



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

June 17, 2014

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. 7009 0820 0001 6812 2077

Mr. Benny Dehghi
Manager, Remediation & Evaluation Services
Honeywell International, Inc.
2525 West 190th St.
MS 23-21-80
Torrance, CA 90504

Dear Mr. Dehghi:

TRANSMITTAL OF THE WASTE DISCHARGE REQUIREMENTS (WDRS) AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR HONEYWELL INTERNATIONAL INC., GARDENA GROUNDWATER REMEDIATION SYSTEM FACILITY, GARDENA, CA. (NPDES NO. CA0062162)

Our letter of June 2, 2014, transmitted the revised tentative Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit for Honeywell International, Inc. – Gardena Groundwater Remediation System Facility. On June 5, 2014, we transmitted to you a change letter for minor modifications to Table 4 of the Order, Table F-7 of Attachment F and Table F-8 of Attachment F to clarify that the chronic toxicity effluent limit applies for wet weather discharges only.

Pursuant to Division 7 of the California Water Code, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) at a public hearing held on June 12, 2014, reviewed the revised tentative requirements with the June 5, 2014 changes, considered all factors in the case, and adopted Order No. R4-2014-0107.

Order No. R4-2014-0107 serves as an NPDES permit, and it expires on July 31, 2019. 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 (August 1, 2014) of Order No. R4-2014-0107. Your first monitoring report for the period of August 1, 2014 through September 31, 2014 is due by November 1, 2014.

The Regional Board is implementing a paperless office system to reduce paper use, increase efficiency, and provide a more effective way for our staff, the public and interested parties to view water quality documents. Therefore, please convert all regulatory documents, submissions, data and correspondence that you would normally submit to us as hard copies to a searchable Portable Document Format (PDF). Documents that are less than 10 megabytes (MB) should be emailed to losangeles@waterboards.ca.gov. Documents that are 10 MB or larger should be transferred to a disk and mailed to the address listed above. If you need additional information regarding electronic submittal of documents please visit the Regional Board's website listed above and navigate to Paperless Office.

CHARLES STRINGER, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

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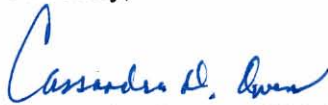
When submitting monitoring or technical reports to the Regional Board as required by your MRP, please continue to send them ATTN: Information Technology Unit and include a reference to Compliance File CI-7015 and NPDES No. CA0062162. This will assure that the reports are directed to the appropriate electronic file and staff. Also, please do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

We are sending the hard copy of the Permit to the Discharger only. For those on the mailing list or other interested parties who would like access to a copy of the Order, please go to the Regional Board's website at:

http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/by_permits_tools.shtml.

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

Sincerely,



Cassandra Owens, Chief
Industrial Permitting Unit

Enclosures: Order No. R4-2014-0107
Attachment E – Monitoring and Reporting Program (MRP No. 7015)
Attachment F – Fact Sheet

(Via Email Only)

Ms. Robyn Stuber, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
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 Game, Region 5
Ms. Leah Walker, California Department of Public Health
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. Kirsten James, Heal the Bay
Mr. Peter Schellenbarger, Heal the Bay
Mr. Liz Crosson, Los Angeles WaterKeeper
Ms. Anna Kheyfets, Natural Resources Defense Council
Mr. Cameron Irvine, CH2M Hill
Ms. Mary Welch, PG Environmental, LLC
Ms. Kristy Allen, TetraTech
Mr. Jae Kim, TetraTech

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

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**ORDER R4-2014-0107
NPDES NO. CA0062162**

WASTE DISCHARGE REQUIREMENTS

**HONEYWELL INTERNATIONAL, INC., GARDENA GROUNDWATER REMEDIATION SYSTEM
FACILITY, LOS ANGELES COUNTY**

DISCHARGE TO THE DOMINGUEZ CHANNEL VIA DISCHARGE POINT NO. 001

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

Table 1. Discharger Information

Discharger	Honeywell International Inc.
Name of Facility	Gardena Groundwater Remediation System Facility
Facility Address	1733 West Artesia Boulevard
	Gardena, CA 90248
	Los Angeles County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
001	Treated Groundwater	33° 52' 28.1" N	-118° 18' 25.7" W	Dominguez Channel

Table 3. Administrative Information

This Order was adopted on:	June 12, 2014
This Order shall become effective on:	August 1, 2014
This Order shall expire on:	July 31, 2019
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDR's in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	180 days prior to the Order expiration date
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows:	Minor discharge

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 12, 2014.



Samuel Unger, P.E., Executive Officer

TENTATIVE REQUIREMENTS SENT: APRIL 22, 2014
REVISED TENTATIVE REQUIREMENTS SENT: JUNE 2, 2014

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I. FACILITY INFORMATION

Information describing the Gardena Groundwater Remediation System Facility (Facility) is summarized in Table 1 and in sections I and II of the Fact Sheet (Attachment F). Section I of the Fact Sheet also includes information regarding the Facility's permit application.

II. FINDINGS

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

- A. Legal Authorities.** This Order serves as WDR's pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260). This Order is also issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters.
- B. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements in this Order, is hereby incorporated into and constitutes Findings for this Order. Attachments A through E and G through J are also incorporated into this Order.
- C. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.B, IV.C, and V.B are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- D. Notification of Interested Parties.** The Regional Water Board Name has notified the Discharger and interested agencies and persons of its intent to prescribe WDR's for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.
- E. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED that Order R4-2009-0024 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger is authorized to discharge from the identified facility and outfalls into waters of the United States and shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for past violations of the previous Order.

III. DISCHARGE PROHIBITIONS

- A.** The discharge of wastewater at a location other than specifically described in this Order is prohibited, and constitutes a violation of the Order. Wastes discharged shall be limited to 0.02 million gallons per day (MGD) of treated groundwater 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 a storm drain system, Dominguez Channel, or other waters of the state, are prohibited.
- C.** Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or create a nuisance as defined by section 13050 of the Water Code.
- D.** Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- E.** The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Board as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.
- F.** The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001

The discharge of treated groundwater shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program, Attachment E:

Table 4. Final Effluent Limitations for Discharge Point No. 001

Pollutant	Unit	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous	
				Minimum	Maximum
Conventional Pollutants					
Biochemical Oxygen Demand (BOD) ₅ @ 20 °C	mg/L	20	30	--	--
	lbs/day ¹	3.3	5.0	--	--
Oil and Grease	mg/L	10	15	--	--
	lbs/day ¹	1.7	2.5	--	--
pH	standard units	--	--	6.5	8.5
Total Suspended Solids (TSS)	mg/L	50	75	--	--
	lbs/day ¹	8.3	13	--	--
Non-Conventional Pollutants					
Settleable Solids	ml/L	0.1	0.3	--	--
Temperature	°F	--	--	--	86
Turbidity	NTU	50	75	--	--
Chronic Toxicity, Wet Weather ⁵	Pass or Fail and % Effect for TST approach	Pass ^{2,3}	Pass or % Effect <50 ²	--	--
Priority Pollutants					
Chromium (VI)	µg/L	5.6	16	--	--
	lbs/day ¹	0.00093	0.0027	--	--
Copper, Total Recoverable, Dry Weather ⁴	µg/L	2.9	5.8	--	--
	lbs/day ¹	0.0005	0.001	--	--
Copper, Total Recoverable, Wet Weather ⁵	µg/L	4.4	9.7	--	--
	lbs/day ¹	0.00073	0.0016	--	--
Lead, Total Recoverable, Dry Weather ⁴	µg/L	5.1	11	--	--
	lbs/day ¹	0.00085	0.0018	--	--
Lead, Total Recoverable, Wet Weather ⁵	µg/L	15	42.7	--	--
	lbs/day ¹	0.0025	0.0071	--	--
Selenium, Total Recoverable	µg/L	4.1	8.2	--	--
	lbs/day ¹	0.00068	0.0014	--	--
Thallium, Total Recoverable	µg/L	6.3	13	--	--
	lbs/day ¹	0.0010	0.0022	--	--
Cyanide, Total (as CN)	µg/L	2.2	7.4	--	--
	lbs/day ¹	0.00037	0.0012	--	--
Zinc, Total Recoverable, Dry Weather ⁴	µg/L	65	216	--	--
	lbs/day ¹	0.011	0.036	--	--
Zinc, Total Recoverable, Wet Weather ⁵	µg/L	21	70	--	--
	lbs/day ¹	0.0035	0.012	--	--
1,1-Dichloroethylene	µg/L	3.2	6.4	--	--
	lbs/day ¹	0.00053	0.0011	--	--
Tetrachloroethylene	µg/L	8.9	18	--	--
	lbs/day ¹	0.0015	0.0030	--	--

Pollutant	Unit	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous	
				Minimum	Maximum
1,1,2-Trichloroethane	µg/L	42	84	--	--
	lbs/day ¹	0.0070	0.014	--	--
Trichloroethylene	µg/L	81	163	--	--
	lbs/day ¹	0.014	0.027	--	--
Heptachlor	µg/L	0.00021	0.00042	--	--
	lbs/day ¹	3.5 x 10 ⁻⁸	7.0 x 10 ⁻⁸	--	--

¹ The mass limitations are based on a maximum flow of 0.02 MGD and is calculated as follows:

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

² Report "Pass" or "Fail" for Median Monthly Effluent Limitation (MDEL). Report "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitation (MDEL). During a calendar month, exactly three independent toxicity tests are required for routine monitoring when one toxicity test results in "Fail". This limit applies for wet weather discharges only.

³ This is a Median Monthly Effluent Limitation.

⁴ Dry weather is assumed for any discharge that occurs when the flow is less than 63 cubic feet per second (cfs) as measured at station S28 in the Dominguez Channel.

⁵ Wet weather is assumed for any discharge that occurs when the flow is equal to or greater than 63 cubic feet per second (cfs) as measured at station S28 in the Dominguez Channel.

2. Interim Effluent Limitations—Not Applicable

B. Land Discharge Specifications—Not Applicable

C. Recycling Specifications—Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the Dominguez 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 0.5 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. Water Contact Standards: In waters designated for non-contact recreation (REC-2) and not designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 2000/100 ml (based on a minimum of not less than four samples for any 30 day period), nor shall more than 10 percent of samples collected during any 30-day period exceed 4000/100 ml.
4. Depress the concentration of dissolved oxygen to fall below 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.
5. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
6. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.

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

B. Groundwater Limitations

The discharge shall not cause the underlying groundwater to be degraded, to exceed water quality objectives, unreasonably effect beneficial uses, or cause a condition of pollution or nuisance.

VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. **Regional Water Board Standard Provisions.** The Discharger shall comply with the following provisions.
 - a. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 C.F.R sections 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
 - b. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of 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 the groundwater treatment operation and treatment capacity by more than ten percent. Such notification shall include estimates of proposed treatment capacity, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.
- k. 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 maximum effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (213) 576-6600 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.
- t. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Water Code section 1211).

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E 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 RPA.
- c. This Order may be reopened and modified in accordance with the provisions set forth in 40 C.F.R. Parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new Minimum Levels (MLs).
- d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Dominguez Channel.

- e. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for dilution credits or a mixing zone, as may be appropriate.
- f. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. **Chronic Toxicity Limit and Monitoring Requirements.** The Order contains numeric chronic toxicity effluent limits. The Discharger shall monitor the effluent annually for chronic toxicity to determine the presence of chronic toxicity. If the chronic toxicity of the effluent exceeds the Median Monthly Effluent Limit, 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 Toxicity Reduction Evaluation (TRE) Workplan.** The Discharger shall submit to the Regional Water Board an Initial Investigation TRE workplan (1-2 pages) within **90 days** of the effective date of this Order. This plan shall describe the steps the Discharger intends to follow in the event that toxicity is detected. See section V of the Monitoring and Reporting Program (Attachment E) for an overview of accelerated monitoring and TRE requirements.
- c. **Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary 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 Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary. These plans shall follow the “TMDL Element – Monitoring Plan” provisions in Attachment A to Resolution No. R11-008. The Discharger must inform the Regional Board if they plan to join a collaborative monitoring effort or develop a site specific plan no later than **90 days** after the effective date of this Order. If the Discharger is joining a collaborative effort that notification must include documentation of such. If developing a site specific monitoring plan, the plan must be submitted no later than **12 months** after the effective date of this Order for public review and, subsequently, Executive Officer approval. Monitoring shall begin 6 months after a monitoring plan is approved by the Executive Officer.

3. Best Management Practices and Pollution Prevention

The Discharger shall submit to the Regional Water Board, within 90 days of the effective date of this Order, an updated Best Management Practices Plan (BMPP). 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. The BMPP shall be consistent with the general guidance contained in the USEPA *Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004) and any applicable advanced technologies.

4. Construction, Operation and Maintenance Specifications

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

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

6. Other Special Provisions—Not Applicable

7. Compliance Schedules—Not Applicable

VII. COMPLIANCE DETERMINATION

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

A. Single Constituent Effluent Limitation

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

B. Effluent Limitations Expressed as a Sum of Several Constituents

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

C. Effluent Limitations Expressed as a Median

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

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

D. Mass-based Effluent Limitations

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

E. Multiple Sample Data

When determining compliance with an AMEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of “Detected, but Not Quantified” (DNQ) or “Not Detected” (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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

F. Average Monthly Effluent Limitation (AMEL)

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

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

3. 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.
4. 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.

5. 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.
6. If only one sample was obtained for the month or more than a monthly period and the result exceeds the AMEL, then the Discharger is in violation of the AMEL.

G. Maximum Daily Effluent Limitations (MDEL)

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

H. Instantaneous Minimum Effluent Limitation

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

I. Instantaneous Maximum Effluent Limitation

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

J. Median Monthly Effluent Limitation (MMEL)

If the median of daily discharges over a calendar month exceeds the MMEL for a given parameter, an alleged violation will be flagged and 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). However, an alleged violation of the MMEL will be considered one violation for the purpose of assessing State mandatory minimum penalties. If no sample (daily discharge) is taken over a calendar month, no compliance determination can be made for that month with respect to effluent violation determination, but compliance determination can be made for that month with respect to reporting violation determination.

K. Chronic Toxicity

This discharge is subject to determination of “Pass” or “Fail” and “Percent (%) Effect” from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (Ho) for the TST approach is: Mean discharge IWC response $\leq 0.75 \times$ Mean control response. A test result that rejects this

null hypothesis is reported as “Pass”. A test result that does not reject this null hypothesis is reported as “Fail”. The relative “Percent (%) Effect” at the discharge IWC is defined and reported as: $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$.

The Maximum Daily Effluent Limitation (MDEL) for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST approach, results in “Fail” and the “Percent (%) Effect” is ≥ 50 .

The Median Monthly Effluent Limitation (MMEL) for chronic toxicity is exceeded and a violation will be flagged when the median of no more than three independent chronic toxicity tests conducted within the same calendar month—analyzed using the TST approach—results in “Fail”. During a calendar month, exactly three independent toxicity tests are required when one toxicity test results in “Fail”.

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:

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

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Best Management Practices (BMPs)

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

Bioaccumulative

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

Carcinogenic

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

Coefficient of Variation (CV)

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

Daily Discharge

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

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

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

Detected, but Not Quantified (DNQ)

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

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, San Pedro Bay (Los Angeles-Long Beach Harbors), Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration

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

Estuaries

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

Existing Discharger

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

Infeasible

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

Inland Surface Waters

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

Instantaneous Maximum Effluent Limitation

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

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 40 C.F.R. part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)

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

Mixing Zone

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

Not Detected (ND)

Sample results which are less than the laboratory's MDL.

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 Los Angeles Regional Water Quality Control 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 Water Resources Control Board (State Water Board) or the Los Angeles Regional Water Quality Control Board.

