

Los Angeles Regional Water Quality Control Board

June 20, 2018

Mr. Daniel Olivera
Vice President/General Manager
CEMEX Construction Materials Pacific, LLC
3990 E. Concourse Street, Suite 3200
Ontario, CA 91764

Certified Mail
Return Receipt Requested
Claim No. 7001 2510 0002 2222 0280

Dear Mr. Olivera:

TRANSMITTAL OF THE WASTE DISCHARGE REQUIREMENTS (WDRs) AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT – CEMEX CONSTRUCTION MATERIALS PACIFIC, LLC, MOORPARK FACILITY, MOORPARK, CA. (NPDES NO. CA0059315, CI NO. 6658)

On April 24, 2018, we transmitted the tentative Waste Discharge Requirements (WDRs) for your permit to discharge wastes under the National Pollutant Discharge Elimination System (NPDES) Program. On May 29, 2018, we sent you the revised tentative Fact Sheet that included minor changes to update the antibacksliding analysis in the tentative Fact Sheet.

Pursuant to Division 7 of the California Water Code, this Regional Water Board at a public hearing held on June 14, 2018, reviewed the revised tentative requirements, considered all factors in the case, and adopted Order R4-2018-0085. Order R4-2018-0085 serves as an NPDES permit, and it expires on July 31, 2023. 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 Monitoring and Reporting Program (MRP) on the effective date (August 1, 2018) of Order R4-2018-0085. Your first quarterly monitoring report for the period of August 1, 2018 through September 30, 2018 is due by November 1, 2018.

Please continue to electronically submit Self-Monitoring Reports (SMRs) using the State Water Resource Control Board's California Integrated Water Quality System (CIWQS) Program web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). The CIWQS web site will provide additional information for SMR submittal in the event there is a planned service interruption for electronic submittal. Also, please do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

Please convert all of the regulatory documents, submissions and correspondence that you would normally submit to us as hard copies to a searchable Portable Document Format (PDF). Please reference the facility name (CEMEX–Moorpark Facility), NPDES No. CA0059315 and Compliance File CI-6658 on the documents. Documents that are less than 10 megabytes (MB) should be

emailed to losangeles@waterboards.ca.gov with a copy to JauRen.Chen@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 Water Board's website listed above and navigate to Paperless Office.

If you have any questions, please contact Jau Ren Chen at (213) 576-6656.

Sincerely,



Cassandra Owens, Chief
Industrial Permitting Unit

Enclosures

MAILING LIST (VIA EMAIL ONLY)

David Smith, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Robyn Stuber, Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
NPDES Wastewater Unit, State Water Resources Control Board, Division of Water Quality
Kenneth Wong, U.S Army Corps of Engineers
Bryant Chesney, NOAA, National Marine Fisheries Service
Jeff Phillips, Department of Interior, U.S. Fish and Wildlife Service
William Paznokas, Department of Fish and Game, Region 5
Tim Smith, Los Angeles County, Department of Public Works, Waste Management Division
Bellete Yohannes, City of Los Angeles, Bureau of Sanitation, Industrial Waste Management
Angelo Bellomo, Los Angeles County, Department of Health Services
Sarah Sikich, Heal the Bay
Annelisa Moe, Heal the Bay
Bruce Reznik, Los Angeles Waterkeeper
Arthur Pugsley, Los Angeles Waterkeeper
Melissa Kelly, Los Angeles Waterkeeper
Corinne Bell, Natural Resources Defense Council
Jason Weiner, Ventura Coastkeeper
Brian Mastin, CEMEX Construction Materials Pacific, LLC.
Patricia Contreras, CEMEX Construction Materials Pacific, LLC.
James Ashby, PG Environmental
Sarah Torres, PG Environmental

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

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Phone (213) 576-6600 • Fax (213) 576-6640
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**ORDER R4-2018-0085
NPDES NO. CA0059315**

**WASTE DISCHARGE REQUIREMENTS
FOR CEMEX CONSTRUCTION MATERIALS PACIFIC, LLC
MOORPARK FACILITY**

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

Table 1. Discharger Information

Discharger	CEMEX Construction Materials Pacific, LLC
Name of Facility	Moorpark Facility
Facility Address	9035 Roseland Avenue
	Moorpark, California 93021
	Ventura County

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Storm water runoff	34.33475°	-118.87825°	Unnamed tributary to Happy Camp Wash

Table 3. Administrative Information

This Order was adopted on:	June 14, 2018
This Order shall become effective on:	August 1, 2018
This Order shall expire on:	July 31, 2023
The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	180 days prior to the Order expiration date
The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, Los Angeles Region have classified this discharge as follows:	Minor

I, Deborah J. Smith, 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 the date indicated above.



