N	No detected value of B, Step 7		No	MEC<C & B is ND			
45	2-Chlorophenol	0.5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
46	2,4-Dichlorophenol	0.53		N	No detected value of B, Step 7		No	MEC<C & B is ND			
47	2,4-Dimethylphenol	1.3		N	No detected value of B, Step 7		No	MEC<C & B is ND			
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
49	2,4-Dinitrophenol	1.3		N	No detected value of B, Step 7		No	MEC<C & B is ND			

CTR#	Parameters	REASONABLE POTENTIAL ANALYSIS (RPA)							HUMAN HEALTH CALCULATIONS		
									Organisms only		
		If all data points ND Enter the min detection limit (MDL) (ug/L)	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?	Reason	AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh
50	2-Nitrophenol	0.59		N	No Criteria	No Criteria	Uc	No Criteria			
51	4-Nitrophenol	0.43		N	No Criteria	No Criteria	Uc	No Criteria			
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	1		N	No Criteria	No Criteria	Uc	No Criteria			
53	Pentachlorophenol	0.37		N	No detected value of B, Step 7		No	MEC<C & B is ND			
54	Phenol	0.58		N	No detected value of B, Step 7		No	MEC<C & B is ND			
55	2,4,6-Trichlorophenol	0.61		N	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
56	Acenaphthene	0.7		N	No detected value of B, Step 7		No	MEC<C & B is ND			
57	Acenaphthylene	0.72		N	No Criteria	No Criteria	Uc	No Criteria			
58	Anthracene	0.75		N	No detected value of B, Step 7		No	MEC<C & B is ND			
59	Benzidine	0.31		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
60	Benzo(a)Anthracene	0.56		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
61	Benzo(a)Pyrene	0.44		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
62	Benzo(b)Fluoranthene	0.62		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
63	Benzo(ghi)Perylene	0.36		N	No Criteria	No Criteria	Uc	No Criteria			
64	Benzo(k)Fluoranthene	0.85		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
65	Bis(2-Chloroethoxy)Methane	0.58		N	No Criteria	No Criteria	Uc	No Criteria			
66	Bis(2-Chloroethyl)Ether	0.51		N	No detected value of B, Step 7		No	MEC<C & B is ND			
67	Bis(2-Chloroisopropyl)Ether	0.76		N	No detected value of B, Step 7		No	MEC<C & B is ND			
68	Bis(2-Ethylhexyl)Phthalate	0.51		N	No detected value of B, Step 7		No	MEC<C & B is ND			
69	4-Bromophenyl Phenyl Ethe	0.61		N	No Criteria	No Criteria	Uc	No Criteria			
70	Butylbenzyl Phthalate	0.52		N	No detected value of B, Step 7		No	MEC<C & B is ND			
71	2-Chloronaphthalene	0.65		N	No detected value of B, Step 7		No	MEC<C & B is ND			
72	4-Chlorophenyl Phenyl Ethe	0.61		N	No Criteria	No Criteria	Uc	No Criteria			
73	Chrysene	0.64		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
74	Dibenzo(a,h)Anthracene	0.41		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
75	1,2-Dichlorobenzene	0.56		N	No detected value of B, Step 7		No	MEC<C & B is ND			
76	1,3-Dichlorobenzene	0.58		N	No detected value of B, Step 7		No	MEC<C & B is ND			
77	1,4-Dichlorobenzene	0.57		N	No detected value of B, Step 7		No	MEC<C & B is ND			
78	3,3 Dichlorobenzidine	4		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
79	Diethyl Phthalate	5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
80	Dimethyl Phthalate	5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
81	Di-n-Butyl Phthalate	5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
82	2,4-Dinitrotoluene	5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
83	2,6-Dinitrotoluene	5		N	No Criteria	No Criteria	Uc	No Criteria			
84	Di-n-Octyl Phthalate	5		N	No Criteria	No Criteria	Uc	No Criteria			
85	1,2-Diphenylhydrazine				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No			
86	Fluoranthene	5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
87	Fluorene	5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
88	Hexachlorobenzene	5		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
89	Hexachlorobutadiene	5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
90	Hexachlorocyclopentadiene	15		N	No detected value of B, Step 7		No	MEC<C & B is ND			
91	Hexachloroethane	5		N	No detected value of B, Step 7		No	MEC<C & B is ND			
92	Indeno(1,2,3-cd)Pyrene	5		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
93	Isophorone	0.62		N	No detected value of B, Step 7		No	MEC<C & B is ND			
94	Naphthalene	0.72		N	No Criteria	No Criteria	Uc	No Criteria			
95	Nitrobenzene	25		N	No detected value of B, Step 7		No	MEC<C & B is ND			
96	N-Nitrosodimethylamine	0.55		N	No detected value of B, Step 7		No	MEC<C & B is ND			
97	N-Nitrosodi-n-Propylamine	0.65		N	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
98	N-Nitrosodiphenylamine	0.68		N	No detected value of B, Step 7		No	MEC<C & B is ND			
99	Phenanthrene	0.75		N	No Criteria	No Criteria	Uc	No Criteria			
100	Pyrene	0.68		N	No detected value of B, Step 7		No	MEC<C & B is ND			