Reporting Level (RL)

The RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Los Angeles Regional Water Quality Control 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 Quality Control 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	<i>Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 °C
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
C.F.R	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	California Water Code
Discharger	Honeywell International Incorporated
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	California Department of Public Health Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	Groundwater Remediation System Facility
gpd	gallons per day
IC	Inhibition Coefficient
IC ₁₅	Concentration at which the organism is 15% inhibited
IC ₂₅	Concentration at which the organism is 25% inhibited
IC ₄₀	Concentration at which the organism is 40% inhibited
IC ₅₀	Concentration at which the organism is 50% inhibited
IWC	In-stream Waste Concentration
LA	Load Allocations
LOEC	Lowest Observed Effect Concentration
µg/L	micrograms per Liter
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
ND	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
OAL	Office of Administrative Law
PMEL	Proposed Maximum Daily Effluent Limitation
PMP	Pollutant Minimization Plan

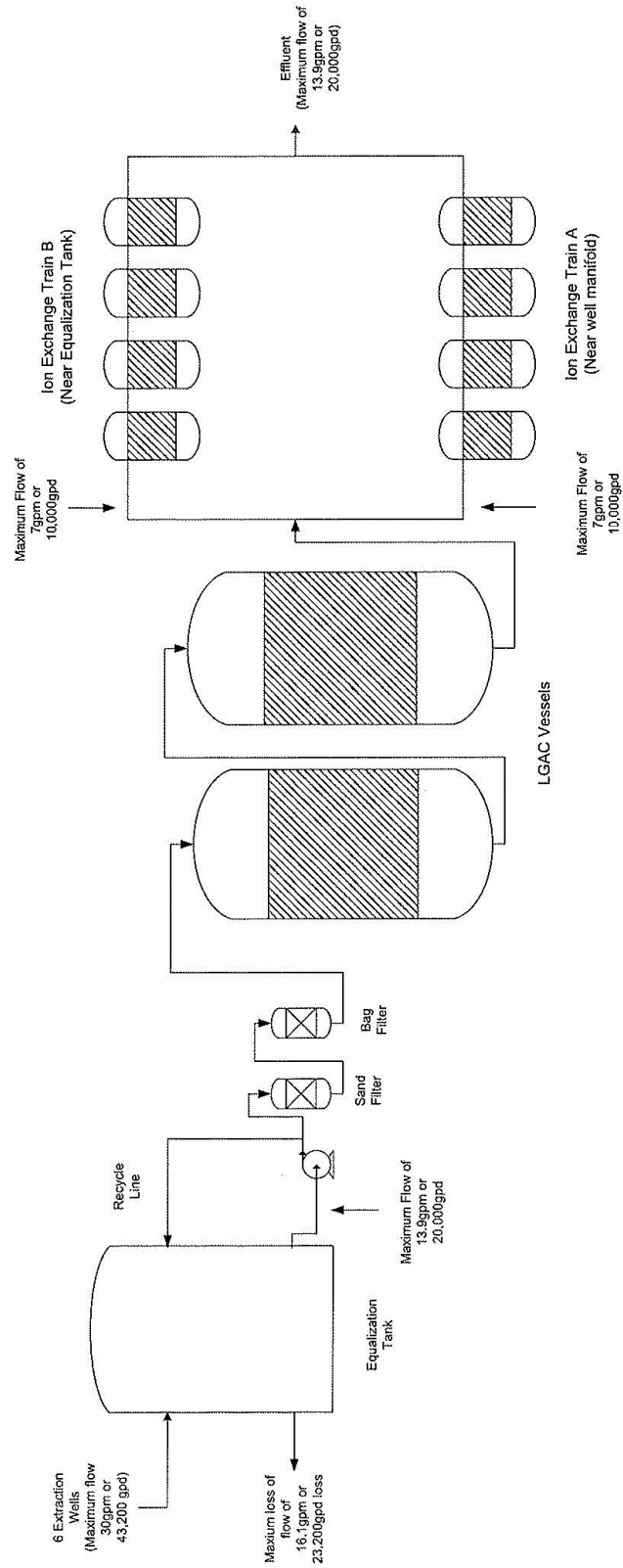
POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
Ocean Plan	<i>Water Quality Control Plan for Ocean Waters of California</i>
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RPA	Reasonable Potential Analysis
SCP	Spill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

ATTACHMENT B – MAP



ATTACHMENT C – FLOW SCHEMATIC

Process Flow Diagram
 Gardena Groundwater Treatment System at the Former Honeywell Gardena Site
 Gardena, California



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. (40 C.F.R. § 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. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 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 (40 C.F.R. § 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 (40 C.F.R. § 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 (40 C.F.R. § 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. (40 C.F.R. § 122.41(i)(4).)

G. Bypass

1. Definitions

- a. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
 - b. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)
 3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
 4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)
 5. Notice
 - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)

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

H. Upset

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

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

B. Duty to Reapply

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

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the

Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)
- B.** Monitoring results must be conducted according to test procedures under 40 C.F.R. part 136 or, in the case of sludge use or disposal, approved under 40 C.F.R. part 136 unless otherwise specified in 40 C.F.R. part 503 unless other test procedures have been specified in this Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 C.F.R. part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)
- B.** Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
 - 2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
 - 3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
 - 4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
 - 5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
 - 6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)
- C.** Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):
 - 1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
 - 2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

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

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)
2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and
 - c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:
6. “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for

submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 C.F.R. § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. § 122.41(l)(1)(ii).)
3. The alteration or addition 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). (40 C.F.R. § 122.41(l)(1)(ii).)
4. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R. § 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

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

H. Other Noncompliance

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

I. Other Information

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

VI. STANDARD PROVISIONS – ENFORCEMENT

- A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 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 [40 C.F.R. § 122.41(a)(2)] [Water Code sections 13385 and 13387].

- C. Any person may be assessed an administrative penalty by the Regional Water Board for violating Section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [40 C.F.R. § 122.41 (a)(3)].
- D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 C.F.R. § 122.410(5)].
- E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 C.F.R. § 122.41 (k)(2)].

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

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

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):
 - a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));

- b.** 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));
 - c.** Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or
 - d.** The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)
- 2.** That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(2)):
 - a.** 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));
 - b.** 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));
 - c.** Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or
 - d.** The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (CI 7015)

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) (CI 7015)

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

I. GENERAL MONITORING PROVISIONS

- A.** An effluent sampling station shall be established at the end of treatment. This locations, Monitoring Location EFF-001, is representative of the discharge for Discharge Point 001 (Latitude 33° 52' 28.1" N, Longitude 118° 18' 25.7" W). All sampling stations 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 parts 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/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 purposes of reporting compliance with numerical limitations, 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*, 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 procedure.

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 C.F.R. part 136 (revised May 18, 2012);
 3. When the Discharger agrees to use an ML that is lower than that listed in Attachment 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 part 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 are fewer than 20 samples in a batch, or once annually when there are fewer than 20 samples collected in a calendar year. 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 should 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	The effluent sampling station shall be located where representative samples of Discharge Point No. 001 can be obtained. Latitude 33° 52' 28.1" N, Longitude 118° 18' 25.7" W
--	RSW-001	A receiving water sampling station shall be established outside the influence of the effluent discharge location, at least 50 feet upstream of the discharge of the storm drain into the Dominguez Channel. Latitude 33° 55' 16.7" N, Longitude 118° 18' 32.4" W
--	RSW-002	A sampling station shall be established at the nearest accessible location downstream of the discharge of the storm drain into the Dominguez Channel.

III. INFLUENT MONITORING REQUIREMENTS—NOT APPLICABLE

IV. EFFLUENT MONITORING REQUIREMENTS—MONITORING LOCATION EFF-001

If discharge is initiated from EFF-001 during the permit period, the Discharger shall monitor discharges of treated groundwater at Monitoring Location EFF-001 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table E-2. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	gal/day	totalizer	continuously ⁶	1
Conventional Pollutants				
Biochemical Oxygen Demand (BOD) (5-day@20 Deg. C)	mg/L ²	Grab	1/Quarter	1
pH	standard units	Grab	1/Quarter	1
Total Suspended Solids (TSS)	mg/L ²	Grab	1/Quarter	1
Oil and Grease	mg/L ²	Grab	1/Quarter	1
Non-Conventional Pollutants				
Turbidity	NTU	Grab	1/Quarter	1
Settleable Solids	ml/L	Grab	1/Quarter	1
E. coli	MPN/100 ml	Grab	1/Quarter	1
Chronic Toxicity ³	Pass or Fail and % Effect for TST approach	24 hour composite	1/Year ⁷	1,3
Temperature	°F	Grab	1/Quarter	1
Ammonia (as N)	mg/L	Grab	1/Quarter	1
Methyl tertiary butyl ether (MTBE)	µg/L	Grab	1/Quarter	1
Total Petroleum Hydrocarbons (TPH) ⁴	µg/L	Grab	1/Quarter	4
Xylene	µg/L	Grab	1/Quarter	1
Priority Pollutants⁵				
Chromium, Hexavalent	µg/L ²	Grab	1/Quarter	1
Copper, Total Recoverable	µg/L ²	Grab	1/Quarter	1
Lead, Total Recoverable	µg/L ²	Grab	1/Quarter	1
Selenium, Total Recoverable	µg/L ²	Grab	1/Quarter	1
Thallium, Total Recoverable	µg/L ²	Grab	1/Quarter	1
Zinc, Total Recoverable	µg/L ²	Grab	1/Quarter	1
Cyanide, Total (as CN)	µg/L ²	Grab	1/Quarter	1
1,1-Dichloroethylene	µg/L ²	Grab	1/Quarter	1
Tetrachloroethylene	µg/L ²	Grab	1/Quarter	1
1,1,2-Trichloroethane	µg/L ²	Grab	1/Quarter	1
Trichloroethylene	µg/L ²	Grab	1/Quarter	1
N-nitrosodi-n-propylamine	µg/L ²	Grab	1/Quarter	1
Heptachlor	µg/L ²	Grab	1/Quarter	1
TCDD Equivalents ⁸	µg/L	Grab	1/Year	1
Remaining Priority Pollutants ⁵	µg/L	Grab	1/Year	1

¹ Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136. For priority pollutants, the methods must meet the lowest Minimum Levels (MLs) specified in Attachment 4 of the SIP and included as Attachment H. If no methods are specified for a given pollutant it shall be analyzed 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 MLs.

² The mass emission (lbs/day) for the discharge shall be calculated and reported using the limitation concentration and the actual flow rate measured at the time of discharge, according to the formula:

$$M = 8.34 \times C_e \times Q$$

where: M = mass discharge for a pollutant, lbs/day

C_e = Reported concentration for a pollutant

Q = actual discharge flow rate.

³ Refer to the MRP Section V, Whole Effluent Toxicity Requirements. Report "Pass" or "Fail" for Median Monthly Effluent Limitation (MMEL). Report "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitation (MDEL). During a calendar month, exactly three independent toxicity tests are required for routine monitoring when one toxicity test results in "Fail".

⁴ TPH shall mean the sum of gasoline and diesel fractions of petroleum hydrocarbons. Analysis using USEPA Method 8015 (Modified).

⁵ Priority pollutants as defined by the CTR and included as Attachment H.

⁶ Record the total monthly flow and report the calculated daily average flow and monthly flow in monitoring reports.

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

⁸ TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are provided in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculated TCDD equivalents the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

$$\text{Dioxin-TEQ (TCDD equivalents)} = \sum(C_x \times \text{TEF}_x)$$

where: C_x = concentration of dioxin or furan congener x

TEF_x = TEF for congener x

Minimum Levels, and Toxicity Equivalency Factors

Congeners	Minimum Level (pg/L)	Toxicity Equivalence Factor (TEF)
2,3,7,8 - tetra CDD	10	1.0
1,2,3,7,8 - penta CDD	50	1.0
1,2,3,4,7,8 - hexa CDD	50	0.1
1,2,3,6,7,8 - hexa CDD	50	0.1
1,2,3,7,8,9 - hexa CDD	50	0.1
1,2,3,4,6,7,8 - hepta CDD	50	0.01
Octa CDD	100	0.0001
2,3,7,8 - tetra CDF	10	0.1
1,2,3,7,8 - penta CDF	50	0.05
2,3,4,7,8 - penta CDF	50	0.5
1,2,3,4,7,8 - hexa CDF	50	0.1
1,2,3,6,7,8 - hexa CDF	50	0.1
1,2,3,7,8,9 - hexa CDF	50	0.1
2,3,4,6,7,8 - hexa CDF	50	0.1
1,2,3,4,6,7,8 - hepta CDFs	50	0.01
1,2,3,4,7,8,9 - hepta CDFs	50	0.01
Octa CDF	100	0.0001

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. 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 test results shall be measured using the two concentration (i.e., discharge IWC and laboratory water control) Test of Significant Toxicity (TST) hypothesis testing approach and reported in units of Pass or Fail and % Effect.

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

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

3. Sample Volume and Holding Time

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

e.

4. Chronic Freshwater Species and Test Methods

If effluent samples are collected from outfalls discharging to receiving waters with salinity <1 ppt, the Discharger shall conduct the following chronic toxicity tests on effluent samples—at the in-stream waste concentration for the discharge—in accordance with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR section 136). In no case shall these species be substituted with another test species unless written authorization from the Executive Officer is received.

- a. A static renewal toxicity test with the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0).
- b. A static renewal toxicity test with the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.01).
- c. A static renewal toxicity test with the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

5. Species Sensitivity Screening

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

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

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

6. Quality Assurance and Additional Requirements

Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below.

- a. The discharge is subject to determination of "Pass" or "Fail" and "Percent Effect" from a single-effluent concentration chronic toxicity test at the discharge IWC using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1. The null hypothesis (H_0) for the TST approach is: Mean discharge IWC response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as "Pass". A test result that does not reject this null hypothesis is reported as "Fail". The relative "Percent (%) Effect" at the discharge IWC is defined and reported as: $((\text{Mean control response} - \text{Mean discharge IWC response}) \div \text{Mean control response}) \times 100$.
- b. The Median Monthly Effluent Limit (MMEL) for chronic toxicity only applies when there is a discharge more than one day in a calendar month period. This discharge occurs more than one day in a calendar month; consequently, during a calendar month, exactly three independent toxicity tests are required for routine monitoring when one toxicity test results in "Fail".
- c. Dilution water and control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.
- d. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported.
- e. The Discharger shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of the Monitoring and Reporting Program and the rationale is explained in the Fact Sheet (Attachment F).

7. Preparation of an Initial Investigation TRE Workplan

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

- a. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
- b. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.

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

8. Accelerated Monitoring Schedule for Median Monthly Summary Result: “Fail”

Within 24 hours of the time the Discharger becomes aware of this result, the Discharger shall implement an accelerated monitoring schedule of four toxicity tests—consisting of five-concentrations (including the discharge IWC) and a control—conducted at approximately two week intervals, over an eight week period. If each of the accelerated toxicity tests results in “Pass”, the Discharger shall return to routine monitoring for the next monitoring period. If one of the accelerated toxicity tests results in “Fail”, the Discharger shall both immediately notify the Regional Water Board Executive Officer and implement the Toxicity Reduction Evaluation (TRE) Process conditions set forth below.

9. Toxicity Reduction Evaluation (TRE) Process

- a. Preparation and Implementation of Detailed TRE Work Plan.** The Discharger shall immediately initiate a TRE using—according to the type of treatment facility—EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999) or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989). Within 30 days, the Discharger shall submit to the Regional Water Board Executive Officer a Detailed TRE Work Plan, which shall follow the generic Initial Investigation TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the Executive Officer:
 - i. Further actions by the Discharger to investigate, identify, and correct the causes of toxicity.
 - ii. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.
 - iii. A schedule for these actions, progress reports, and the final report.
- b. TIE Implementation.** The Discharger may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.
- c.** Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.
- d.** The Discharger shall conduct routine effluent monitoring for the duration of the TRE process. Additional accelerated monitoring and TRE work plans are not required once a TRE is begun.

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

10. Reporting

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

- a. The toxicity test results for the TST approach, reported as “Pass” or “Fail” and “Percent (%) Effect” at the chronic toxicity IWC for the discharge.
- b. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).
- c. TRE/TIE results. The Regional Water Board Executive Officer shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses.
- d. Statistical program (e.g., TST calculator, CETIS, etc.) output results for each toxicity test.

VI. LAND DISCHARGE MONITORING REQUIREMENTS—NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS—NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Location RSW-001

Receiving water monitoring shall be required only in years in which a discharge occurs. When required, the Discharger shall monitor the Dominguez Channel at RSW-001 as follows:

Table E-3. Receiving Water Monitoring Requirements—Monitoring Location RSW-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Conventional Pollutants				
pH	standard units	Grab	1/Year ¹	2
Non-Conventional Pollutants				
Ammonia, Total (as N)	mg/L	Grab	1/Year	2
Hardness, Total (as CaCO ₃)	mg/L	Grab	1/Year ¹	2
Temperature	°F	Grab	1/Year ¹	2
Salinity	ppm	Grab	1/Year	2
Priority Pollutants				
Priority Pollutants ³	µg/L	Grab	1/Year	2
TCDD Equivalents ⁴	µg/L	Grab	1/Year	1

¹ .Receiving water pH, hardness, and temperature must be analyzed concurrent with effluent priority pollutant sampling (Monitoring Location EFF-001).

² Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136, for priority pollutants the methods must meet the lowest MLs specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by method approved by this Regional Water Board or the State Water Board. If more than one analytical method is listed for a given parameter, the Discharger must select from the listed methods and corresponding ML.

³ Priority pollutants as defined by the CTR, included in Attachment I of this Order.

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

Dioxin-TEQ (TCDD equivalents) = $\Sigma(C_x \times TEF_x)$
 where: C_x = concentration of dioxin or furan congener x
 TEF_x = TEF for congener x

Minimum Levels, and Toxicity Equivalency Factors

Congeners	Minimum Level (pg/L)	Toxicity Equivalence Factor (TEF)
2,3,7,8 - tetra CDD	10	1.0
1,2,3,7,8 - penta CDD	50	1.0
1,2,3,4,7,8 - hexa CDD	50	0.1
1,2,3,6,7,8 - hexa CDD	50	0.1
1,2,3,7,8,9 - hexa CDD	50	0.1
1,2,3,4,6,7,8 - hepta CDD	50	0.01
Octa CDD	100	0.0001
2,3,7,8 - tetra CDF	10	0.1
1,2,3,7,8 - penta CDF	50	0.05
2,3,4,7,8 - penta CDF	50	0.5
1,2,3,4,7,8 - hexa CDF	50	0.1
1,2,3,6,7,8 - hexa CDF	50	0.1
1,2,3,7,8,9 - hexa CDF	50	0.1
2,3,4,6,7,8 - hexa CDF	50	0.1
1,2,3,4,6,7,8 - hepta CDFs	50	0.01
1,2,3,4,7,8,9 - hepta CDFs	50	0.01
Octa CDF	100	0.0001

B. Monitoring Location RSW-002

Receiving water monitoring shall be required only in years in which a discharge occurs. When required, the Discharger shall monitor the Dominguez Channel at RSW-002 as follows:

Table E-4. Receiving Water Monitoring Requirements—Monitoring Location RSW-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Conventional Pollutants				
pH	standard units	Grab	1/Year ¹	²
Non-Conventional Pollutants				
Temperature	°F	Grab	1/Year ¹	²

¹ Receiving water pH and temperature must be analyzed concurrent with effluent priority pollutant sampling (Monitoring Location EFF-001).

² Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136, for priority pollutants the methods must meet the lowest MLs specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by method approved by this Regional Water Board or the State Water Board. If more than one analytical method is listed for a given parameter, the Discharger must select from the listed methods and corresponding ML.

IX. HARBOR TOXICS TMDL MONITORING

A. Dominguez Channel Water Column Sampling

Water column and total suspended solids samples shall be collected during two wet weather events and one dry weather event each year. Both media shall, at a minimum, be analyzed for the chemical suite (lead, zinc, copper, DDT, PCBs, benzo[a]anthracene, benzo[a]pyrene, chrysene, phenanthrene, and pyrene), temperature, dissolved oxygen, pH, electrical

conductivity, and a flow measurement. Sufficient volumes of suspended solids are required to allow analysis of the pollutants in the bulk sediment.

B. Sediment Monitoring

Sediment chemistry samples shall be collected every five years. The analysis shall include the chemical suite, two toxicity tests, and four benthic indices as specified in the SQO Part 1.

C. Fish Tissue Monitoring

Fish tissue samples shall be collected every two years from the Dominguez Channel Estuary and analyzed for chlordane, dieldrin, toxaphene, DDT, and PCBs. The target species shall be selected based on residency, local abundance, and fish size at the time of field collection. Tissues analyzed shall be based on the most common preparation for the selected fish species.

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 chronic toxicity testing, TRE and TIE as required in the Attachment E, Monitoring and Reporting, Section V.H.

B. Self-Monitoring Reports (SMR's)

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>). Until such notification is given, the Discharger shall submit SMRs as searchable PDF documents. SMR documents that are less than 10 megabytes (MB) should be emailed to losangeles@waterboards.ca.gov. Documents that are 10 MB or larger should be transferred to a disk and mailed to the address listed in section X.B.8.c of this MRP.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through X. The Discharger shall submit quarterly and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
1/Quarter	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
1/Year	January 1 following (or on) permit effective date	January 1 through December 31	February 1

4. Reporting Protocols. The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 C.F.R. part 136.
5. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
 - a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
 - b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

 For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (\pm a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
 - c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
 - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
6. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).
7. Multiple Sample Data. When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

- a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
 - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
8. The Discharger shall submit SMR's 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 WDR's; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
 - c. SMRs must be submitted to the Regional Water Board electronically as specified in finding XI.B.1. above, signed and certified as required by the Standard Provisions (Attachment D). If the size of the submittal necessitates the submittal of a disk, please mail it to the address listed below:

California Regional Water Quality Control Board

Los Angeles Region

320 W. 4th Street, Suite 200

Los Angeles, CA 90013

C. Discharge Monitoring Reports (DMR's)—Not Applicable

D. Other Reports

1. Within 90 days of the effective date of this permit, the Discharger is required to submit the following to the Regional Water Board:
 - a. Initial Investigation TRE Workplan
 - b. Updated BMPP
2. Within **90 days** of the effective date of this Order, the Discharger must submit to the Regional Water Board notification of whether Honeywell International, Inc, Gardena Groundwater Remediation System Facility will be participating with an organized group of Responsible Parties to complete the regional monitoring required by the Harbor Toxics TMDL, or if the Discharger will be developing a site specific plan. If developing a site specific plan, that plan is due to the Regional Water Board 12 months from the effective

date of this Order. Regional Water Board staff will review the plan and provide an opportunity for public comment. After the receipt of the plan the Executive Officer will comment or approve the plan. The Discharger has six months after the approval to implement the plan. The Discharger or the Responsible Parties shall submit annual implementation reports to the Regional Water Board. The reports shall describe the measures implemented and the progress achieved toward meeting the assigned WLAs and LAs.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4B191263001
Discharger	Honeywell International Inc.
Name of Facility	Gardena Groundwater Remediation System Facility
Facility Address	1733 West Artesia Boulevard1
	Gardena, CA 90248
	Los Angeles County
Facility Contact, Title and Phone	Benny Dehghi, Manager, Remediation and Evaluation Services, (310) 512 - 2296
Authorized Person to Sign and Submit Reports	Benny Dehghi, Manager, Remediation and Evaluation Services, (310) 512 - 2296
Mailing Address	2525 West 190th Street, MS-23-21-80, Torrance, CA 90504
Billing Address	Same as Mailing Address
Type of Facility	Groundwater Remediation
Major or Minor Facility	Minor
Threat to Water Quality	3
Complexity	B
Pretreatment Program	Not Applicable
Recycling Requirements	Not Applicable
Facility Permitted Flow	0.02 million gallons per day (MGD)
Facility Design Flow	0.02 MGD
Watershed	Dominguez Channel and Los Angeles/Long Beach Harbors WMA
Receiving Water	Dominguez Channel
Receiving Water Type	Inland Surface Water

- A.** Honeywell International Inc. (hereinafter Discharger) is the owner and operator of the Gardena Groundwater Remediation System Facility (hereinafter Facility), a groundwater treatment facility for a former furnace gas control valve manufacturing facility located at 1733 West Artesia Boulevard in Gardena, CA.

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 treated groundwater to the Dominguez Channel, a water of the United States, above the Dominguez Channel Estuary. The Discharger was previously regulated by Order R4-2009-0024 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0062162 that was adopted on February 5, 2009 and expired on January 10, 2014. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

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. The State Water Board retains the jurisdictional authority to enforce such requirements under Water Code section 1211.

- C.** The Discharger filed a report of waste discharge and submitted an application for reissuance of its WDR's and NPDES permit on July 12, 2013. The application was deemed complete on September 6, 2013. A site visit was conducted on September 26, 2013, to observe operations and collect additional data to develop permit limitations and requirements for the waste discharge.

II. FACILITY DESCRIPTION

The Discharger formerly operated a manufacturing facility for furnace gas control valves at 17300 South Western Avenue, Gardena, California. The Facility stored gasoline, diesel fuel, and several solvents in underground storage tanks. In 1989, a leak detection program initiated at the site detected soil and groundwater contamination which originated from leaking underground storage tanks and spills. The groundwater was contaminated with trichloroethylene and tetrachloroethylene. All underground storage tanks and associated piping were removed and in 1990 a groundwater extraction and treatment system was installed at the Facility.

A. Description of Wastewater and Biosolids Treatment and Controls

The Facility is located in a shopping plaza. Six groundwater extraction wells are located in the parking lot and driveway areas of the plaza. Water from the extraction wells is pumped via subsurface pipes to the groundwater treatment equipment which is housed in a building within the plaza. Groundwater from extraction wells enters the treatment system through one of six dedicated pipes and flows to an equalization tank, which is equipped with four floats to automatically control the pumping rate from the wells to enable optimum efficiency of the treatment system. The Facility is unmanned for the majority of the time and is equipped with automatic shutoffs. Any leaks or spills that result from malfunctioning equipment, drain to the headworks of the system at the equalization tank. From the equalization tank, groundwater flows through a sand filter followed by a cartridge filter to remove solids, then to two liquid granular activated carbon (LGAC) vessels in series. After the LGAC vessels, the groundwater splits into two trains whereby each train includes two anion exchange vessels followed by two cation exchange vessels. These exchange vessels are placed in series within each train, so there are four total anion and four total cation exchange vessels. Treated groundwater from the extraction wells is pumped via underground pipe to the storm drain located on Artesia Boulevard which flows to the Dominguez Channel.

From March 13, 2009 through March 31, 2013, a period that spans the majority of the existing permit term, the highest reported daily flow was 13,855 gallons per day (GPD) and the average of reported daily flows over this period was 6,996 GPD.

The Discharger has installed an Enhanced Reductive Dechlorination (ERD) system to replace the existing groundwater treatment system. The ERD works by injecting a highly

biodegradable, soluble, and colloidal organic carbon into the aquifer to form a biobarrier to prevent the migration of contaminated groundwater. The ERD system includes 30 injection wells and four monitoring wells along Artesia Boulevard. On October 24, 2013, the groundwater treatment system was taken out of service and testing of the ERD began. Periodic injection and groundwater monitoring events will occur to determine the efficiency of the ERD in containing the groundwater contaminants and whether adjustments need to be made. Once the ERD system is fully functional it will result in no discharges of wastewater to surface water. The Discharger plans to maintain the existing groundwater treatment system in the interim and as a backup to the ERD once it is operational.

B. Discharge Points and Receiving Waters

Honeywell discharges up to 0.020 million gallons per day of treated groundwater at Discharge Point No. 001 (Latitude 33° 52' 28.1" N, Longitude 118° 18' 25.7" W). The effluent drains unmixed through an underground conduit for approximately 800 feet in a southwest direction across the shopping plaza property to the corner of Artesia Boulevard and Western Avenue where it enters an underground storm drain on Western Avenue. The storm drain continues approximately 650 feet south on Western Avenue until it discharges into the Dominguez Channel on the east side of Western Avenue, approximately one mile upstream of the Dominguez Channel Estuary. The Dominguez Channel is a water of the United States.

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

Effluent limitations contained in Order No. 2009-0024 for discharges from Discharge Point No. 001 (Monitoring Location EFF-001) and representative monitoring data from the term of the Order are as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation		Monitoring Data (From March 2009 – June 2013)	
		Average Monthly	Maximum Daily	Highest Average Monthly Discharge	Highest Daily Discharge
Conventional Pollutants					
Biochemical Oxygen Demand 5-day @ 20 deg. C (BOD ₅)	mg/L	20	30	1.9	1.9
	lbs/day ¹	3.3	5.0	NR	NR
Oil and Grease	mg/L	10	15	7.5	7.5
	lbs/day ¹	1.7	2.5	NR	NR
pH	Standard Units	6.5 – 8.5 ²		6.77 – 7.65 ²	
Total Suspended Solids (TSS)	mg/L	50	75	3.24	3.24
	lbs/day ¹	8.3	13	6	6
Non-Conventional Pollutants					
Acute Toxicity	% Survival	--	3	100% ⁴	
Settleable Solids	ml/L	0.1	0.3	<0.1	<0.1
Temperature	°F	--	86 ⁵	79	80
Turbidity	NTU	50	75	0.21	0.21

Parameter	Units	Effluent Limitation		Monitoring Data (From March 2009 – June 2013)	
		Average Monthly	Maximum Daily	Highest Average Monthly Discharge	Highest Daily Discharge
Priority Pollutants					
Chromium, Hexavalent	µg/L	6.5	16	4.5	7.5
	lbs/day ¹	0.001	0.003	NR	NR
Copper, Total Recoverable	µg/L	2.9	5.8	4.79⁶	5.19
	lbs/day ¹	0.0005	0.001	NR	NR
Lead, Total Recoverable	µg/L	5.5	11	1.49	1.49
	lbs/day ¹	0.001	0.002	NR	NR
Selenium, Total Recoverable	µg/L	4.1	8.2	7.57⁶	9.58⁶
	lbs/day ¹	0.0007	0.001	NR	NR
Thallium, Total Recoverable	µg/L	6.3	13	1.2	1.2
	lbs/day ¹	0.001	0.002	NR	NR
Cyanide	µg/L	3.7	9.6	1.5	1.5
	lbs/day ¹	0.0006	0.002	NR	NR
1,1-Dichloroethylene	µg/L	3.2	6.4	2.6	2.6
	lbs/day ¹	0.0005	0.001	NR	NR
Tetrachloroethylene	µg/L	8.9	30	0.39	0.39
	lbs/day ¹	0.001	0.005	NR	NR
1,1,2-Trichloroethane	µg/L	42	84	<0.26	<0.26
	lbs/day ¹	0.007	0.01	NR	NR

NR – Not Reported

¹ Mass-based effluent limitations are based on a maximum discharge flow rate of 0.020 million gallons per day.

² Range of instantaneous values.

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

- a. the average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay test shall be at least 90%, and
- b. no single test producing 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 Lowest percent survival reported.

⁵ Instantaneous maximum.

⁶ Exceedance of effluent limitation.

D. Compliance Summary

Monitoring data from March 2009 to July 2013 indicated that the Discharger has complied with the effluent limitations of Order No. R4-2009-0024 except for the effluent limitation exceedances listed in the following table:

Table F-3. Compliance Summary

Date	Type of Limitation	Pollutant	Units	Effluent Limitation	Result
5/23/2009	AMEL	Copper	µg/L	2.9	4.79
5/29/2009	AMEL	Copper	lbs/day	0.0005	0.0007
6/30/2009	AMEL	Copper	µg/L	2.9	4.025
6/30/2009	AMEL	Selenium	µg/L	4.1	6.56
6/30/2009	MDEL	Selenium	µg/L	8.2	8.77
6/30/2009	AMEL	Copper	lbs/day	0.0005	0.0006
6/30/2009	AMEL	Selenium	lbs/day	0.0010	0.0007
7/13/2009	MDEL	Selenium	µg/L	8.2	9.58
7/31/2009	AMEL	Selenium	µg/L	4.1	5.1
6/11/2010	MDEL	Selenium	µg/L	8.2	8.53
9/2/2010	AMEL	Selenium	µg/L	4.1	7.57

2009

The Regional Water Board issued Settlement Offer No. R4-2010-0010-M for \$24,000 on February 3, 2010 to address nine effluent violations for copper and selenium that occurred during the second and third quarters of 2009. The Discharger accepted the offer on April 2, 2010. The fine, in the amount of \$24,000, was paid on July 16, 2010.

2010

Two effluent violations for selenium occurred during the second and third quarters of 2010. Enforcement actions for these violations are pending.

Monitoring data demonstrates that the Discharger is now in compliance with the AMELs and MDELs for both copper and selenium. No exceedance has been detected for copper during 21 sampling events since October, 2011. No exceedance has been detected for selenium during 27 sampling events since March, 2011.

E. Planned Changes

The Discharger has installed the Enhanced Reductive Dechlorination (ERD) system to replace their existing groundwater treatment system. On June 21, 2013 the Regional Water Board issued a letter approving the ERD system for regulation under General Waste Discharge Requirements Order R4-2007-0019.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

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

B. California Environmental Quality Act (CEQA)

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

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

1. Water Quality Control Plan. The Regional Water Board adopted a *Water Quality Control Plan Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan. In addition, the Basin Plan implements State Water Board Resolution 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Dominguez Channel are as follows:

Table F-4. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Dominguez Channel, above Estuary (Freshwater)	<p><u>Existing:</u> Non-contact water recreation (REC-2); preservation of rare and endangered species (RARE).</p> <p><u>Potential:</u> Municipal and domestic water supply (MUN); water contract recreation (REC-1), warm freshwater habitat (WARM), and wildlife habitat (WILD).</p>

2. High Flow Suspension. On July 10, 2003, the Regional Water Board adopted Resolution No. 2003-010 (High Flow Suspension) to suspend recreational beneficial uses in engineered channels during unsafe weather conditions. The High Flow Suspension became effective on November 2, 2004. The High Flow Suspension applies to water contact recreational activities associated with the swimmable goal as expressed in the federal Clean Water Act section 101(a)(2) and regulated under the REC-1 use, non-contact water recreation involving incidental water contact regulated under the REC-2 use, and the associated bacteriological objectives set to protect those activities. Water quality objectives set to protect (1) other recreational uses associated with the fishable goal as expressed in the federal CWA section 101(a)(2) and regulated under the REC-1 use and (2) other REC-2 uses (e.g., uses involving the aesthetic aspects of water) shall remain in effect at all times for water bodies to which the High Flow Suspension applies. The High Flow Suspension shall apply on days with rainfall greater than or equal to 1/2 inch and the 24 hours following the end of the 1/2-inch or greater rain event, as measured at the nearest local rain gauge, using local Doppler radar, or using widely accepted rainfall estimation methods. The High Flow Suspension only applies to engineered channels, defined as inland, flowing surface water bodies with a box, V-shaped or trapezoidal configuration that have been lined on the sides and/or bottom with concrete. Dominguez Channel has been identified by the Regional Water Board as a water body to which the High Flow Suspension applies.

3. Thermal Plan. The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California* (Thermal Plan) on January 7, 1971, and amended this plan on

September 18, 1975. This plan contains temperature objectives for surface waters. Requirements of this Order implement the Thermal Plan. Additionally, a white paper developed by Regional Water Board Staff, *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*, evaluated the optimum temperatures for aquatic species routinely available in surface water bodies within the Los Angeles Region including: steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam and blue mussel. A maximum effluent temperature limitation of 86°F was determined to be appropriate for protection of aquatic life and is included in this Order.

4. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** The United States Environmental Protection Agency (USEPA) adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain federal water quality criteria for priority pollutants.
5. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
6. **Antidegradation Policy.** Federal regulation 40 C.F.R. section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16. Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.
7. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.
8. **Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. §§ 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, including protecting rare, threatened, or endangered species. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

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 TMDLs that will specify wasteload 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 and Ventura County watersheds 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 Facility discharges into the Dominguez Channel. The 2010 State Water Board's California 303(d) List classifies the Dominguez Channel as impaired. The pollutants/stressors of concern in the Dominguez Channel are: ammonia, copper, diazinon, indicator bacteria, lead, toxicity, and zinc.

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 Harbor Waters* (Harbor Toxics TMDL). The Harbor Toxics TMDL was approved by the State Water Board on February 7, 2012, the OAL on March 21, 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 the freshwater portion of the Dominguez Channel (above Vermont Avenue) the Harbor Toxics TMDL included:

1. Final Freshwater Toxicity Allocation in wet weather of 1 TU_c (Attachment A to Resolution No. R11-008, p. 11).
2. Final Freshwater Metals Allocations in wet weather for copper, lead, and zinc (Attachment A to Resolution No. R11-008, p. 12).
3. 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 (Attachment A to Resolution No. R11-008, pp. 22-23).