 Deborah J. Smith, Executive Officer

CONTENTS

I.	Facility Information	3
II.	Findings	3
III.	Discharge Prohibitions	3
IV.	Effluent Limitations and Discharge Specifications	4
	A. Effluent Limitations.....	4
	1. Final Effluent Limitations –Discharge Point 001	4
	B. Land Discharge Specifications – Not Applicable	6
	C. Recycling Specifications – Not Applicable.....	6
V.	Receiving Water Limitations.....	6
	A. Surface Water Limitations	6
	B. Groundwater Limitations – Not Applicable	8
VI.	Provisions	8
	A. Standard Provisions.....	8
	B. Monitoring and Reporting Program (MRP) Requirements	10
	C. Special Provisions.....	10
	1. Reopener Provisions	10
	2. Special Studies, Technical Reports and Additional Monitoring Requirements.....	11
	3. Best Management Practices and Pollution Prevention.....	11
	4. Construction, Operation and Maintenance Specifications	12
	5. Other Special Provisions – Not Applicable.....	12
	6. Compliance Schedules – Not Applicable	12
VII.	Compliance Determination	12

TABLES

Table 1.	Discharger Information.....	1
Table 2.	Discharge Location	1
Table 3.	Administrative Information.....	1
Table 4.	Effluent Limitations at Discharge Point 001	4

ATTACHMENTS

Attachment A – Definitions.....	A-1
Attachment B – Regional Site Map	B-1
Attachment C – Facility Storm Water Flow Schematic	C-1
Attachment D – Standard Provisions	D-1
Attachment E – Monitoring and Reporting Program (MRP 6658)	E-1
Attachment F – Fact Sheet	F-1
Attachment G – Storm Water Pollution Prevention Plan Requirements.....	G-1
Attachment H – State Water Board Minimum Levels (µg/L)	H-1
Attachment I – List of Priority Pollutants.....	I-1
Attachment J – Summary of Effluent Limitations Calculations.....	J-1

I. FACILITY INFORMATION

Information describing the Moorpark 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 waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (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 U.S. Environmental Protection Agency (U.S. EPA) and chapter 5.5, division 7 of the Water Code (commencing with section 13370) and state regulations (including title 27, California Code of Regulation, section 22561 et. seq.). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.
- 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 and 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 has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Fact Sheet.
- E. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet.

THEREFORE, IT IS HEREBY ORDERED that this Order supersedes Order R4-2013-0078 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 shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for violations of the previous Order.

III. DISCHARGE PROHIBITIONS

- A.** Wastes discharged shall be limited to a maximum of 0.120 million gallons per day (MGD) of treated storm water runoff (i.e., storm water) via Discharge Point 001. The discharge of wastes from accidental spills or other sources is prohibited.

- B. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to an unnamed tributary to the Happy Camp Wash, or other waters of the State, are prohibited.
- C. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or a nuisance as defined by section 13050 of the Water Code.
- D. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- E. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board (State Water Board) as required by the federal CWA and regulations adopted thereunder.
- F. Discharge of oil or any residuary product of petroleum to waters of the State, except in accordance with waste discharge requirements or other provisions of Division 7 of the Water Code, is prohibited.
- G. The discharge of any radiological, chemical, or biological warfare agent into the waters of the State is prohibited under Water Code section 13375.
- H. 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.
- I. 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.
- J. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.
- K. The discharge of trash to surface waters of the State or the deposition of trash where it may be discharged into surface waters of the State is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations

1. Final Effluent Limitations –Discharge Point 001

- a. The Discharger 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. Effluent Limitations at Discharge Point 001

Parameter	Units	Effluent Limitations		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	0.120	--	--
Conventional Pollutants				
Biochemical Oxygen Demand (BOD) (5-day @ 20°C)	mg/L	30	--	--
	lbs/day ¹	30	--	--
Oil and Grease	mg/L	15	--	--
	lbs/day ¹	15	--	--