CTR#	Parameters	REASONABLE POTENTIAL ANALYSIS (RPA)							HUMAN HEALTH CALCULATIONS		
									Organisms only		
		If all data points ND Enter the min detection limit (MDL) (ug/L)	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?	Reason	AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh
101	1,2,4-Trichlorobenzene	0.65		N	No Criteria	No Criteria	Uc	No Criteria			
102	Aldrin				No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
103	alpha-BHC				No detected value of B, Step 7		No	MEC<C & B is ND			
104	beta-BHC	0.008		N	No detected value of B, Step 7		No	MEC<C & B is ND			
105	gamma-BHC	0.02		N	No detected value of B, Step 7		No	MEC<C & B is ND			
106	delta-BHC	0.018		N	No Criteria	No Criteria	Uc	No Criteria			
107	Chlordane	0.085		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
108	4,4'-DDT	0.015		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and	criteria reqd?'		
109	4,4'-DDE (linked to DDT)	0.012		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
110	4,4'-DDD	0.012		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
111	Dieldrin	0.012		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
112	alpha-Endosulfan	0.005		N	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
113	beta-Endolsulfan	0.011		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
114	Endosulfan Sulfate	0.008		N	No detected value of B, Step 7		No	MEC<C & B is ND			
115	Endrin	0.012		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
116	Endrin Aldehyde	0.005		N	No detected value of B, Step 7		No	MEC<C & B is ND			
117	Heptachlor	0.007		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
118	Heptachlor Epoxide	0.023		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			
119-125	**PCBs sum (2)**	0.21		Y	No detected value of B, Step 7		No	MEC<C & B is ND	H criteria reqd?'		
126	Toxaphene	0.13		Y	No detected value of B, Step 7		No	UD; effluent ND, MDL>C, and			

Notes:
Ud = Undetermined due to lack of da
Uc = Undetermined due to lack of C
C = Water Quality Criteria
B = Background receiving water data