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

The Harbor Toxics TMDL includes final freshwater metals allocations in wet weather for Dominguez Channel. The concentration-based allocations for NPDES dischargers (in µg/L based on hardness = 50 mg/L) are 9.7 for copper, 42.7 for lead, and 69.7 for zinc (Attachment A to Resolution No. R11-008, p. 12). This Order establishes WQBELs that are statistically calculated based on the TMDL final freshwater concentration-based allocations for copper, lead, and zinc.

The Harbor Toxics TMDL also includes freshwater metals interim allocations for Dominguez Channel (wet weather only) for copper, lead and zinc (Attachment A to Resolution No. R11-008, p. 10). The interim limits, however, are greater than the limits established in the previous

permit and are greater than the levels observed during effluent monitoring. The TMDL interim limits, therefore, are not applicable to the discharge from this facility.

The Harbor Toxics TMDL also includes both final and interim freshwater toxicity allocations for Dominguez Channel in wet weather. The final allocation is 1 TU_c, or its equivalent based on any Statewide Toxicity Policy (Attachment A to Resolution No. R11-008, p. 11). All effluent sampling results have achieved the final TMDL allocation of 1 TU_c. Because the TMDL interim WLA does not allow any decrease in current facility performance, and the discharge does not qualify for a compliance schedule in the permit under the 2008 Compliance Schedule Policy, the final TMDL WLA is applicable to the discharge from this facility and equivalent final effluent limits, expressed in units used by the Test of Significant Toxicity (USEPA, 2010, Diamond et al., 2013) are established in this Order. Because this is a wet weather effluent limit, compliance monitoring for these limits shall include wet weather conditions as defined by this Order.

Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary Compliance Monitoring Program

The TMDL's implementation schedule allows up to 20 years after the TMDL effective date to attain WLAs and load allocations for those dischargers who justify the need for additional time 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 Dominguez Channel Estuary. These plans shall follow the "TMDL Element – Monitoring Plan" provisions in Attachment A to Resolution No. R11-008. The Discharger must inform the Regional Board if they plan to join a collaborative monitoring effort or develop a site specific plan no later than **90 days** after the effective date of this Order. If the Discharger is joining a collaborative effort that notification must include documentation of such. If developing a site specific monitoring plan, the plan must be submitted no later than **12 months** after the effective date of this Order for public review and, subsequently, Executive Officer approval. Monitoring shall begin 6 months after the monitoring plan is approved by the Executive Officer.

E. Other Plans, Polices and Regulations—Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

Pollutants of concern for the discharges covered under this Order were identified based on effluent monitoring data, constituents regulated in the previous Order, and the pollutants on the 303(d) list for the Dominguez Channel. Effluent monitoring during the term of Order No. R4-2009-0024 detected elevated levels of zinc and heptachlor; therefore these constituents are also considered pollutants of concern. Order No. R4-2009-0024 included effluent limitations for BOD₅, oil and grease, pH, TSS, hexavalent chromium, copper, lead, selenium, thallium, cyanide, 1,1-dichloroethylene, tetrachloroethylene, 1,1,2-trichloroethane, settleable solids, temperature and

turbidity. Order No. R4-2009-0024 also identified trichloroethylene as an original pollutant of concern. The Dominguez Channel is listed as impaired for ammonia, bacteria, copper, lead, zinc, toxicity, and diazinon. As such, these constituents are pollutants of concern.

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 Dominguez Channel that are regulated by an NPDES permit.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Technology-based effluent limits are intended to achieve a minimum level of treatment of pollutants for point source discharges. Section 301(b) of the CWA and USEPA permit regulations at 40 C.F.R. section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on 40 C.F.R. section 122.23 (NPDES Permit Regulations) and 40 C.F.R. 125.3 (Best Professional Judgment (BPJ)).

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

- a.** Best practicable treatment control technology (BPT) represents the average of the best existing performance by well-operated facilities within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- b.** Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- c.** Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering a two-part reasonableness test. The first test compares the relationship between the costs of attaining a reduction in effluent discharge and the resulting benefits. The second test examines the cost and level of reduction of pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources. Effluent limitations must be reasonable under both tests.
- 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 40 C.F.R. section 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is

used, the Regional Water Board must consider specific factors outlined in 40 C.F.R. section 125.3.

2. Applicable Technology-Based Effluent Limitations

As the discharge from this Facility is limited to treated groundwater, there are no applicable national Effluent Limitation Guidelines (ELGs).

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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

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

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

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

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 Dominguez Channel 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 Dominguez Channel. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with 40 C.F.R. section 131.38(c)(3): freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time. The Regional Water Board has determined that freshwater criteria applies to Dominguez Channel upstream of Vermont Avenue. The point where the effluent is discharged to the receiving water (at Western Avenue) is approximately one mile upstream of Vermont Avenue. Therefore, the CTR criteria for freshwater 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 Dominguez Channel.

Some water quality criteria are hardness dependent. The Discharger provided hardness data for the receiving water. The lowest receiving water hardness was 200 mg/L (CaCO₃), which is the value used to conduct the Reasonable Potential Analysis (RPA) for this Order.

Table F-5. Applicable Water Quality Criteria

CTR No.	Constituent	Selected Criteria	CTR/NTR Water Quality Criteria ¹		
			Freshwater		Human Health for Consumption of: Organisms only
			Acute	Chronic	
	µg/L	µg/L	µg/L	µg/L	
1	Antimony	4,300	--	--	4,300
2	Arsenic	150	340	150	--
4	Cadmium	4.2	9.9	4.2	Narrative
5a	Chromium III	365	3,063	365	Narrative
5b	Chromium VI	11	16	11	Narrative
6	Copper	9.7 ²	27	17	--
7	Lead	42.7 ²	197	7.7	Narrative
8	Mercury	0.051	--	--	0.051
9	Nickel, Total Recoverable	94	843	94	4,600
10	Selenium, Total Recoverable	5	20	5	Narrative
11	Silver, Total Recoverable	13	13	--	--
12	Thallium, Total Recoverable	6.3	--	--	6.3
13	Zinc	69.7 ²	216	216	--
14	Cyanide	5.2	22	5.2	220,000
27	Dichlorobromomethane	46	--	--	46
29	1,2-Dichloroethane	99	--	--	99
30	1,1-Dichloroethylene	3.2	--	--	3.2
38	Tetrachloroethylene	8.9	--	--	8.9
42	1,1,2-Trichloroethane	42	--	--	42
43	Trichloroethylene	81	--	--	81
97	N-Nitrosodi-n-Propylamine	1.4	--	--	1.4
117	Heptachlor	0.00021	0.52	0.0038	0.00021

NC = no criteria

N/A – Not applicable; indicates the receiving water body is not characterized as saltwater.

¹ Based on hardness = 200

² Page 12, Attachment A to Resolution No. R11-008 (Harbor Toxics TMDL)

3. Determining the Need for WQBELS

In accordance with section 1.3 of the SIP, the Regional Water Board conducts a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Water Board analyzes effluent and receiving water data and identifies the maximum observed effluent concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent. To determine reasonable potential, the MEC and

the B are then compared with the applicable water quality objectives (C) outlined in the CTR, NTR, as well as the Basin Plan. For all pollutants that have a reasonable potential to cause or contribute to an excursion above a state water quality standard, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Regional Water Board identifies the MEC and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger.

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

- 1) Trigger 1 - If the $MEC \geq C$, 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 using data collected by the Discharger at Monitoring Location EFF-001 and RSW-001 from March 2009 through June 2013. This period represents the terms of Order No. R4-2009-0024. Based on the RPA, pollutants that demonstrate reasonable potential are chromium VI, copper, lead, selenium, thallium, zinc, cyanide, 1,1-dichloroethylene, tetrachloroethylene, 1,1,2-trichloroethane, trichloroethylene, and heptachlor. Refer to Attachment J for a summary of the RPA and associated effluent limitation calculations.

Existing Order No. R4-2009-0024 included effluent limitations for hexavalent chromium, thallium, cyanide, and 1,1,2-trichloroethane and identified trichloroethylene as an original pollutant of concern. The Discharger currently provides ion exchange treatment that results in reduction of metals in effluent. In addition, the LGAC treatment results in removal of VOCs. However, without data to show the pollutants are not present at elevated levels in the influent to the treatment facility, discontinuance of effluent limitations may allow for a reduction in treatment. Under Trigger 3, this information indicates that the discharge has reasonable potential to exceed CTR criteria for these constituents.

Additionally, the Regional Water Board developed wet weather WQBELs for copper, lead, and zinc that have available WLAs under the Harbor Toxics TMDL, which was adopted by the Regional Water Board on May 5, 2011. The effluent limitations for these pollutants were established for wet weather discharges regardless of whether or not there is reasonable potential for the pollutants to be present in the discharge at levels that would cause or contribute to a violation of water quality standards. The Regional Water Board developed water quality-based effluent limitations for these pollutants pursuant to 40 C.F.R. section 122.44(d)(1)(vii), which does not require or contemplate a reasonable potential analysis. Similarly, the SIP at Section 1.3 recognizes that reasonable potential analysis is not appropriate if a TMDL has been developed.

Table F-6. Summary Reasonable Potential Analysis

CTR No.	Constituent	Applicable Water Quality Criteria (C)	Max Effluent Conc. (MEC)	Maximum Detected Receiving Water Conc. (B)	RPA Result - Need Limit?	Reason
1	Antimony	4,300	1	2.6	No	MEC<C
2	Arsenic	150	2.2	3.4	No	MEC<C
3	Beryllium	No Criteria	J 0.27	<0.29	No	No Criteria
4	Cadmium	4.2	1.3	0.201	No	MEC<C
5a	Chromium III	365	8.8	1.3	No	MEC<C
5b	Chromium VI	11	7.5	1.9	Yes ¹	Trigger 3
6	Copper, Total Recoverable	9.7	5.2	24	Yes ²	B>C, detected in effluent
7	Lead, Total Recoverable	42.7	1.5	5.2	Yes ^{1, 2}	Trigger 3
8	Mercury	0.051	0.0026	0.039	No	MEC<C
9	Nickel, Total Recoverable	94	8.3	5.0	No	MEC<C
10	Selenium, Total Recoverable	5.0	9.6	1.5	Yes	MEC≥C
11	Silver, Total Recoverable	13	1	<0.013	No	MEC<C
12	Thallium, Total Recoverable	6.3	1.2	0.12	Yes ¹	Trigger 3
13	Zinc, Total Recoverable	69.7	553	282	Yes ²	MEC≥C
14	Cyanide	5.2	1.5	0.9	Yes ¹	Trigger 3
26	Chloroform	No Criteria	3.8	<0.33	No	No Criteria
27	Dichlorobromomethane	46	0.8	<0.21	No	MEC<C
29	1,2-Dichloroethane	99	0.67	<0.24	No	MEC<C
30	1,1-Dichloroethylene	3.2	2.6	<0.42	Yes ³	Trigger 3
35	Methyl Chloride	No Criteria	0.29	<0.4	No	No Criteria
38	Tetrachloroethylene	8.9	0.39	22	Yes	B>C, detected in effluent
42	1,1,2-Trichloroethane	42	<0.26	<0.3	Yes ³	Trigger 3
43	Trichloroethylene	81	<0.14	16	Yes ³	Trigger 3
97	N-Nitrosodi-n-Propylamine	1.4	<10	<0.1	No	MEC<C
117	Heptachlor	0.00021	0.005	<0.0031	Yes	MEC≥C

¹ Reasonable potential has been determined based on Trigger 3. The Discharger currently provides ion exchange treatment that removes metals and cyanide from the groundwater. The limit ensures that the Facility is held to treatment standards that address applicable water quality criteria.

² Constituent is required to have a wet weather limitation regardless of reasonable potential determination in order to implement the Harbor Toxics TMDL.

³ Reasonable potential has been determined based on Trigger 3. Order No. R4-2009-0024 contains effluent limitations for 1,1-dichloroethylene, and 1,1,2-trichloroethane. 1,1-Dichloroethylene was detected in the effluent. This source of this substance may be from biodegradation of trichloroethylene, which was identified as a pollutant of concern in Order No. R4-2009-0024. The Discharger currently provides treatment that reduces or removes both these constituents from the groundwater and provides incidental removal of 1,1,2-trichloroethane. The limit ensures the Facility is held to treatment standards to address applicable water quality criteria.

4. **WQBEL Calculations**

- a. 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 wasteload allocation (WLA) established as part of a total maximum daily load (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. The wet-weather WQBELs for copper, lead, and zinc are based on the final wet-weather WLAs established in the Harbor Toxics TMDL and the procedures specified in section 1.4 of the SIP. This Order requires that discharges from the Facility during dry-weather must comply with effluent limitations calculated based on CTR criteria and SIP methods. Within this Order, “dry-weather” is assumed for any discharge that is neither the result of precipitation nor the result of a precipitation event of a magnitude that produces a flow in the channel of less than 63 cubic feet per second (cfs) as measured at station S28 in the Dominguez Channel.

The dry-weather WQBELs for copper and zinc are based on the reasonable potential determination and are calculated according to section 1.4 of the SIP. Additionally, WQBELs for selenium, 1,1-dichloroethylene, tetrachloroethylene, trichloroethylene, and heptachlor are based on the reasonable potential determination and are calculated according to section 1.4 of the SIP as well.

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

Dry Weather Total Recoverable Copper

The following demonstrates how WQBELs were established in this Order for dry-weather total recoverable copper. The calculation represents a WQBEL established based on reasonable potential analysis.

The process for developing these limits is in accordance with Section 1.4 of the SIP.

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:

$$ECA = C + D(C-B) \text{ when } C > B, \text{ and}$$

$$ECA = C \quad \text{when } C \leq B,$$

Where:

C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH, and translators,

D = The dilution credit, and

B = The ambient background concentration

Dilution was not allowed due to the nature of the receiving water and quantity of the effluent; therefore,

$$ECA = C$$

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

$$ECA_{acute} = 26.90$$

$$ECA_{chronic} = 16.87$$

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.

$$LTA_{acute} = ECA_{acute} \times \text{Multiplier}_{acute99}$$

$$LTA_{chronic} = ECA_{chronic} \times \text{Multiplier}_{chronic99}$$

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

No. of Samples	CV	ECA Multiplier _{acute}	ECA Multiplier _{chronic}
71	0.75	0.263	0.458

Dry-weather total recoverable copper:

$$LTA_{acute} = 26.90 \mu\text{g/L} \times 0.263 = 7.07$$

$$LTA_{chronic} = 16.87 \mu\text{g/L} \times 0.458 = 7.73$$

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

For dry-weather total recoverable copper, the most limiting LTA is LTA_{acute}

$$LTA_{dryweather} = LTA_{acute} = 7.07$$

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.

$$AMEL_{aquaticlife} = LTA \times AMEL_{multiplier95}$$

$$MDEL_{aquaticlife} = LTA \times MDEL_{multiplier99}$$

AMEL multipliers are based on a 95th percentile occurrence probability, and the MDEL multipliers are based on a 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 dry-weather total recoverable copper, the following data were used to develop the AMEL and MDEL for effluent limitations using equations provided in section 1.4, Step 5 of the SIP:

No of Samples Per Month	CV	Multiplier _{MDEL99}	Multiplier _{AMEL95}
4	0.75	3.785	1.7

Dry-weather total recoverable copper:

$$AMEL = 7.07 \mu\text{g/L} \times 1.7 = 12$$

$$MDEL = 7.07 \mu\text{g/L} \times 3.785 = 27$$

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

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

In the case of total recoverable copper, there are no human health criteria. Therefore there will be no AMEL or MDEL calculated for human health criteria.

Step 6: Calculate the MDEL for human health by multiplying the AMEL by the ratio of 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.

$$MDEL_{human\ health} = AMEL_{human\ health} \times (\text{Multiplier}_{MDEL} / \text{Multiplier}_{AMEL})$$

In the case of total recoverable copper, there are no human health criteria. Therefore there will be no AMEL or MDEL calculated for human health criteria.

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

Wet-Weather Total Recoverable Copper

The wet-weather total recoverable copper limit calculation is based on WLAs established in the Harbor toxics TMDL.

The process for developing these limits is in accordance with Section 1.4 of the SIP.

Calculation of aquatic life AMEL and MDEL:

Step 1: The parameters for determining the ECA are the same as in the dry-weather example above. For wet-weather total recoverable copper, however, the ECA is equal to the concentration-based Dominguez Channel wet-weather final WLA established in the Harbor Toxics TMDL:

$$ECA = WLA_{acute} = 9.7$$

$$ECA = WLA_{chronic} = \text{Not applicable}$$

Step 2: As explained in the dry-weather example above, the equations for determining the LTA values are:

$$LTA_{acute} = ECA_{acute} \times \text{Multiplier}_{acute99}$$

$$LTA_{chronic} = ECA_{chronic} \times \text{Multiplier}_{chronic99}$$

As explained in the dry-weather example above, the following data were used to develop the acute and chronic LTAs:

No. of Samples	CV	ECA Multiplier _{acute}	ECA Multiplier _{chronic}
71	0.75	0.263	0.458

Note that for wet-weather total recoverable copper, the TMDL WLA is based on acute criterion, and therefore only acute multipliers will be used to develop the wet weather effluent limitations.

$$LTA_{acute} = 9.7 \mu\text{g/L} \times 0.263 = 2.55$$

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

For wet-weather total recoverable copper, since only a wet-weather LTA is calculated, no comparison is made.

$$LTA_{wetweather} = LTA_{acute} = 2.55$$

Step 4: As explained in the dry-weather example above, the following equations were used to calculate the WQBELs.

$$AMEL_{aquaticlife} = LTA \times \text{Multiplier}_{multiplier95}$$

$$MDEL_{aquaticlife} = LTA \times \text{Multiplier}_{multiplier99}$$

As explained in the dry-weather example above, the following data were used to develop the AMEL and MDEL:

No of Samples Per Month	CV	Multiplier _{MDEL99}	Multiplier _{AMEL95}
4	0.75	3.785	1.7

Wet-weather total recoverable copper:

$$AMEL = 2.55 \mu\text{g/L} \times 1.7 = 4.3$$

$$MDEL = 2.55 \mu\text{g/L} \times 3.785 = 9.7$$

Steps 5-7: Same as in the dry-weather example above.