Parameter	Units	Effluent Limitations		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	standard units	--	6.5	8.5
Total Suspended Solids (TSS)	mg/L	75	--	--
	lbs/day ¹	75	--	--
Non-conventional Pollutants				
Boron, Total	mg/L	1.0	--	--
	lbs/day ¹	1.0	--	--
Chloride	mg/L	150	--	--
	lbs/day ¹	150	--	--
Chlorpyrifos	µg/L	0.023	--	--
	lbs/day ¹	0.000023	--	--
Chronic Toxicity ²	Pass or Fail, % Effect	Pass or % Effect <50	--	--
Diazinon	µg/L	0.10	--	--
	lbs/day ¹	0.00010	--	--
Nitrite Plus Nitrate (as N)	mg/L	10	--	--
	lbs/day ¹	10	--	--
Settleable Solids	ml/L	0.3	--	--
Sulfate	mg/L	250	--	--
	lbs/day ¹	250	--	--
Temperature	°F	--	--	86
Total Dissolved Solids (TDS)	mg/L	850	--	--
	lbs/day ¹	850	--	--
Turbidity	NTU	75	--	--
Priority Pollutants				
Copper, Total Recoverable (Dry Weather) ³	µg/L	22	--	--
	lbs/day ¹	0.022	--	--
Copper, Total Recoverable (Wet Weather) ³	µg/L	31	--	--
	lbs/day ¹	0.031	--	--
Lead, Total Recoverable	µg/L	9.5	--	--
	lbs/day ¹	0.0095	--	--
Mercury, Total Recoverable	µg/L	0.10	--	--
	lbs/day ¹	0.00010	--	--
Nickel, Total Recoverable, (Wet Weather) ³	µg/L	960	--	--
	lbs/day ¹	0.96	--	--
Selenium, Total Recoverable	µg/L	8.2	--	--
	lbs/day ¹	0.0082	--	--
Chlordane	µg/L	0.0012	--	--
	lbs/day ¹	1.2 x 10 ⁻⁶	--	--
4,4-DDD	µg/L	0.0017	--	--
	lbs/day ¹	1.7 x 10 ⁻⁶	--	--

Parameter	Units	Effluent Limitations		
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
4,4-DDE	µg/L	0.0012	--	--
	lbs/day ¹	1.2 x 10 ⁻⁶	--	--
4,4-DDT	µg/L	0.0012	--	--
	lbs/day ¹	1.2 x 10 ⁻⁶	--	--
Dieldrin	µg/L	0.00028	--	--
	lbs/day ¹	2.8 x 10 ⁻⁷	--	--
PCBs	µg/L	0.00034	--	--
	lbs/day ¹	3.4 x 10 ⁻⁷	--	--
Toxaphene	µg/L	0.00033	--	--
	lbs/day ¹	3.3 x 10 ⁻⁷	--	--

1. Mass limitations (lbs/day) are based on a maximum permitted flow of 0.120 MGD and are calculated as follows:

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

For reporting, the actual mass for a pollutant shall be calculated based on the actual measured flow of the discharge and actual measured concentration.

2. The maximum daily effluent limitation (MDEL) for chronic toxicity shall be reported as “Pass” or “Fail” and “% Effect”. The MDEL is exceeded when a toxicity test results in a “Fail,” and the percent effect is greater than or equal to 0.50.
3. Within this Order, wet-weather effluent limitations apply when the flow at ASNC1 gauge station (Arroyo Simi at Madera Rd.) equals 10 cubic feet per second (cfs) or greater; otherwise, dry-weather effluent limitations apply.

B. Land Discharge Specifications – Not Applicable

C. Recycling Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

The discharge shall not cause the following in the tributary to the Happy Camp Wash or in Happy Camp Wash:

1. The pH of the receiving water shall not be depressed below 6.5 or raised above 8.5 as a result of the discharge. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of waste discharge. Natural conditions shall be determined on a case-by-case basis.
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
 - a. Geometric Mean Limits
 - i. *E. coli* density shall not exceed 126/100ml.
 - b. Single Sample Maximum
 - i. *E. coli* density shall not exceed 235/100ml.

The geometric mean values should be calculated based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period).