CTR#	Parameters	AQUATIC LIFE CALCULATIONS									LIMITS		Recommendation	Comment
		Saltwater / Freshwater / Basin Plan												
		ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life	Lowest AMEL	Lowest MDEL		
1	Antimony												No Limit	
2	Arsenic	0.26	17.88	0.45	16.30	16.30	1.72	27.98	3.86	62.87685	28	63		
3	Beryllium												No Limit	
4	Cadmium												No Limit	
5a	Chromium (III)												No Limit	
5b	Chromium (VI)												No Limit	
6	Copper	0.26	1.49	0.45	1.68	1.49	1.72	2.56	3.89	5.783133	2.6	5.8		
7	Lead	0.11	23.81	0.18	1.55	1.55	2.95	4.58	9.28	14.38746	4.6	14		
8	Mercury						1.55		3.11		0.051	0.10		
9	Nickel	0.36	27.12	0.57	4.73	4.73	1.47	6.97	2.76	13.04769	7.0	13		
10	Selenium	0.14	42.06	0.27	18.87	18.87	2.40	45.20	6.91	130.3537	45	130		
11	Silver												No Limit	
12	Thallium												No Limit	
13	Zinc	0.13	12.09	0.23	19.46	12.09	2.62	31.68	7.87	95.13742	32	95		
14	Cyanide												No Limit	
15	Asbestos												No Limit	
16	2,3,7,8 TCDD												No Limit	
	TCDD Equivalents												No Limit	
17	Acrolein												No Limit	
18	Acrylonitrile												No Limit	
19	Benzene												No Limit	
20	Bromoform												No Limit	
21	Carbon Tetrachloride												No Limit	
22	Chlorobenzene												No Limit	
23	Chlorodibromomethane												No Limit	
24	Chloroethane												No Limit	
25	2-Chloroethylvinyl ether												No Limit	
26	Chloroform												No Limit	
27	Dichlorobromomethane												No Limit	
28	1,1-Dichloroethane												No Limit	
29	1,2-Dichloroethane												No Limit	
30	1,1-Dichloroethylene												No Limit	
31	1,2-Dichloropropane												No Limit	
32	1,3-Dichloropropylene												No Limit	
33	Ethylbenzene												No Limit	
34	Methyl Bromide												No Limit	
35	Methyl Chloride												No Limit	
36	Methylene Chloride												No Limit	
37	1,1,2,2-Tetrachloroethane												No Limit	
38	Tetrachloroethylene												No Limit	
39	Toluene												No Limit	
40	1,2-Trans-Dichloroethylene												No Limit	
41	1,1,1-Trichloroethane												No Limit	
42	1,1,2-Trichloroethane												No Limit	
43	Trichloroethylene												No Limit	
44	Vinyl Chloride												No Limit	
45	2-Chlorophenol												No Limit	
46	2,4-Dichlorophenol												No Limit	
47	2,4-Dimethylphenol												No Limit	
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)												No Limit	
49	2,4-Dinitrophenol												No Limit	

CTR#	Parameters	AQUATIC LIFE CALCULATIONS									LIMITS		Recommendation	Comment
		Saltwater / Freshwater / Basin Plan												
		ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life	Lowest AMEL	Lowest MDEL		
50	2-Nitrophenol												No Limit	
51	4-Nitrophenol												No Limit	
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)												No Limit	
53	Pentachlorophenol												No Limit	
54	Phenol												No Limit	
55	2,4,6-Trichlorophenol												No Limit	
56	Acenaphthene												No Limit	
57	Acenaphthylene												No Limit	
58	Anthracene												No Limit	
59	Benzidine												No Limit	
60	Benzo(a)Anthracene												No Limit	
61	Benzo(a)Pyrene												No Limit	
62	Benzo(b)Fluoranthene												No Limit	
63	Benzo(ghi)Perylene												No Limit	
64	Benzo(k)Fluoranthene												No Limit	
65	Bis(2-Chloroethoxy)Methane												No Limit	
66	Bis(2-Chloroethyl)Ether												No Limit	
67	Bis(2-Chloroisopropyl)Ether												No Limit	
68	Bis(2-Ethylhexyl)Phthalate												No Limit	
69	4-Bromophenyl Phenyl Ethe												No Limit	
70	Butylbenzyl Phthalate												No Limit	
71	2-Chloronaphthalene												No Limit	
72	4-Chlorophenyl Phenyl Ethe												No Limit	
73	Chrysene												No Limit	
74	Dibenzo(a,h)Anthracene												No Limit	
75	1,2-Dichlorobenzene												No Limit	
76	1,3-Dichlorobenzene												No Limit	
77	1,4-Dichlorobenzene												No Limit	
78	3,3 Dichlorobenzidine												No Limit	
79	Diethyl Phthalate												No Limit	
80	Dimethyl Phthalate												No Limit	
81	Di-n-Butyl Phthalate												No Limit	
82	2,4-Dinitrotoluene												No Limit	
83	2,6-Dinitrotoluene												No Limit	
84	Di-n-Octyl Phthalate												No Limit	
85	1,2-Diphenylhydrazine												No Limit	
86	Fluoranthene												No Limit	
87	Fluorene												No Limit	
88	Hexachlorobenzene												No Limit	
89	Hexachlorobutadiene												No Limit	
90	Hexachlorocyclopentadiene												No Limit	
91	Hexachloroethane												No Limit	
92	Indeno(1,2,3-cd)Pyrene												No Limit	
93	Isophorone												No Limit	
94	Naphthalene												No Limit	
95	Nitrobenzene												No Limit	
96	N-Nitrosodimethylamine												No Limit	
97	N-Nitrosodi-n-Propylamine												No Limit	
98	N-Nitrosodiphenylamine												No Limit	
99	Phenanthrene												No Limit	
100	Pyrene												No Limit	