Calculations for effluent limitations are based on the acute and chronic criteria for dry-weather total recoverable copper and the acute WLA for wet-weather total recoverable copper. These limitations are expected to be protective of beneficial uses. Final WQBELs for each are summarized in Table F-8 of the Fact Sheet.

5. WQBELs based on Basin Plan Objectives

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

- a. **pH.** The pH of inland surface waters 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 0.5 units from natural conditions as a result of waste discharge. This Order includes effluent and receiving water limitations for pH to ensure compliance with Basin Plan Objectives for pH.
- b. **Ammonia.** The discharge was evaluated for potential to exceed the Basin Plan objective for ammonia as specified in Resolution No. 2002-011. The Basin Plan objectives for ammonia are expressed as a function of pH and temperature. The toxicity of ammonia to aquatic organisms increases with increasing pH and temperature. In turn, objectives calculated from higher pH and temperature values results in lower (more stringent) objectives. The ammonia objectives were calculated using the 90th percentile pH and 90th percentile temperature monitoring results obtained from the upstream receiving water monitoring location RSW-001. In this case, upstream data was used in lieu of downstream receiving water monitoring data because the previous Order R4-2009-0024 did not require the Discharger to monitor the receiving water downstream of the discharge. From the period of March 13, 2009 through April 14, 2013, the maximum effluent concentration of ammonia was 0.17 mg/L, which is below the calculated objectives. In order to address the receiving water impairment status due to ammonia, this Order requires continued monitoring for effluent ammonia. In addition, this Order requires the discharger to conduct upstream ammonia monitoring and downstream pH and temperature monitoring in order to provide data necessary to calculate ammonia objectives and conduct future RPAs. The calculated ammonia water quality objectives are as follows:
 - i. 1-hour average unionized ammonia concentration: 0.85 mg/L
 - ii. 4-day average unionized ammonia concentration: 0.47 mg/L
 - iii. 30-day average unionized ammonia concentration: 0.19 mg/L
- c. **Dissolved Oxygen.** 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. This Order applies the water quality objective for dissolved oxygen as a receiving water limitation.
- d. **Turbidity.** 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%. This Order applies the water quality objective for turbidity as a receiving water limitation in addition to the technology-based effluent limitation. At times the WQO may be more stringent than the numeric technology-based effluent limitation.

- e. **Temperature.** The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. Based on the requirements of the Thermal Plan and 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*, a maximum effluent temperature limitation of 86°F is included in the permit. The white paper evaluated the optimum temperatures for aquatic species routinely available in surface water bodies within the Los Angeles Region including: steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel.

6. **WQBELs based on the Harbor Toxics TMDL**

The Harbor Toxics TMDL assigned freshwater final concentration-based waste load allocations (WLAs) for chronic toxicity, copper, lead, and zinc for discharges to the Dominguez Channel. 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 interim limits and a compliance plan. As explained in Section III.D "Implementation of the Harbor Toxics TMDL" the Discharger has demonstrated the ability to meet the final limits established in this Order and therefore a compliance schedule is not required.

During the TMDL implementation period, the Discharger is also 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 Dominguez Channel Estuary. 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.

7. **Whole Effluent Toxicity (WET)**

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 measures mortality. A chronic toxicity test 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.

a. **Chronic Toxicity Effluent Limitations**

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 discharge from Discharge Point 001 has been determined to have the reasonable potential to cause or contribute chronic toxicity in receiving waters, in

accordance with 40 CFR part 122.44(d), because a chronic toxicity TMDL WLA is applicable to the discharge and WQBELs based on this WLA are required (40 CFR part 122.44(d)(1)(vii)(B)).

The USEPA Regions 8, 9 and 10 Toxicity Training Tool (January 2010) (Toxicity Tool) recommends that permitting authorities establish a monthly median effluent limit (MML) of 1.0 TU_c as the monthly compliance level for chronic WET for NPDES dischargers without a mixing zone or dilution allowance (Section 2.6.2). The use of the MML of 1.0 TU_c for chronic WET is recommended only in conjunction with the following permit conditions as defined in the USEPA's Technical Support Document For Water Quality-based Toxics Control (March 1991) (TSD):

- A statistically calculated maximum daily effluent limit (MDL) for chronic WET (TSD Section 5.4.1) ; and
- Routine WET monitoring using the most sensitive test species identified through screening using species representing three different phyla (TSD Section 1.3.4).

This Order establishes a MMEL of "Pass", as the monthly chronic toxicity effluent limit, and a MDEL of "Pass" or "% Effect <50", as the daily chronic toxicity effluent limit. While the chronic toxicity TMDL uses U.S. EPA's multi-concentration NOEC-LOEC hypothesis testing approach and recommended numeric water quality criterion of 1.0 TU_c to set and measure the toxicity target, the numeric chronic toxicity effluent limits use U.S. EPA's two-concentration TST hypothesis testing approach. Both of these approaches are scientifically valid and provide comparable levels of water quality protection. However, the TST approach is superior in that it improves test power, provides the incentive for toxicity laboratories to generate high quality data, streamlines toxicity test data analysis, and is more likely to correctly classify toxic and not toxic samples (U.S. EPA, 2010; Diamond et al, 2013). The TST-based effluent limits derive from and comply with the underlying water quality standard for chronic toxicity in the Basin Plan, and are consistent with the assumptions and requirements of the available final WLA for chronic toxicity approved by U.S. EPA (40 CFR 122.44(d)(1)(vii)). These effluent limits are feasible and fully comply with applicable NPDES regulations (e.g., 40 CFR 122.44(d)(1) and 122.45(d)(1)). The routine WET monitoring requirements have been established in Section V.B of Attachment E – Monitoring and Reporting Requirements of this Order.

8. Final WQBELS

A summary of the WQBELs are described in Table F-7.

Table F-7. Summary of Water Quality-based Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	standard units	--	--	6.5	8.5
Chromium (VI)	µg/L	5.6	16	--	--
	lbs/day ¹	0.00093	0.0027	--	--
Copper, Total Recoverable, Dry-Weather ²	µg/L	12	27	--	--
	lbs/day ¹	0.0020	0.0045	--	--
Copper, Total Recoverable, Wet-Weather ³	µg/L	4.4	9.7	--	--
	lbs/day ¹	0.00073	0.0016	--	--
Lead, Total Recoverable, Dry-Weather ²	µg/L	5.1	14	--	--
	lbs/day ¹	0.00085	0.0023	--	--
Lead, Total Recoverable, Wet Weather ³	µg/L	15	42.7	--	--
	lbs/day ¹	0.0025	0.0071	--	--
Selenium, Total Recoverable	µg/L	4.1	8.2	--	--
	lbs/day ¹	0.00068	0.0014	--	--
Thallium, Total Recoverable	µg/L	6.3	13	--	--
	lbs/day ¹	0.0011	0.0021	--	--
Cyanide, Total (as CN)	µg/L	2.2	7.4	--	--
	lbs/day ¹	0.00037	0.0012	--	--
Zinc, Total Recoverable, Dry-Weather ²	µg/L	65	216	--	--
	lbs/day ¹	0.011	0.036	--	--
Zinc, Total Recoverable, Wet Weather ³	µg/L	21	69.6	--	--
	lbs/day ¹	0.0035	0.012	--	--
1,1-Dichloroethylene	µg/L	3.2	6.4	--	--
	lbs/day ¹	0.00053	0.0011	--	--
Tetrachloroethylene	µg/L	8.9	18	--	--
	lbs/day ¹	0.0015	0.0030	--	--
1,1,2-Trichloroethane	µg/L	42	84	--	--
	lbs/day ¹	0.0070	0.014	--	--
Trichloroethylene	µg/L	81	163	--	--
	lbs/day ¹	0.014	0.027	--	--
Heptachlor	µg/L	0.00021	0.00042	--	--
	lbs/day ¹	3.5×10^{-8}	7.0×10^{-8}	--	--
Temperature	Deg. F	--	--	--	86
Chronic Toxicity, Wet Weather ³	Pass or Fail and % Effect for TST approach	Pass ^{4,5}	Pass or % Effect <50 ⁴	--	--

¹ The mass limitations are based on a maximum flow of 0.02 MGD and are calculated as follows:

$$\text{Flow (MGD)} \times \text{Concentration (mg/L)} \times 8.34 \text{ (conversion factor)} = \text{lbs/day.}$$

² Dry weather is assumed for any discharge that occurs when the flow is less than 63 cubic feet per second (cfs) as measured at station S28 in the Dominguez Channel.

³ Wet weather is assumed for any discharge that occurs when the flow is equal to or greater than 63 cubic feet per second (cfs) as measured at station S28 in the Dominguez Channel.

⁴ Report "Pass" or "Fail" for Median Monthly Effluent Limitation (MMEL). Report "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitation (MDEL). During a calendar month, exactly three independent toxicity tests are required for routine monitoring when one toxicity test results in "Fail". This limit applies for wet weather discharges only.

⁵ This is a Median Monthly Effluent Limitation.

D. Final Effluent Limitation Considerations

Effluent limitations for BOD₅, oil and grease, pH, TSS, settleable solids, temperature and turbidity are included consistent with the previous Order (No. R4-2009-0024). Further, copper, selenium, zinc, tetrachloroethylene, and heptachlor have exhibited reasonable potential and have final effluent limits based on the most current sampling data set. In addition, this Order includes effluent limitations for hexavalent chromium, lead, thallium, cyanide, 1,1-dichloroethylene, 1,1,2-trichloroethane, and trichloroethylene, which were determined to have reasonable potential based on their historic presence in the contaminated groundwater. Approved Harbor Toxics TMDL WLAs for copper, lead, and zinc are also available for the discharge. Refer to Attachment J for a summary of the RPA and associated effluent limitation calculations.

1. Anti-Backsliding Requirements

All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order and therefore anti-backsliding requirements are satisfied.

2. Antidegradation Policies

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 is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16 because there will be no lowering of water quality of receiving waters. This Order does not provide for an increase in the permitted design flow or allow for a reduction in the level of treatment. The final limitations in this Order meet the requirements of the SIP and hold the Discharger to performance levels that will not cause or contribute to water quality impairment. Further, compliance with these requirements will result in the use of best practicable treatment or control of the discharge. Hence, the permitted discharge is consistent with the antidegradation provision of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16.

3. 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)

4. 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 which apply to the waste stream consist of restrictions on pH, BOD, TSS, oil and grease, turbidity, sulfides, 1,1,1-trichloroethane, acetone, phenolic compounds (chlorinated) and xylene.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the

CTR is the applicable standard pursuant to 40 C.F.R. section 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants are based on the SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

5. Summary of Final Effluent Limitations

Table F-8 provides a summary of the final effluent limitations at Discharge Point No. 001. Effluent limits for copper and selenium have been retained consistent with the existing order. Historical effluent violations have been noted for copper and selenium. Monitoring data demonstrates, however, that the Discharger is now in compliance with the AMELs and MDELs for both copper and selenium. No exceedance has been detected for copper during 21 sampling events since October, 2011. No exceedance has been detected for selenium during 27 sampling events since March, 2011.

Table F-8. Summary of Final Effluent Limitations

Pollutant	Unit	Effluent Limitations				Basis ¹
		Average Monthly	Maximum Daily	Instantaneous		
				Minimum	Maximum	
Conventional Pollutants						
Biochemical Oxygen Demand (BOD) ₅ @ 20°C	mg/L	20	30	--	--	E
	lbs/day ²	3.3	5.0	--	--	
Oil and Grease	mg/L	10	15	--	--	E
	lbs/day ²	1.7	2.5	--	--	
pH	standard units	--	--	6.5	8.5	BP, E
Total Suspended Solids (TSS)	mg/L	50	75	--	--	E
	lbs/day ²	8.3	13	--	--	
Non-Conventional Pollutants						
Settleable Solids	ml/L	0.1	0.3	--	--	E
Temperature	°F	--	--	--	86	E, WP
Turbidity	NTU	50	75	--	--	E
Chronic Toxicity, Wet Weather ⁶	Pass or Fail and % Effect for TST approach	Pass ^{3,4}	Pass or % Effect <50 ³	--	--	TMDL
Priority Pollutants						
Chromium (VI)	µg/L	5.6	16	--	--	CTR, SIP, E
	lbs/day ²	0.00093	0.0027	--	--	
Copper, Total Recoverable, Dry Weather ⁵	µg/L	2.9	5.8	--	--	CTR, SIP, E
	lbs/day ²	0.0005	0.001	--	--	
Copper, Total Recoverable, Wet Weather ⁶	µg/L	4.4	9.7	--	--	TMDL
	lbs/day ²	0.00073	0.0016	--	--	
Lead, Total Recoverable, Dry Weather ⁵	µg/L	5.1 ⁷	11 ⁷	--	--	CTR, SIP, E
	lbs/day ²	0.00085	0.0018	--	--	

Pollutant	Unit	Effluent Limitations				Basis ¹
		Average Monthly	Maximum Daily	Instantaneous		
				Minimum	Maximum	
Lead, Total Recoverable, Wet Weather ⁶	µg/L	15	42.7	--	--	TMDL
	lbs/day ²	0.0025	0.0071	--	--	
Selenium, Total Recoverable	µg/L	4.1	8.2	--	--	CTR, SIP, E
	lbs/day ²	0.00068	0.0014	--	--	
Thallium, Total Recoverable	µg/L	6.3	13	--	--	CTR, SIP, E
	lbs/day ²	0.0010	0.0022	--	--	
Cyanide, Total (as CN)	µg/L	2.2	7.4	--	--	CTR, SIP, E
	lbs/day ²	0.00037	0.0012	--	--	
Zinc, Total Recoverable, Dry Weather ⁵	µg/L	65	216	--	--	CTR, SIP
	lbs/day ²	0.011	0.036	--	--	
Zinc, Total Recoverable, Wet Weather ⁶	µg/L	21	69.6	--	--	TMDL
	lbs/day ²	0.0035	0.012	--	--	
1,1-Dichloroethylene	µg/L	3.2	6.4	--	--	CTR, SIP, E
	lbs/day ²	0.00053	0.0011	--	--	
Tetrachloroethylene	µg/L	8.9	18	--	--	CTR, SIP, E
	lbs/day ²	0.0015	0.0030	--	--	
1,1,2-Trichloroethane	µg/L	42	84	--	--	CTR, SIP, E
	lbs/day ²	0.0070	0.014	--	--	
Trichloroethylene	µg/L	81	163	--	--	CTR, SIP, E
	lbs/day ²	0.014	0.027	--	--	
Heptachlor	µg/L	0.00021	0.00042	--	--	CTR, SIP
	lbs/day ²	3.5 x 10 ⁻⁸	7.0 x 10 ⁻⁸	--	--	

¹ BP = Basin Plan; E = Existing; BPJ = Best professional judgment; CTR=California Toxics Rule; SIP=State Implementation Plan, TMDL = Harbor Toxics Total Maximum Daily Load

² The mass limitations are based on a maximum flow of 0.02 MGD and is calculated as follows:
 Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

³ Report "Pass" or "Fail" for Median Monthly Effluent Limitation (MMEL). Report "Pass" or "Fail" and "% Effect" for Maximum Daily Effluent Limitation (MDEL). During a calendar month, exactly three independent toxicity tests are required for routine monitoring when one toxicity test results in "Fail". This limit applies for wet weather discharges only.

⁴ This is a Median Monthly Effluent Limitation.

⁵ Dry weather is assumed for any discharge that occurs when the flow is less than 63 cubic feet per second (cfs) as measured at station S28 in the Dominguez Channel.

⁶ Wet weather is assumed for any discharge that occurs when the flow is equal to or greater than 63 cubic feet per second (cfs) as measured at station S28 in the Dominguez Channel.

⁷ The Water Quality-Based Effluent Limitations (WQBELs) calculated for lead (dry weather) are 5.1 µg/L (average monthly) and 14 µg/L (maximum daily). The existing effluent limitations are 5.5 µg/L (average monthly) and 11 µg/L (maximum daily). Therefore, the WQBEL calculated average monthly limitation is included in this Order; but, to satisfy anti-backsliding requirements, the maximum daily limitation from the existing Order is retained.

- E. Interim Effluent Limitations—Not Applicable**
- F. Land Discharge Specifications—Not Applicable**
- G. Recycling 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 (40 C.F.R. § 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Basin Plan.