4. The mean annual dissolved oxygen concentration to fall below 7.0 mg/L. No single determination of dissolved oxygen shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations.
5. Exceedance of the total ammonia (as N) concentrations specified in the Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use Designations for Protection of Aquatic Life*; and the Regional Water Board Resolution No. 2005-014, *An Amendment to the Water Quality Control Plan for the Los Angeles Region to Revise Early Life Stage Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) for Protection of Aquatic Life*.
6. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
7. Where natural turbidity is between 0 to 50 NTU, increases in turbidity shall not exceed 20%. Where natural turbidity is greater than 50 NTU, increases in turbidity shall not exceed 10%.
8. 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.
9. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
10. Toxic or other deleterious substances in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
11. Accumulation of bottom deposits or aquatic growths.
12. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
13. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.
14. Alteration of turbidity, or apparent color beyond present natural background levels.
15. Damage, discolor, or formation of sludge deposits on flood control structures or facilities, or overloading of the design capacity.
16. Degradation of surface water communities and populations including vertebrate, invertebrate, and plant species.
17. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
18. Nuisance, or adversely affect beneficial uses of the receiving water, including but not limited to biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.

19. Violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water Board. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

B. Groundwater Limitations – Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D.
2. The Discharger shall comply with the following provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this Order, the more stringent provision shall apply:
 - 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 programs developed to comply with NPDES permits issued by the Regional Water Board to local agencies.
 - c. 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.
 - d. 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.
 - e. Oil or oily material, chemicals, refuse, or other wastes that constitute a condition of pollution or nuisance 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.
 - f. 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.
 - g. 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.
- h. 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.
- i. The Discharger shall file with the Regional Water Board a report of waste discharge at least 180 days before making any material change or proposed change in the character, location or volume of the discharge.
- j. 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.
- k. In the event of any change in name, ownership, or control of these waste disposal facilities, the Discharger shall notify this Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Water Board.
- l. 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.
- m. Violation 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.
- n. 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. U.S. EPA registration number, if applicable.
- o. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

- p. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, 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.
- q. 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. (Wat. Code § 1211.)
- r. The provisions of this order are severable. If any provision of this Order is found invalid, the remainder of this Order shall not be affected.

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

1. Reopener Provisions

- a. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the federal CWA, and amendments thereto, the Regional Water Board may 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 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 Arroyo Simi or tributaries thereto. Happy Camp Wash is a tributary to Arroyo Simi.
- e. 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.
- f. 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.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. **Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan.** The Discharger shall submit to the Regional Water Board an Initial Investigation TRE workplan (1-2 pages) within 90 days of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected. See section V of the Monitoring and Reporting Program (Attachment E) for an overview of TRE requirements.

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:

- a. An updated Storm Water Pollution Prevention Plan (SWPPP) that describes site specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to the waters of the state. The SWPPP shall cover all areas of the Facility and shall include an updated drainage map for the Facility. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge point; describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material; and address the feasibility of containment and/or treatment of storm water. In addition, the SWPPP shall address and include best management practices and procedures that the Discharger will implement to prohibit the discharge of trash from the Facility through Discharge Point 001. The SWPPP shall be developed in accordance with the requirements in Attachment G.
- b. An updated **Best Management Practices Plan (BMPP)** that will be implemented to reduce the discharge of pollutants to the receiving water. The BMPP shall include site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material and trash from being discharged to waters of the State. Further, the Discharger shall ensure that the storm water discharges from the Facility would neither cause nor contribute to a nuisance in the receiving water, and that unauthorized discharges (i.e. spills) to the receiving water have been effectively prohibited. In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material and trash discharges to surface waters. The BMPP may be included and submitted as part of the SWPPP.
- c. An updated **Spill Control Plan (SCP)** that shall be site-specific and shall cover all areas of the Facility including material storage areas. The SCP shall describe the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effects of such events. The SCP may be included and submitted as part of the SWPPP

Each plan shall cover all areas of the Facility and shall include an updated drainage map for the Facility. The plans shall be reviewed annually and at the same time and updated as required. Updated information shall be submitted to the Regional Water Board within 30 days of revision.

The Discharger shall implement the SWPPP, BMPP, and SCP Plan within 10 days of the approval by the Executive Officer or no later than 90 days after submission to the Regional Water Board, whichever comes first. The Discharger shall continue to implement any existing and previously approved SWPPP until an updated SWPPP is

approved by the Executive Officer or until the stipulated 90-day period after the updated SWPPP submittal has occurred.