CTR#	Parameters	AQUATIC LIFE CALCULATIONS – Saltwater / Freshwater / Basin Plan									LIMITS		Recommendation	Comment
		ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life	Lowest AMEL	Lowest MDEL		
101	1,2,4-Trichlorobenzene												No Limit	
102	Aldrin												No Limit	
103	alpha-BHC												No Limit	
104	beta-BHC												No Limit	
105	gamma-BHC												No Limit	
106	delta-BHC												No Limit	
107	Chlordane												No Limit	
108	4,4'-DDT										Check Y/N in	Check Y/N in		
109	4,4'-DDE (linked to DDT)												No Limit	
110	4,4'-DDD												No Limit	
111	Dieldrin												No Limit	
112	alpha-Endosulfan												No Limit	
113	beta-Endolsulfan												No Limit	
114	Endosulfan Sulfate												No Limit	
115	Endrin												No Limit	
116	Endrin Aldehyde												No Limit	
117	Heptachlor												No Limit	
118	Heptachlor Epoxide												No Limit	
119-125	**PCBs sum (2)**										Check Y/N in	Check Y/N in		
126	Toxaphene												No Limit	

Notes:
Ud = Undetermined due to lack of da
Uc = Undetermined due to lack of C
C = Water Quality Criteria
B = Background receiving water data

Attachment K – Effluent limit Calculation Based on TMDL

Attachment K
Effluent Limit Calculation Based on TMDL

Calculation of Effluent limitations Based on WLAs in Harbor Toxics TMDL

Assumptions: *Coefficient of Variation for DDT & PCBs = 0.60*
Number of Monitoring Samples = 4
Inputs: *Flow (MGD):* 7.25
Units: *µg/L for concentration limits and pound per day for mass*

WLAs for Aquatic Life

	WLA-ug/L	CV	LTA Multiplier	MDEL Multplier	AMEL Mutiplier	Maximum Daily	Max. Daily Rounded	Max. Daily Mass	Average Monthly	Avg. M. Rounded	Avg. M Mass
Copper	3.73	0.77	0.45	3.89	1.72	6.525913	6.5	0.39458936	2.893426	2.9	0.174951
Lead	8.52	2.27	0.18	9.28	2.95	14.39194	14	0.87020852	4.583586	4.6	0.2771465
Zinc	85.6	1.77	0.23	7.87	2.62	153.0583	150	9.25467187	50.96115	51	3.0813658

WLAs for Human Health

	WLA-ug/L	CV	MDEL/AMEL Multiplier	Maximum Daily	Max. Daily Rounded	Max. Daily Mass	Average Monthly	Avg. M. Rounded	Avg. M Mass
4,4'-DDT	0.00059	0.60	2.01	0.001186	0.0012	7.1705E-05	0.00059	0.00059	3.567E-05
Total PCBs	0.00017	0.60	2.01	0.000342	0.00034	2.0661E-05	0.00017	0.00017	1.028E-05