B. Groundwater—Not Applicable

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

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

B. Special Provisions

1. Reopener Provisions

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

2. Special Studies and Additional Monitoring Requirements

- a. **Initial Investigation Toxicity Reduction Evaluation Workplan.** This provision is based on section 4 of the SIP, Toxicity Control Provisions, which establishes minimum toxicity control requirements for implementing the narrative toxicity objective for aquatic life protection established in the basin plans of the State of California.
- b. **Harbor Toxics TMDL Water Column, Sediment, and Fish Tissue Monitoring for Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary 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 Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary. These plans shall follow the “TMDL Element – Monitoring Plan” provisions in Attachment A to Resolution No. R11-008. The Discharger must inform the Regional Board if they plan to join a collaborative monitoring effort or develop a site specific plan no later than **90 days** after the effective date of this Order. If the Discharger is joining a collaborative effort that notification must include documentation of such. If developing a site specific monitoring plan, the plan must be submitted no later than **12 months** after the effective date of this Order for public review and, subsequently, Executive Officer approval. Monitoring shall begin 6 months after a monitoring plan is approved by the Executive Officer.

3. Best Management Practices and Pollution Prevention—Not Applicable

4. Construction, Operation, and Maintenance Specifications

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

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

6. Other Special Provisions—Not Applicable

7. Compliance Schedules—Not Applicable

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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

A. Influent Monitoring—Not Applicable

B. Effluent Monitoring

Monitoring for pollutants expected to be present and for which effluent limitations exist at Monitoring Location EFF-001 for Discharge Point No. 001 will be required as shown in the proposed MRP. To determine compliance with effluent limitations, the proposed monitoring plan includes monthly monitoring for all priority pollutants that demonstrated reasonable potential. All other monitoring requirements have been retained consistent with Order No. R4-2009-0024.

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 chronic 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.

D. Receiving Water Monitoring

1. Surface Water

The Regional Water Board is requiring that the Discharger conduct upstream receiving water monitoring for pH, temperature, TDS, hardness, salinity, and CTR priority pollutants at Monitoring Location RSW-001. Sampling for hardness has been added to upstream and downstream sampling requirements to be consistent with other Orders in the Region, and to provide an updated value for conducting RPA. Downstream receiving water monitoring is required for pH, temperature, and dissolved oxygen at Monitoring Location RSW-002, to determine compliance with receiving water limitations and characterize the quality of the receiving water.

2. Groundwater—Not Applicable

E. Other Monitoring Requirements—Not Applicable

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for Honeywell International Incorporated Gardena Groundwater Remediation Facility. 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 to all interested parties.

The Regional Water Board's web address is <http://www.waterboards.ca.gov/losangeles> where the public has been provided access to the agenda including any changes in dates and locations.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Board, written comments must be received at the Regional Board offices by 5:00 p.m. on May 9, 2014.

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: **June 12, 2014**
Time: **9:00 AM**
Location: **Metropolitan Water District of Southern California Board Room
700 North Alameda Street
Los Angeles, CA 90071**

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) does not apply to this proceeding.

Ex Parte Communications Prohibited: As a quasi-adjudicative proceeding, no board member may engage in communications regarding 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:

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 5 p.m. on May 9, 2014. Comments or evidence received after that time will be submitted, ex agenda, to the Board for consideration, but only included in the 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 oral testimony.

G. Hearing Procedure

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

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

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

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

I. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations 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.

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 6-months 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 General 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 C.F.R, 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 [C.F.R], 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 VII.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 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 VII.A.8 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 annual 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		

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
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	CVAAs	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

Table 2d – PESTICIDES – PCBs*	GC
Delta-BHC	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Gamma-BHC (Lindane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

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

Techniques:

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

ATTACHMENT I – LIST OF PRIORITY POLLUTANTS

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

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
43	Trichloroethylene	79016	1
44	Vinyl Chloride	75014	1
45	2-Chlorophenol	95578	1
46	2,4-Dichlorophenol	120832	1
47	2,4-Dimethylphenol	105679	1
48	2-Methyl-4,6-Dinitrophenol	534521	1
49	2,4-Dinitrophenol	51285	1
50	2-Nitrophenol	88755	1
51	4-Nitrophenol	100027	1
52	3-Methyl-4-Chlorophenol	59507	1
53	Pentachlorophenol	87865	1
54	Phenol	108952	1
55	2,4,6-Trichlorophenol	88062	1
56	Acenaphthene	83329	1
57	Acenaphthylene	208968	1
58	Anthracene	120127	1
59	Benzidine	92875	1
60	Benzo(a)Anthracene	56553	1
61	Benzo(a)Pyrene	50328	1
62	Benzo(b)Fluoranthene	205992	1
63	Benzo(ghi)Perylene	191242	1
64	Benzo(k)Fluoranthene	207089	1
65	Bis(2-Chloroethoxy)Methane	111911	1
66	Bis(2-Chloroethyl)Ether	111444	1
67	Bis(2-Chloroisopropyl)Ether	108601	1
68	Bis(2-Ethylhexyl)Phthalate	117817	1
69	4-Bromophenyl Phenyl Ether	101553	1
70	Butylbenzyl Phthalate	85687	1
71	2-Chloronaphthalene	91587	1
72	4-Chlorophenyl Phenyl Ether	7005723	1
73	Chrysene	218019	1
74	Dibenzo(a,h)Anthracene	53703	1
75	1,2-Dichlorobenzene	95501	1
76	1,3-Dichlorobenzene	541731	1
77	1,4-Dichlorobenzene	106467	1
78	3,3'-Dichlorobenzidine	91941	1
79	Diethyl Phthalate	84662	1
80	Dimethyl Phthalate	131113	1
81	Di-n-Butyl Phthalate	84742	1
82	2,4-Dinitrotoluene	121142	1
83	2,6-Dinitrotoluene	606202	1
84	Di-n-Octyl Phthalate	117840	1
85	1,2-Diphenylhydrazine	122667	1
86	Fluoranthene	206440	1
87	Fluorene	86737	1
88	Hexachlorobenzene	118741	1
89	Hexachlorobutadiene	87863	1
90	Hexachlorocyclopentadiene	77474	1

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
91	Hexachloroethane	67721	1
92	Indeno(1,2,3-cd)Pyrene	193395	1
93	Isophorone	78591	1
94	Naphthalene	91203	1
95	Nitrobenzene	98953	1
96	N-Nitrosodimethylamine	62759	1
97	N-Nitrosodi-n-Propylamine	621647	1
98	N-Nitrosodiphenylamine	86306	1
99	Phenanthrene	85018	1
100	Pyrene	129000	1
101	1,2,4-Trichlorobenzene	120821	1
102	Aldrin	309002	1
103	alpha-BHC	319846	1
104	beta-BHC	319857	1
105	gamma-BHC	58899	1
106	delta-BHC	319868	1
107	Chlordane	57749	1
108	4,4'-DDT	50293	1
109	4,4'-DDE	72559	1
110	4,4'-DDD	72548	1
111	Dieldrin	60571	1
112	alpha-Endosulfan	959988	1
113	beta-Endosulfan	33213659	1
114	Endosulfan Sulfate	1031078	1
115	Endrin	72208	1
116	Endrin Aldehyde	7421934	1
117	Heptachlor	76448	1
118	Heptachlor Epoxide	1024573	1
119	PCB-1016	12674112	1
120	PCB-1221	11104282	1
121	PCB-1232	11141165	1
122	PCB-1242	53469219	1
123	PCB-1248	12672296	1
124	PCB-1254	11097691	1
125	PCB-1260	11096825	1
126	Toxaphene	8001352	1

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

ATTACHMENT J – SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Fact Sheet Attachment J
Reasonable Potential Analysis (Per Sections 1.3 and 1.4 of SIP)
Wet Weather

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)				Lowest C or wet weather WLAs	REASONABLE POTENTIAL ANALYSIS (RPA)									
					Freshwater		Human Health for consumption of:			MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?	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?
					C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only											
1	Antimony	ug/L	0.6	1			4300.00	4300.00	No	No	Y	N		2.64		B<=C, Step 7	No		
2	Arsenic	ug/L	0.6	2.2	340.00	150.00		150.00	No	No	Y	N		3.43		B<=C, Step 7	No		
3	Beryllium	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		0.29	N	No Criteria	No Criteria	Uc		
4	Cadmium	ug/L	0.6	1.3	9.87	4.24		4.24	No	No	Y	N		0.201		B<=C, Step 7	No		
5a	Chromium (III)	ug/L	0.6	8.81	3063.53	365.16		365.16	No	No	Y	N		1.27		B<=C, Step 7	No		
5b	Chromium (VI)	ug/L	1.451	7.5	16.00	11.00		11.00	No	No	Y	N		1.9		B<=C, Step 7	No		
6	Copper	ug/L	0.753	5.19	9.70			9.70	N/A	N/A	N/A	N/A				B<=C, Step 7	Currently Treats for TMDL WLA		
7	Lead	ug/L	1.314	1.49	42.70			42.70	N/A	N/A	N/A	N/A				0.00	Yes		
8	Mercury	ug/L	0.6	0.0026	Res	Res	0.051	0.051	No	No	Y	N		0.0388		B<=C, Step 7	0.00		
9	Nickel	ug/L	0.6	8.27	843.35	93.76		4600.00	93.76	No	No	Y	N		4.98		B<=C, Step 7	No	
10	Selenium	ug/L	0.59	9.58	20.00	5.00		5.00	Yes	Yes	Y	N		1.48		B<=C, Step 7	Yes		
11	Silver	ug/L	0.6	1	13.37			13.37	No	No	Y	Y		0.0129	N	No detected value of B, Step 7	No		
12	Thallium	ug/L	0.6	1.2			6.30	6.30	No	No	Y	N		0.12		B<=C, Step 7	Currently Treats for TMDL WLA		
13	Zinc	ug/L	3.467	553	69.70			69.70	N/A	N/A	N/A	N/A					Yes		
14	Cyanide	ug/L	4.033	1.5	22.00	5.20		220000.00	5.20	No	No	Y	N		0.9		B<=C, Step 7	Currently Treats for TMDL WLA	
15	Asbestos	Fibers/L	0.6	No Criteria				No Criteria	No Criteria	Y	N		0.2		No Criteria	No Criteria	Uc		
16	2,3,7,8 TCDD	ug/L	0.6				0.00000014	0.00000014			Y	N		0.000000566		B>C & eff ND, Step 7	no		
17	TCDD Equivalents	ug/L	0				0.000000014	0.000000014			N					No detected value of B, Step 7	Ud		
18	Acrolein	ug/L	0.6	3.8			780	780	No	No	Y	N		4		B<=C, Step 7	No		
19	Acrylonitrile	ug/L	0.6				0.66	0.66			Y	N		1.2		B>C & eff ND, Step 7	no		
20	Benzene	ug/L	0.6	0.061			71	71.0	No	No	Y	Y		0.14	N	No detected value of B, Step 7	No		
21	Bromoform	ug/L	0.6	0.37			360	360.0	No	No	Y	Y		0.4	N	No detected value of B, Step 7	No		
22	Carbon Tetrachloride	ug/L	0.6	0.19			4.4	4.40	No	No	Y	Y		0.23	N	No detected value of B, Step 7	No		
23	Chlorobenzene	ug/L	0.6	0.15			21000	21000	No	No	Y	Y		0.17	N	No detected value of B, Step 7	No		
24	Chlorodibromomethane	ug/L	0.6	0.15			34	34.00	No	No	Y	Y		0.25	N	No detected value of B, Step 7	No		
25	Chloroethane	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		0.4	N	No Criteria	No Criteria	Uc		
26	2-Chloroethylvinyl ether	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		1.8	N	No Criteria	No Criteria	Uc		
27	Chloroform	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y			N	No Criteria	No Criteria	Uc		
28	Dichlorobromomethane	ug/L	0.6	0.8			46	46.00	No	No	Y	Y		0.21	N	No detected value of B, Step 7	No		
29	1,1-Dichloroethane	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		0.28	N	No Criteria	No Criteria	Uc		
30	1,2-Dichloroethane	ug/L	0.6	0.67			99	99.00	No	No	Y	Y		0.24	N	No detected value of B, Step 7	No		
31	1,1-Dichloropropane	ug/L	0.6	0.14			32	32.00	No	No	Y	Y		0.42	N	No detected value of B, Step 7	Currently Treats for TMDL WLA		
32	1,2-Dichloropropane	ug/L	0.6	0.22			39	39.00	No	No	Y	Y		0.35	N	No detected value of B, Step 7	No		
33	1,3-Dichloropropane	ug/L	0.6	0.22			1700	1700	No	No	Y	Y		0.22	N	No detected value of B, Step 7	No		
34	Ethylbenzene	ug/L	0.6	0.096			29000	29000	No	No	Y	Y		0.14	N	No detected value of B, Step 7	No		
35	Methyl Bromide	ug/L	0.6	0.42			4000	4000	No	No	Y	Y		0.42	N	No detected value of B, Step 7	No		
36	Methyl Chloride	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		0.4	N	No Criteria	No Criteria	Uc		
37	Methylene Chloride	ug/L	0.6	0.64			1600	1600.0	No	No	Y	Y		0.64	N	No detected value of B, Step 7	No		
38	1,1,2,2-Tetrachloroethane	ug/L	0.6	0.1			11	11.00	No	No	Y	Y		0.3	N	No detected value of B, Step 7	No		
39	Tetrachloroethylene	ug/L	0.6	0.39			8.85	8.9	No	No	Y	N		22		Limit required, B>C & pollutant detected	Yes		
40	Toluene	ug/L	0.6	0.068			200000	200000	No	No	Y	Y		0.24	N	No detected value of B, Step 7	No		
41	1,2-Trans-Dichloroethylene	ug/L	0.6	0.3			140000	140000	No	No	Y	Y		0.3	N	No detected value of B, Step 7	No		
42	1,1,1-Trichloroethane	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		0.3	N	No Criteria	No Criteria	Uc		
43	1,1,2-Trichloroethane	ug/L	0.6	0.26			42	42.0	No	No	Y	Y		0.3	N	No detected value of B, Step 7	Currently Treats for TMDL WLA		
44	Trichloroethylene	ug/L	0.6	0.14			81	81.0	No	No	Y	N		16		B<=C, Step 7	Currently Treats for TMDL WLA		
45	Vinyl Chloride	ug/L	0.6	0.086			525	525	No	No	Y	Y		0.3	N	No detected value of B, Step 7	No		
46	2-Chlorophenol	ug/L	0.6	0.19			400	400	No	No	Y	Y		0.2	N	No detected value of B, Step 7	No		
47	2,4-Dichlorophenol	ug/L	0.6	0.19			790	790	No	No	Y	Y		0.2	N	No detected value of B, Step 7	No		
48	2,4-Dimethylphenol	ug/L	0.6	0.28			2300	2300	No	No	Y	Y		0.3	N	No detected value of B, Step 7	No		
49	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L	0.6	0.19			765	765.0	No	No	Y	Y		0.2	N	No detected value of B, Step 7	No		
50	2,4-Dinitrophenol	ug/L	0.6	0.85			14000	14000	No	No	Y	Y		0.9	N	No detected value of B, Step 7	No		
51	2-Nitrophenol	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		0.9	N	No Criteria	No Criteria	Uc		
52	4-Nitrophenol	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		1.6	N	No Criteria	No Criteria	Uc		
53	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		0.2	N	No Criteria	No Criteria	Uc		
54	Pentachlorophenol	ug/L	0.6	0.094			14.42	11.06			8.2	No		0.1	N	No detected value of B, Step 7	No		
55	Phenol	ug/L	0.6	0.28			4600000	4600000	No	No	Y	Y		0.3	N	No detected value of B, Step 7	No		
56	2,4,6-Trichlorophenol	ug/L	0.6	0.094			6.5	6.5	No	No	Y	Y		0.1	N	No detected value of B, Step 7	No		
57	Acenaphthene	ug/L	0.6	0.094			2700	2700	No	No	Y	Y		0.1	N	No detected value of B, Step 7	No		
58	Acenaphthylene	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		0.1	N	No Criteria	No Criteria	Uc		
59	Anthracene	ug/L	0.6	0.094			110000	110000	No	No	Y	Y		0.1	N	No detected value of B, Step 7	No		
60	Benzidine	ug/L	0.6				0.00054	0.00054			Y	Y		5	Y	No detected value of B, Step 7	No		
61	Benzo(a)Anthracene	ug/L	0.6				0.049	0.0490			Y	Y		0.1	Y	No detected value of B, Step 7	No		
62	Benzo(a)Pyrene	ug/L	0.6				0.049	0.0490			Y	Y		0.1	Y	No detected value of B, Step 7	No		
63	Benzo(b)Fluoranthene	ug/L	0.6				0.049	0.0490			Y	Y		0.1	Y	No detected value of B, Step 7	No		
64	Benzo(ghi)Perylene	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		0.1	N	No Criteria	No Criteria	Uc		
65	Benzo(k)Fluoranthene	ug/L	0.6				0.049	0.0490			Y	Y		0.1	Y	No detected value of B, Step 7	No		
66	Bis(2-Chloroethoxy)Methane	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		0.1	N	No Criteria	No Criteria	Uc		
67	Bis(2-Chloroethyl)Ether	ug/L	0.6	0.094			1.4	1.400	No	No	Y	Y		0.1	N	No detected value of B, Step 7	No		
68	Bis(2-Chloroisopropyl)Ether	ug/L	0.6	0.094			170000	170000	No	No	Y	Y		0.1	N	No detected value of B, Step 7	No		
69	Bis(2-Ethylhexyl)Phthalate	ug/L	0.6	1.6			5.9	5.9	No	No	Y	Y		1.7	N	No detected value of B, Step 7	No		
70	4-Bromophenyl Phenyl Ether	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		0.1	N	No Criteria	No Criteria	Uc		
71	Butylbenzyl Phthalate	ug/L	0.6	0.66			5200	5200	No	No	Y	Y		0.7	N	No detected value of B, Step 7	No		
72	2-Chloronaphthalene	ug/L	0.6	0.094			4300	4300	No	No	Y	Y		0.1	N	No detected value of B, Step 7	No		
73	4-Chlorophenyl Phenyl Ether	ug/L	0.6	No Criteria				No Criteria	No Criteria	Y	Y		0.1	N	No Criteria	No Criteria	Uc		
74	Chrysene	ug/L	0.6				0.049	0.0490	No	No	Y	Y		0.1	Y	No detected value of B, Step 7	No		