4. Construction, Operation and Maintenance Specifications

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

5. Other Special Provisions – Not Applicable

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

B. Effluent Limitations Expressed as a Sum of Several Constituents.

If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations of a group of pollutants, consider constituents reported as "Not Detected" (ND) or "Detected, but Not Quantified" (DNQ) to have concentrations equal to zero, provided that the applicable ML is used.

C. Effluent Limitations Expressed as a Median.

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

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

D. Multiple Sample Data.

When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

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

E. Average Monthly Effluent Limitation (AMEL).

If the average (or when applicable, the median determined by section D 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. If multiple samples are taken the Discharger will only be considered out of compliance for days when the discharge occurs. For anyone calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

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

1. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for that constituent, the Discharger has demonstrated compliance with the AMEL for each day of the month for that parameter;
2. If the analytical result of a single sample monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any constituent, the Discharger shall collect four additional samples at approximately equal intervals during the month. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. The concentration of a pollutant (an arithmetic mean or a median) in these samples estimated from the "Multiple Sample Data Reduction" section above, will be used for compliance determination.
3. In the event of noncompliance with an AMEL, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

F. Maximum Daily Effluent Limitations (MDEL).

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

G. 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).

H. 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).

I. Chronic Toxicity.

The discharge is subject to determination of “Pass” or “Fail” and “Percent Effect” from a single-effluent concentration chronic toxicity test at the discharge In-stream Waste Concentration (IWC) using the Test of Significant Toxicity (TST) statistical 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 statistical 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 statistical approach, results in “Fail” and the “Percent Effect” is $\geq 50\%$.

J. Mass and Concentration Limitations

Compliance with mass effluent limitations and concentration effluent limitations for the same parameter shall be determined separately. When the concentration for a parameter in a sample is reported as ND or DNQ, the corresponding mass emission rate determined using that sample concentration shall also be reported as ND or DNQ.

K. 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 noncompliance 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.

L. Bacterial Standards and Analyses

The geometric mean used for determining compliance with bacterial standards is calculated using the following equation:

$$\text{Geometric Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n}$$

where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL or CFU/100 mL) found on each day of sampling. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for *Enterococcus*). The detection method used for each analysis shall be reported with the results of the analysis.

Detection methods used for coliforms (total, fecal, and *E. coli*) and *Enterococcus* shall be those presented in Table 1A of 40 C.F.R. part 136 (revised August 28, 2017), unless alternate methods have been approved by U.S. EPA pursuant to 40 C.F.R. part 136 or improved methods have been determined by the Executive Officer and/or U.S. EPA.

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)

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

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

Average Monthly Effluent Limitation (AMEL)

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

Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

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 1 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 U.S. EPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays

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

Estimated Chemical Concentration

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

Estuaries

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

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 reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 C.F.R. part 136, Attachment B.

Minimum Level (ML)

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

Mixing Zone

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

Not Detected (ND)

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

Persistent Pollutants

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

Pollutant Minimization Program (PMP)

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

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 Regional Water Board.

Reporting Level (RL)

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

Source of Drinking Water

Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

Standard Deviation (σ)

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

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

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

Toxicity Reduction Evaluation (TRE)

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

Trash

All improperly discarded solid material from any production, manufacturing, or processing operation including, but not limited to, products, product packaging, or containers constructed of plastic, steel, aluminum, glass, paper, or other synthetic or natural material.