Fact Sheet Attachment J
 Reasonable Potential Analysis (Per Sections 1.3 and 1.4 of SIP)
 Wet Weather

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)				Lowest C or wet weather WLAs	REASONABLE POTENTIAL ANALYSIS (RPA)									
					Freshwater		Human Health for consumption of:			MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?	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?
					C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only											
74	Dibenzo(a,h)Anthracene	ug/L	0.6				0.049	0.0490						0.1		Y	No detected value of B, Step 7	No	No
75	1,2-Dichlorobenzene	ug/L	0.6	0.12			17000	17000	No	No	Y	Y		0.32	N		No detected value of B, Step 7		No
76	1,3-Dichlorobenzene	ug/L	0.6	0.12			2600	2600	No	No	Y	Y		0.35	N		No detected value of B, Step 7		No
77	1,4-Dichlorobenzene	ug/L	0.6	0.17			2600	2600	No	No	Y	Y		0.37	N		No detected value of B, Step 7		No
78	3,3-Dichlorobenzidine	ug/L	0.6				0.077	0.08			Y	Y		2.6	Y		No detected value of B, Step 7		No
79	Diethyl Phthalate	ug/L	0.6	0.094			120000	120000	No	No	Y	N			0.12		B < C, Step 7		No
80	Dimethyl Phthalate	ug/L	0.6	0.094			2900000	2900000	No	No	Y	Y		0.1	N		No detected value of B, Step 7		No
81	Di-n-Butyl Phthalate	ug/L	0.6	0.19			12000	12000	No	No	Y	Y		0.2	N		No detected value of B, Step 7		No
82	2,4-Dinitrotoluene	ug/L	0.6	0.19			9.10	9.10	No	No	Y	Y		0.2	N		No detected value of B, Step 7		No
83	2,6-Dinitrotoluene	ug/L	0.6	No Criteria				No Criteria	No Criteria	No Criteria	Y	Y		0.1	N		No Criteria	No Criteria	Uc
84	Di-n-Octyl Phthalate	ug/L	0.6	No Criteria				No Criteria	No Criteria	No Criteria	Y	Y		0.1	N		No Criteria	No Criteria	Uc
85	1,2-Diphenylhydrazine	ug/L	0.6	0.094			0.54	0.540	No	No	Y	Y		0.1	N		No detected value of B, Step 7		No
86	Fluoranthene	ug/L	0.6	0.094			370	370	No	No	Y	Y		0.1	N		No detected value of B, Step 7		No
87	Fluorene	ug/L	0.6	0.094			14000	14000	No	No	Y	Y		0.1	N		No detected value of B, Step 7		No
88	Hexachlorobenzene	ug/L	0.6				0.00077	0.00077			Y	Y		0.1	Y		No detected value of B, Step 7		No
89	Hexachlorobutadiene	ug/L	0.6	0.38			50	50.00	No	No	Y	Y		0.38	N		No detected value of B, Step 7		No
90	Hexachlorocyclopentadiene	ug/L	0.6	0.094			17000	17000	No	No	Y	Y		0.2	N		No detected value of B, Step 7		No
91	Hexachloroethane	ug/L	0.6	0.19			8.9	8.9	No	No	Y	Y		0.1	N		No detected value of B, Step 7		No
92	Indeno(1,2,3-cd)Pyrene	ug/L	0.6				0.049	0.0490			Y	Y		0.1	Y		No detected value of B, Step 7		No
93	Isophorone	ug/L	0.6	0.094			600	600.0	No	No	Y	Y		0.1	N		No detected value of B, Step 7		No
94	Naphthalene	ug/L	0.6	No Criteria				No Criteria	No Criteria	No Criteria	Y	Y		0.41	N		No Criteria	No Criteria	Uc
95	Nitrobenzene	ug/L	0.6	0.094			1900	1900	No	No	Y	Y		0.1	N		No detected value of B, Step 7		No
96	N-Nitrosodimethylamine	ug/L	0.6	0.094			8.10	8.10000	No	No	Y	Y		0.1	N		No detected value of B, Step 7		No
97	N-Nitrosodi-n-Propylamine	ug/L	0.6				1.40	1.400	No	No	Y	Y		0.1	N		No detected value of B, Step 7		No
98	N-Nitrosodiphenylamine	ug/L	0.6	0.094			16	16.0	No	No	Y	Y		0.1	N		No detected value of B, Step 7		No
99	Phenanthrene	ug/L	0.6	No Criteria				No Criteria	No Criteria	No Criteria	Y	Y		0.1	N		No Criteria	No Criteria	Uc
100	Pyrene	ug/L	0.6	0.094			11000	11000	No	No	Y	Y		0.1	N		No detected value of B, Step 7		No
101	1,2,4-Trichlorobenzene	ug/L	0.6	No Criteria				No Criteria	No Criteria	No Criteria	Y	Y		0.48	N		No Criteria	No Criteria	Uc
102	Aldrin	ug/L	0.6				3.00	0.00014			Y	Y					No detected value of B, Step 7		No
103	alpha-BHC	ug/L	0.6	0.0024				0.013	No	No	Y	Y					No detected value of B, Step 7		No
104	beta-BHC	ug/L	0.6	0.0038				0.046	No	No	Y	Y		0.0041	N		No detected value of B, Step 7		No
105	gamma-BHC	ug/L	0.6	0.0028			0.95	0.063	No	No	Y	Y		0.0031	N		No detected value of B, Step 7		No
106	delta-BHC	ug/L	0.6	No Criteria					No Criteria	No Criteria	Y	Y		0.0036	N		No Criteria	No Criteria	Uc
107	Chlordane	ug/L	0.6				2.4	0.0043	0.00059	0.00059	Y	Y		0.082	Y		No detected value of B, Step 7		No
108	4,4'-DDT	ug/L	0.6				1.1	0.001	0.00059	0.00059	Y	Y		0.0041	Y		No detected value of B, Step 7		No
109	4,4'-DDE (linked to DDT)	ug/L	0.6						0.00059	0.00059	Y	Y		0.0031	Y		No detected value of B, Step 7		No
110	4,4'-DDD	ug/L	0.6						0.00084	0.00084	Y	Y		0.0041	Y		No detected value of B, Step 7		No
111	Dieldrin	ug/L	0.6				0.24	0.056	0.00014	0.00014	Y	Y		0.002	Y		No detected value of B, Step 7		No
112	alpha-Endosulfan	ug/L	0.6	0.0019			0.22	0.056	240	0.0560	No	No	Y	0.002	N		No detected value of B, Step 7		No
113	beta-Endosulfan	ug/L	0.6	0.0028			0.22	0.056	240	0.0560	No	No	Y	0.0031	N		No detected value of B, Step 7		No
114	Endosulfan Sulfate	ug/L	0.6	0.0028					240	240	No	No	Y	0.0031	N		No detected value of B, Step 7		No
115	Endrin	ug/L	0.6	0.0019			0.086	0.036	0.81	0.0360	No	No	Y	0.002	N		No detected value of B, Step 7		No
116	Endrin Aldehyde	ug/L	0.6	0.0019					0.81	0.81	No	No	Y	0.002	N		No detected value of B, Step 7		No
117	Heptachlor	ug/L	0.6	0.0053			0.52	0.0038	0.00021	0.00021	Yes	Yes	Y	0.0031	Y		No detected value of B, Step 7		Yes
118	Heptachlor Epoxide	ug/L	0.6				0.52	0.0038	0.00011	0.00011			Y	0.0026	Y		No detected value of B, Step 7		No
119-125	PCBs sum (2)	ug/L	0.6						0.00017	0.00017			Y	0.05	Y		No detected value of B, Step 7		No
126	Toxaphene	ug/L	0.6				0.73	0.0002	0.00075	0.0002			Y	0.26	Y		No detected value of B, Step 7		No

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

Fact Sheet Attachment J
 Reasonable Potential Analysis (Per Sections 1.3 and 1.4 of SIP)
 Wet Weather

CTR#	Parameters	Reason	HUMAN HEALTH CALCULATIONS				AQUATIC LIFE CALCULATIONS								LIMITS		Recommendation	Comment
			Organisms only			Saltwater / Freshwater / Basin Plan								Lowest AMEL	Lowest MDEL			
			AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	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		
1	Antimony	MEC-C & B<=C															No Limit	
2	Arsenic	MEC-C & B<=C															No Limit	
3	Beryllium	No Criteria															No Limit	
4	Cadmium	MEC-C & B<=C															No Limit	
5a	Chromium (III)	MEC-C & B<=C															No Limit	
5b	Chromium (VI)	MEC-C & B<=C															No Limit	
6	Copper	TMDL																Calculated from TMDL WLA
7	Lead	TMDL																Calculated from TMDL WLA
8	Mercury	MEC-C & B<=C															No Limit	
9	Nickel	MEC-C & B<=C															No Limit	
10	Selenium	MEC<=C																
11	Silver	MEC-C & B is ND															No Limit	
12	Thallium	MEC-C & B<=C																
13	Zinc	TMDL																Calculated from TMDL WLA
14	Cyanide	MEC-C & B<=C																
15	Asbestos	No Criteria																
16	2,3,7,8 TCDD	UD; effluent ND, MDL>C & B<=C																
17	TCDD Equivalents	No effluent data & no B																
18	Acrolein	MEC-C & B<=C																
19	Acrylonitrile	UD; effluent ND, MDL>C & B<=C																
20	Benzene	MEC-C & B is ND																
21	Bromoform	MEC-C & B is ND																
22	Carbon Tetrachloride	MEC-C & B is ND																
23	Chlorobenzene	MEC-C & B is ND																
24	Chlorodibromomethane	MEC-C & B is ND																
25	Chloroethane	No Criteria																
26	2-Chloroethylvinyl ether	No Criteria																
27	Chloroform	No Criteria																
28	Dichlorobromomethane	MEC-C & B is ND																
29	1,1-Dichloroethane	No Criteria																
30	1,2-Dichloroethane	MEC-C & B is ND																
31	1,1-Dichloroethylene	MEC-C & B is ND																
32	1,2-Dichloropropane	MEC-C & B is ND																
33	1,3-Dichloropropylene	MEC-C & B is ND																
34	Ethylbenzene	MEC-C & B is ND																
35	Methyl Bromide	MEC-C & B is ND																
36	Methyl Chloride	No Criteria																
37	Methylene Chloride	MEC-C & B is ND																
38	1,1,2,2-Tetrachloroethane	MEC-C & B is ND																
39	Tetrachloroethylene	B<=C & pollutant detected in effluent																
40	Toluene	MEC-C & B is ND																
41	1,2-Trans-Dichloroethylene	MEC-C & B is ND																
42	1,1,1-Trichloroethane	No Criteria																
43	1,1,2-Trichloroethane	MEC-C & B is ND																
44	Trichloroethylene	MEC-C & B<=C																
45	Vinyl Chloride	MEC-C & B is ND																
46	2-Chlorophenol	MEC-C & B is ND																
47	2,4-Dichlorophenol	MEC-C & B is ND																
48	2,4-Dimethylphenol	MEC-C & B is ND																
49	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	MEC-C & B is ND																
50	2,4-Dinitrophenol	MEC-C & B is ND																
51	2-Nitrophenol	No Criteria																
52	4-Nitrophenol	No Criteria																
53	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	No Criteria																
54	Pentachlorophenol	MEC-C & B is ND																
55	Phenol	MEC-C & B is ND																
56	2,4,6-Trichlorophenol	MEC-C & B is ND																
57	Acenaphthene	MEC-C & B is ND																
58	Acenaphthylene	No Criteria																
59	Anthracene	MEC-C & B is ND																
60	Benzidine	UD; effluent ND, MDL>C, and																
61	Benzo(a)Anthracene	UD; effluent ND, MDL>C, and																
62	Benzo(a)Pyrene	UD; effluent ND, MDL>C, and																
63	Benzo(b)Fluoranthene	UD; effluent ND, MDL>C, and																
64	Benzo(ghi)Perylene	No Criteria																
65	Benzo(k)Fluoranthene	UD; effluent ND, MDL>C, and																
66	Bis(2-Chloroethoxy)Methane	No Criteria																
67	Bis(2-Chloroethyl)Ether	MEC-C & B is ND																
68	Bis(2-Chloroisopropyl)Ether	MEC-C & B is ND																
69	Bis(2-Ethylhexyl)Phthalate	MEC-C & B is ND																
70	4-Bromophenyl Phenyl Ether	No Criteria																
71	Butylbenzyl Phthalate	MEC-C & B is ND																
72	2-Chloronaphthalene	MEC-C & B is ND																
73	4-Chlorophenyl Phenyl Ether	No Criteria																
74	Chrysene	UD; effluent ND, MDL>C, and																

CTR#	Parameters	Reason	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS								LIMITS		Recommendation	Comment
			Organisms only			Saltwater / Freshwater / Basin Plan								Lowest AMEL	Lowest MDEL		
			AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99				
74	Dibenzo(a,h)Anthracene	UD: effluent ND, MDL>C, and														No Limit	
75	1,2-Dichlorobenzene	MEC-C & B is ND														No Limit	
76	1,3-Dichlorobenzene	MEC-C & B is ND														No Limit	
77	1,4-Dichlorobenzene	MEC-C & B is ND														No Limit	
78	3,3-Dichlorobenzidine	UD: effluent ND, MDL>C, and														No Limit	
79	Diethyl Phthalate	MEC-C & B<=C														No Limit	
80	Dimethyl Phthalate	MEC-C & B is ND														No Limit	
81	Di-n-Butyl Phthalate	MEC-C & B is ND														No Limit	
82	2,4-Dinitrotoluene	MEC-C & B is ND														No Limit	
83	2,6-Dinitrotoluene	No Criteria														No Limit	
84	Di-n-Octyl Phthalate	No Criteria														No Limit	
85	1,2-Diphenylhydrazine	MEC-C & B is ND														No Limit	
86	Fluoranthene	MEC-C & B is ND														No Limit	
87	Fluorene	MEC-C & B is ND														No Limit	
88	Hexachlorobenzene	UD: effluent ND, MDL>C, and														No Limit	
89	Hexachlorobutadiene	MEC-C & B is ND														No Limit	
90	Hexachlorocyclopentadiene	MEC-C & B is ND														No Limit	
91	Hexachloroethane	MEC-C & B is ND														No Limit	
92	Indeno(1,2,3-cd)Pyrene	UD: effluent ND, MDL>C, and														No Limit	
93	Isophorone	MEC-C & B is ND														No Limit	
94	Naphthalene	No Criteria														No Limit	
95	Nitrobenzene	MEC-C & B is ND														No Limit	
96	N-Nitrosodimethylamine	MEC-C & B is ND														No Limit	
97	N-Nitrosodi-n-Propylamine	UD: effluent ND, MDL>C, and														No Limit	
98	N-Nitrosodiphenylamine	MEC-C & B is ND														No Limit	
99	Phenanthrene	No Criteria														No Limit	
100	Pyrene	MEC-C & B is ND														No Limit	
101	1,2,4-Trichlorobenzene	No Criteria														No Limit	
102	Aldrin	UD: effluent ND, MDL>C, and														No Limit	
103	alpha-BHC	MEC-C & B is ND														No Limit	
104	beta-BHC	MEC-C & B is ND														No Limit	
105	gamma-BHC	MEC-C & B is ND														No Limit	
106	delta-BHC	No Criteria														No Limit	
107	Chlordane	UD: effluent ND, MDL>C, and														No Limit	
108	4,4'-DDT	UD: effluent ND, MDL>C, and														No Limit	
109	4,4'-DDE (linked to DDT)	UD: effluent ND, MDL>C, and														No Limit	
110	4,4'-DDD	UD: effluent ND, MDL>C, and														No Limit	
111	Dieldrin	UD: effluent ND, MDL>C, and														No Limit	
112	alpha-Endosulfan	MEC-C & B is ND														No Limit	
113	beta-Endosulfan	MEC-C & B is ND														No Limit	
114	Endosulfan Sulfate	MEC-C & B is ND														No Limit	
115	Endrin	MEC-C & B is ND														No Limit	
116	Endrin Aldehyde	MEC-C & B is ND														No Limit	
117	Heptachlor	MEC=C	0.00021	2.01	0.00042	0.32	0.17	0.53	0.00	0.00	1.55	0.0031	3.11	0.006242142	0.00021	0.00042	
118	Heptachlor Epoxide	UD: effluent ND, MDL>C, and														No Limit	
119-125	PCBs sum (2)	UD: effluent ND, MDL>C, and														No Limit	
126	Toxaphene	UD: effluent ND, MDL>C, and														No Limit	

Notes:
 Ud = Undetermined due to lack of d;
 Uc = Undetermined due to lack of C
 C = Water Quality Criteria
 B = Background receiving water dat

CTR#	Parameters	Reason	HUMAN HEALTH CALCULATIONS					AQUATIC LIFE CALCULATIONS								LIMITS		Recommendation
			Organisms only			Saltwater / Freshwater / Basin Plan								Lowest	Lowest			
			AMEL hh = ECA = C hh O only	MDEL / AMEL multiplier	MDEL hh	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	Animony	MEC<C & B<=C															No Limit	
2	Arsenic	MEC<C & B<=C															No Limit	
3	Beryllium	No Criteria															No Limit	
4	Cadmium	MEC<C & B<=C															No Limit	
5a	Chromium (III)	MEC<C & B<=C															No Limit	
5b	Chromium (VI)	Currently Treats for	2.86			0.15	2.37	0.27	2.99	2.37		2.36	5.59	6.75	16	5.6	16.0	
6	Copper	B>C & pollutant detected in effluent	2.23			0.26	7.07	0.46	7.72	7.07		1.70	12.06	3.80	26.90	12	27	
7	Lead	Currently Treats for	2.78			0.16	31.71	0.30	2.28	2.28		2.24	5.11	6.22	14.21	5	14	
8	Mercury	MEC<C & B<=C															No Limit	
9	Nickel	MEC<C & B<=C															No Limit	
10	Selenium	MEC>=C	Narrative	1.99		0.33	6.51	0.53	2.66	2.66		1.54	4.11	3.07	8.18	4.1	8.2	
11	Silver	MEC<C & B is ND															No Limit	
12	Thallium	Currently Treats for	6.3	2.01	12.64							1.55		3.11		6.3	13	
13	Zinc	MEC>=C				0.09	18.73	0.13	27.86	18.73		3.47	64.98	11.51	215.5654	65	216	
14	Cyanide	Currently Treats for	220000	3.38	743227	0.08	1.80	0.12	0.60	0.60		3.61	2.18	12.20	7.38	2.2	7.4	
15	Asbestos	No Criteria															No Limit	
16	2,3,7,8 TCDD	UD; effluent ND, MDL>C & B>C															No Limit	
	TCDD Equivalents	UD; effluent ND, MDL>C & B>C															No Limit	
17	Acrolein	MEC<C & B<=C															No Limit	
18	Acrylonitrile	UD; effluent ND, MDL>C & B>C															No Limit	
19	Benzene	MEC<C & B is ND															No Limit	
20	Bromoform	MEC<C & B is ND															No Limit	
21	Carbon Tetrachloride	MEC<C & B is ND															No Limit	
22	Chlorobenzene	MEC<C & B is ND															No Limit	
23	Chlorodibromomethane	MEC<C & B is ND															No Limit	
24	Chloroethane	No Criteria															No Limit	
25	2-Chloroethylvinyl ether	No Criteria															No Limit	
26	Chloroform	No Criteria															No Limit	
27	Dichlorobromomethane	MEC<C & B is ND															No Limit	
28	1,1-Dichloroethane	No Criteria															No Limit	
29	1,2-Dichloroethane	MEC<C & B is ND															No Limit	
30	1,1-Dichloroethylene	Currently Treats for	3.2	2.01	6.42							1.55		3.11		3.2	6.4	
31	1,2-Dichloropropane	MEC<C & B is ND															No Limit	
32	1,3-Dichloropropylene	MEC<C & B is ND															No Limit	
33	Ethylbenzene	MEC<C & B is ND															No Limit	
34	Methyl Bromide	MEC<C & B is ND															No Limit	
35	Methyl Chloride	No Criteria															No Limit	
36	Methylene Chloride	MEC<C & B is ND															No Limit	
37	1,1,2,2-Tetrachloroethane	MEC<C & B is ND															No Limit	
38	Tetrachloroethylene	B>C & pollutant detected in effluent	8.85	2.01	17.75							1.55		3.11		8.9	18	
39	Toluene	MEC<C & B is ND															No Limit	
40	1,2-Trans-Dichloroethylene	MEC<C & B is ND															No Limit	
41	1,1,1,1-Tetrachloroethane	No Criteria															No Limit	
42	1,1,2-Trichloroethane	Currently Treats for	42	2.01	84							1.55		3.11		42	84	
43	Trichloroethylene	Currently Treats for	81	2.01	163							1.55		3.11		81	163	
44	Vinyl Chloride	MEC<C & B is ND															No Limit	
45	2-Chlorophenol	MEC<C & B is ND															No Limit	
46	2,4-Dichlorophenol	MEC<C & B is ND															No Limit	
47	2,4-Dimethylphenol	MEC<C & B is ND															No Limit	
48	4,6-dinitro-o-resol (aka 2-methyl-4,6-Dinitrophenol)	MEC<C & B is ND															No Limit	
49	2,4-Dinitrophenol	MEC<C & B is ND															No Limit	
50	2-Nitrophenol	No Criteria															No Limit	
51	4-Nitrophenol	No Criteria															No Limit	
52	3-Methyl-4-Chlorophenol (aka p-chloro-m-resol)	No Criteria															No Limit	
53	Pentachlorophenol	MEC<C & B is ND															No Limit	
54	Phenol	MEC<C & B is ND															No Limit	
55	2,4,6-Trichlorophenol	MEC<C & B is ND															No Limit	
56	Acenaphthene	MEC<C & B is ND															No Limit	
57	Acenaphthylene	No Criteria															No Limit	
58	Anthracene	MEC<C & B is ND															No Limit	
59	Benzidine	UD; effluent ND, MDL>C, and B>C															No Limit	
60	Benzo(a)Anthracene	UD; effluent ND, MDL>C, and B>C															No Limit	
61	Benzo(a)Pyrene	UD; effluent ND, MDL>C, and B>C															No Limit	
62	Benzo(b)Fluoranthene	UD; effluent ND, MDL>C, and B>C															No Limit	
63	Benzo(ghi)Perylene	No Criteria															No Limit	
64	Benzo(k)Fluoranthene	UD; effluent ND, MDL>C, and B>C															No Limit	
65	Bis(2-Chloroethoxy)Methane	No Criteria															No Limit	
66	Bis(2-Chloroethoxy)Ether	MEC<C & B is ND															No Limit	
67	Bis(2-Chloroisopropyl)Ether	MEC<C & B is ND															No Limit	
68	Bis(2-Ethylhexyl)Phthalate	MEC<C & B is ND															No Limit	
69	4-Bromophenyl Phenyl Ether	No Criteria															No Limit	
70	Butylbenzyl Phthalate	MEC<C & B is ND															No Limit	
71	2-Chloronaphthalene	MEC<C & B is ND															No Limit	
72	4-Chlorophenyl Phenyl Ether	No Criteria															No Limit	
73	Chrysene	UD; effluent ND, MDL>C, and B>C															No Limit	
74	Dibenzo(a,h)Anthracene	UD; effluent ND, MDL>C, and B>C															No Limit	
75	1,2-Dichlorobenzene	MEC<C & B is ND															No Limit	

Attachment J
Reasonable Potential Analysis and Effluent Limitations (Dry Weather)

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)				REASONABLE POTENTIAL ANALYSIS (RPA)										
					Freshwater		Human Health for consumption of:		Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?	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?
					C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only											
76	1,3-Dichlorobenzene	ug/L		0.12			2600	2600	No	No	Y	Y	0.35	N	No detected value of B, Step 7		No		
77	1,4-Dichlorobenzene	ug/L		0.17			2600	2600	No	No	Y	Y	0.37	N	No detected value of B, Step 7		No		
78	3,3-Dichlorobenzidine	ug/L					0.077	0.09			Y	Y	2.6	Y	No detected value of B, Step 7		No		
79	Diethyl Phthalate	ug/L		0.094			120000	120000	No	No	Y	N		0.12	B<=C, Step 7		No		
80	Dimethyl Phthalate	ug/L		0.094			2900000	2900000	No	No	Y	Y	0.1	N	No detected value of B, Step 7		No		
81	Di-n-Butyl Phthalate	ug/L		0.19			12000	12000	No	No	Y	Y	0.2	N	No detected value of B, Step 7		No		
82	2,4-Dinitrotoluene	ug/L		0.19			9.10	9.10	No	No	Y	Y	0.2	N	No detected value of B, Step 7		No		
83	2,6-Dinitrotoluene	ug/L		No Criteria			No Criteria	No Criteria	No Criteria	No Criteria	Y	Y	0.1	N	No Criteria	No Criteria	Uc		
84	Di-n-Octyl Phthalate	ug/L		No Criteria			No Criteria	No Criteria	No Criteria	No Criteria	Y	Y	0.1	N	No Criteria	No Criteria	Uc		
85	1,2-Diphenylhydrazine	ug/L		0.094			0.54	0.540	No	No	Y	Y	0.1	N	No detected value of B, Step 7		No		
86	Fluoranthene	ug/L		0.094			370	370	No	No	Y	Y	0.1	N	No detected value of B, Step 7		No		
87	Fluorene	ug/L		0.094			14000	14000	No	No	Y	Y	0.1	N	No detected value of B, Step 7		No		
88	Hexachlorobenzene	ug/L					0.00077	0.00077			Y	Y	0.1	Y	No detected value of B, Step 7		No		
89	Hexachlorobutadiene	ug/L		0.38			50	50.00	No	No	Y	Y	0.38	N	No detected value of B, Step 7		No		
90	Hexachlorocyclopentadiene	ug/L		0.094			17000	17000	No	No	Y	Y	0.2	N	No detected value of B, Step 7		No		
91	Hexachloroethane	ug/L		0.19			8.9	8.9	No	No	Y	Y	0.1	N	No detected value of B, Step 7		No		
92	Indeno(1,2,3-cd)Pyrene	ug/L					0.049	0.0490			Y	Y	0.1	Y	No detected value of B, Step 7		No		
93	Isophorone	ug/L		0.094			600	600.0	No	No	Y	Y	0.1	N	No detected value of B, Step 7		No		
94	Naphthalene	ug/L		No Criteria			No Criteria	No Criteria	No Criteria	No Criteria	Y	Y	0.41	N	No Criteria	No Criteria	Uc		
95	Nitrobenzene	ug/L		0.094			1900	1900	No	No	Y	Y	0.1	N	No detected value of B, Step 7		No		
96	N-Nitrosodimethylamine	ug/L		0.094			8.10	8.10000	No	No	Y	Y	0.1	N	No detected value of B, Step 7		No		
97	N-Nitrosodi-n-Propylamine	ug/L	0.6				1.40	1.400			Y	Y	0.1	N	No detected value of B, Step 7		No		
98	N-Nitrosodiphenylamine	ug/L		0.094			16	16.0	No	No	Y	Y	0.1	N	No detected value of B, Step 7		No		
99	Phenanthrene	ug/L		No Criteria			No Criteria	No Criteria	No Criteria	No Criteria	Y	Y	0.1	N	No Criteria	No Criteria	Uc		
100	Pyrene	ug/L		0.094			11000	11000	No	No	Y	Y	0.1	N	No detected value of B, Step 7		No		
101	1,2,4-Trichlorobenzene	ug/L		No Criteria			No Criteria	No Criteria	No Criteria	No Criteria	Y	Y	0.48	N	No Criteria	No Criteria	Uc		
102	Aldrin	ug/L					0.00014	0.00014			Y	Y			No detected value of B, Step 7		No		
103	alpha-BHC	ug/L		0.0024			0.013	0.0130	No	No	Y	Y			No detected value of B, Step 7		No		
104	beta-BHC	ug/L		0.0038			0.046	0.046	No	No	Y	Y	0.0041	N	No detected value of B, Step 7		No		
105	gamma-BHC	ug/L		0.0028	0.95		0.063	0.063	No	No	Y	Y	0.0031	N	No detected value of B, Step 7		No		
106	delta-BHC	ug/L		No Criteria			No Criteria	No Criteria	No Criteria	No Criteria	Y	Y	0.0036	N	No Criteria	No Criteria	Uc		
107	Chlordane	ug/L			2.4	0.0043	0.00059	0.00059			Y	Y	0.082	Y	No detected value of B, Step 7		No		
108	4,4'-DDT	ug/L			1.1	0.001	0.00059	0.00059			Y	Y	0.0041	Y	No detected value of B, Step 7		No		
109	4,4'-DDE (linked to DDT)	ug/L					0.00059	0.00059			Y	Y	0.0031	Y	No detected value of B, Step 7		No		
110	4,4'-DDD	ug/L					0.00084	0.00084			Y	Y	0.0041	Y	No detected value of B, Step 7		No		
111	Dieldrin	ug/L			0.24	0.056	0.00014	0.00014			Y	Y	0.002	Y	No detected value of B, Step 7		No		
112	alpha-Endosulfan	ug/L		0.0019	0.22	0.056	240	0.0560	No	No	Y	Y	0.002	N	No detected value of B, Step 7		No		
113	beta-Endosulfan	ug/L		0.0028	0.22	0.056	240	0.0560	No	No	Y	Y	0.0031	N	No detected value of B, Step 7		No		
114	Endosulfan Sulfate	ug/L		0.0028			240	240	No	No	Y	Y	0.0031	N	No detected value of B, Step 7		No		
115	Endrin	ug/L		0.0019	0.086	0.036	0.81	0.0360	No	No	Y	Y	0.002	N	No detected value of B, Step 7		No		
116	Endrin Aldehyde	ug/L		0.0019			0.81	0.81	No	No	Y	Y	0.002	N	No detected value of B, Step 7		No		
117	Heptachlor	ug/L	0.6	0.0053	0.52	0.0038	0.00021	0.00021	Yes	Yes	Y	Y	0.0031	Y	No detected value of B, Step 7		Yes		
118	Heptachlor Epoxide	ug/L			0.52	0.0038	0.00011	0.00011			Y	Y	0.0026	Y	No detected value of B, Step 7		No		
119-125	PCBs sum (2)	ug/L					0.00017	0.00017			Y	Y	0.05	Y	No detected value of B, Step 7		No		
126	Toxaphene	ug/L			0.73	0.0002	0.00075	0.0002			Y	Y	0.26	Y	No detected value of B, Step 7		No		

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

Attachment J
Reasonable Potential Analysis and Effluent Limitations (Dry Weather)

CTR#	Parameters	Reason	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS								LIMITS		Recommendation	
			Organisms only			Saltwater / Freshwater / Basin Plan								Lowest AMEL	Lowest MDEL		
			AMEL hh = ECA = C hh O only	MDEL / AMEL multiplier	MDEL hh	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
76	1,3-Dichlorobenzene	MEC<C & B is ND														No Limit	
77	1,4-Dichlorobenzene	MEC<C & B is ND														No Limit	
78	3,3-Dichlorobenzidine	UD; effluent ND, MDL>C, and														No Limit	
79	Diethyl Phthalate	MEC<C & B<<C														No Limit	
80	Dimethyl Phthalate	MEC<C & B is ND														No Limit	
81	Di-n-Butyl Phthalate	MEC<C & B is ND														No Limit	
82	2,4-Dinitrotoluene	MEC<C & B is ND														No Limit	
83	2,6-Dinitrotoluene	No Criteria														No Limit	
84	Di-n-Octyl Phthalate	No Criteria														No Limit	
85	1,2-Diphenylhydrazine	MEC<C & B is ND														No Limit	
86	Fluoranthene	MEC<C & B is ND														No Limit	
87	Fluorene	MEC<C & B is ND														No Limit	
88	Hexachlorobenzene	UD; effluent ND, MDL>C, and														No Limit	
89	Hexachlorobutadiene	MEC<C & B is ND														No Limit	
90	Hexachlorocyclopentadiene	MEC<C & B is ND														No Limit	
91	Hexachloroethane	MEC<C & B is ND														No Limit	
92	Indeno(1,2,3-cd)Pyrene	UD; effluent ND, MDL>C, and														No Limit	
93	Isophorone	MEC<C & B is ND														No Limit	
94	Naphthalene	No Criteria														No Limit	
95	Nitrobenzene	MEC<C & B is ND														No Limit	
96	N-Nitrosodimethylamine	MEC<C & B is ND														No Limit	
97	N-Nitrosodi-n-Propylamine	UD; effluent ND, MDL>C, and														No Limit	
98	N-Nitrosodiphenylamine	MEC<C & B is ND														No Limit	
99	Phenanthrene	No Criteria														No Limit	
100	Pyrene	MEC<C & B is ND														No Limit	
101	1,2,4-Trichlorobenzene	No Criteria														No Limit	
102	Aldrin	UD; effluent ND, MDL>C, and														No Limit	
103	alpha-BHC	MEC<C & B is ND														No Limit	
104	beta-BHC	MEC<C & B is ND														No Limit	
105	gamma-BHC	MEC<C & B is ND														No Limit	
106	delta-BHC	No Criteria														No Limit	
107	Chlordane	UD; effluent ND, MDL>C, and														No Limit	
108	4,4'-DDT	UD; effluent ND, MDL>C, and														No Limit	
109	4,4'-DDE (linked to DDT)	UD; effluent ND, MDL>C, and														No Limit	
110	4,4'-DDD	UD; effluent ND, MDL>C, and														No Limit	
111	Dieldrin	UD; effluent ND, MDL>C, and														No Limit	
112	alpha-Endosulfan	MEC<C & B is ND														No Limit	
113	beta-Endosulfan	MEC<C & B is ND														No Limit	
114	Endosulfan Sulfate	MEC<C & B is ND														No Limit	
115	Endrin	MEC<C & B is ND														No Limit	
116	Endrin Aldehyde	MEC<C & B is ND														No Limit	
117	Heptachlor	MEC>=C	0.00021	2.01	0.00042	0.32	0.17	0.53	0.00	0.00	1.55	0.0031	3.11	0.006242	0.00021	0.00042	No Limit
118	Heptachlor Epoxide	UD; effluent ND, MDL>C, and															No Limit
119-125	PCBs sum (2)	UD; effluent ND, MDL>C, and															No Limit
126	Toxaphene	UD; effluent ND, MDL>C, and															No Limit

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