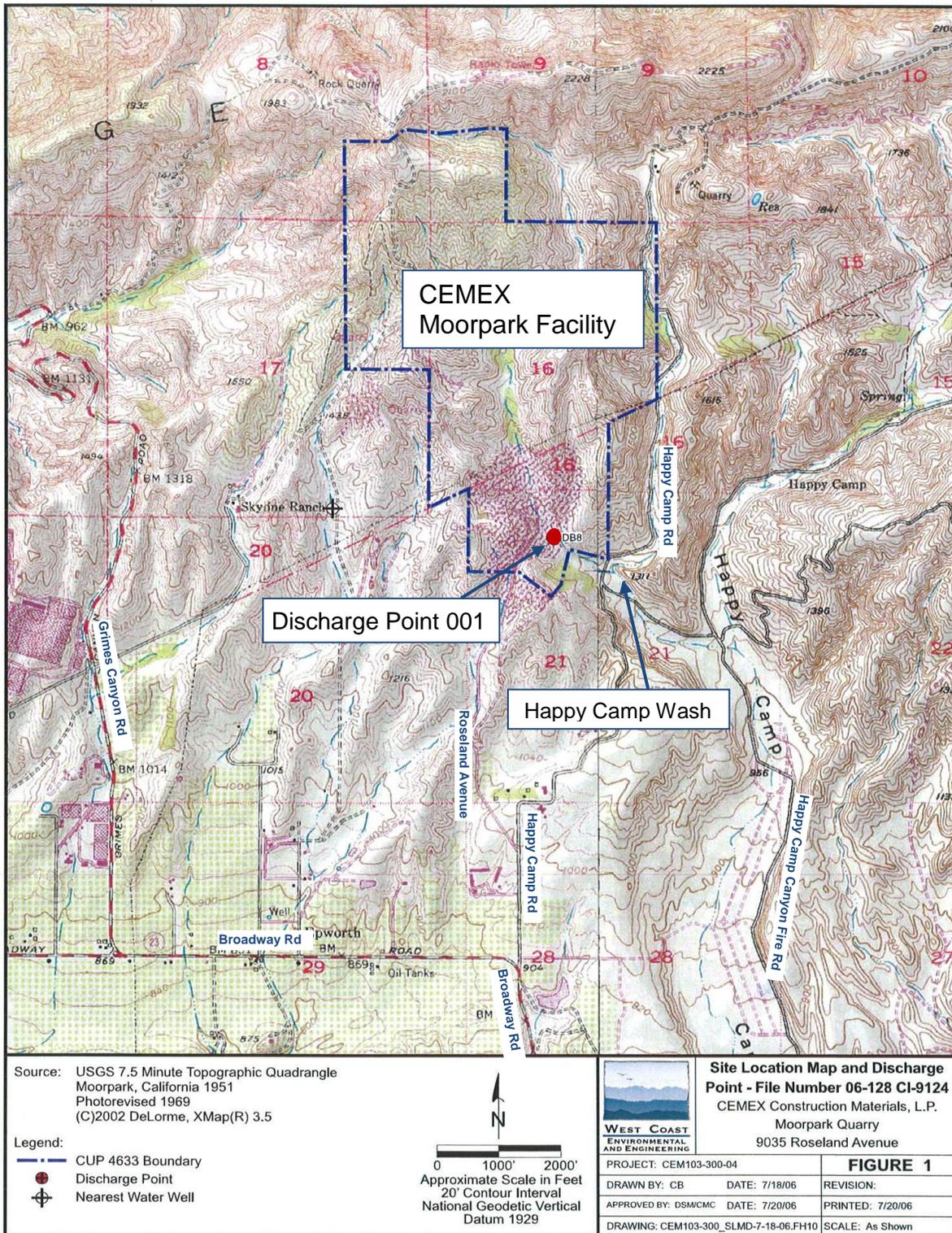
Water Recycling

The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

Wet Weather

Within this Order, wet-weather effluent limitations apply when the flow at ASNC1 gauge station (Arroyo Simi at Madera Rd.) equals 10 cfs or greater; otherwise, dry-weather effluent limitations apply.

ATTACHMENT B – REGIONAL SITE MAP



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 C.F.R. § 122.41(a); Wat. Code, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)
2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants 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 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, U.S. EPA, 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 (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i); Wat. Code, §§ 13267, 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(i); 40 C.F.R. § 122.41(i)(1); Wat. Code, §§ 13267, 13383);
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(2); Wat. Code, §§ 13267, 13383);
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(B)(iii); 40 C.F.R. § 122.41(i)(3); Wat. Code, §§ 13267, 13383); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
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 prior notice, if possible at least 10 days before the date of the bypass. The notice shall be sent to the Regional Water Board. As of December 21, 2020, notices shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(i).)
- b. Unanticipated bypass. The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). The notice shall be sent to the Regional Water Board. As of December 21, 2020, notice shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (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 must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. part 136 for the analysis of pollutants or pollutant parameters or as required under 40 C.F.R. chapter 1 subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
2. The method has the lowest ML of the analytical methods approved under 40 C.F.R. part 136 or required under 40 C.F.R. chapter 1, subchapter N for the measured pollutant or pollutant parameter.

In the case of pollutants or pollutant parameters for which there are no approved methods under 40 C.F.R. part 136 or otherwise required under 40 C.F.R. chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 C.F.R. §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. 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 U.S. EPA within a reasonable time, any information which the Regional Water Board, State Water Board, or U.S. EPA 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 U.S. EPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, §§ 13267, 13383.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, V.B.5 and V.B.6 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 U.S. EPA 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:

“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)).

6. Any person providing the electronic signature for documents described in Standard Provisions – V.B.1, V.B.2, or V.B.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting V.B, and shall ensure that all relevant requirements of 40 C.F.R. part 3 (Cross-Media Electronic Reporting) and 40 C.F.R. part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R § 122.22(e).)

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. As of December 21, 2016, all reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J and comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (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. chapter 1, subchapter N, the results of

such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Regional Water Board or State 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 which 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 report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report 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.

For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (i.e., combined sewer overflow, sanitary sewer overflow, or bypass event), type of overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volume untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the event, and whether the noncompliance was related to wet weather.

As of December 21, 2020, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting V.J. The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours:
 - 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 on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

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).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional 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. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting V.E and the applicable required data in appendix A to 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (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 U.S. EPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

J. Initial Recipient for Electronic Reporting Data

The owner, operator, or the duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 C.F.R. part 127 to the initial recipient defined in 40 C.F.R. section 127.2(b). U.S. EPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 C.F.R. section 127.2(c)]. U.S. EPA will update and maintain this listing. (40 C.F.R. § 122.41(l)(9).)

VI. STANDARD PROVISIONS – ENFORCEMENT

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

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 ($\mu\text{g/L}$) (40 C.F.R. § 122.42(a)(1)(i));
 - b. 200 $\mu\text{g/L}$ for acrolein and acrylonitrile; 500 $\mu\text{g/L}$ 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 ($\mu\text{g/L}$) (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 (MRP 6658)

CONTENTS

I.	General Monitoring Provisions	E-2
II.	Monitoring Locations	E-5
III.	Influent Monitoring Requirements –Not Applicable	E-5
IV.	Effluent Monitoring Requirements	E-5
	A. Monitoring Location EFF-001	E-5
V.	Whole Effluent Toxicity Testing Requirements	E-8
	A. Chronic Toxicity Testing.....	E-8
VI.	Land Discharge Monitoring Requirements – Not Applicable.....	E-12
VII.	Recycling Monitoring Requirements – Not Applicable	E-12
VIII.	Receiving Water Monitoring Requirements	E-12
	A. Monitoring Location RSW-001	E-12
	B. Monitoring Location RSW-002 – Arroyo Simi at Madera Road (ANSC1).....	E-14
IX.	Other Monitoring Requirements	E-14
	A. Rainfall Monitoring.	E-14
	B. Visual Monitoring	E-14
X.	Reporting Requirements	E-14
	A. General Monitoring and Reporting Requirements	E-14
	B. Self-Monitoring Reports (SMRs)	E-15
	C. Discharge Monitoring Reports (DMRs).....	E-17
	D. Other Reports	E-17

TABLES

Table E-1.	Monitoring Station Locations	E-5
Table E-2.	Effluent Monitoring at Monitoring Location EFF-001	E-5
Table E-3.	Receiving Water Monitoring Requirements at RSW-001.....	E-12
Table E-4.	Monitoring Periods and Reporting Schedule.....	E-15

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP NO. 6658)

Section 308 of the federal Clean Water Act (CWA) and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of title 40 of the Code of Federal Regulations (40 C.F.R.) require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

I. GENERAL MONITORING PROVISIONS

- A. An effluent sampling station shall be established for the point of discharge (Discharge Point 001 (Latitude 34.33475°, Longitude -118.87253°) and shall be located where representative samples of that effluent can be obtained.
- B. Effluent samples shall be taken downstream of any 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 40 C.F.R. sections 136.3, 136.4, and 136.5 (revised August 28, 2017); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Resources Control Board (State Water Board).
- E. Laboratory Certification. Laboratories analyzing monitoring samples shall be certified by the State Water Board, Drinking Water Division, Environmental Laboratory Accreditation Program (ELAP) in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.
- F. For any analysis performed for which no procedure is specified in the U.S. EPA guidelines or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.
- G. Each monitoring report must affirm in writing that *“all analyses were conducted at a laboratory certified for such analyses by the State Water Board or approved by the Executive Officer and in accordance with current U.S.EPA guideline procedures or as specified in this MRP.”*
- H. The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:
 - 1. An actual numerical value for sample results greater than or equal to the ML; or
 - 2. “Detected, but Not Quantified (DNQ)” if results are greater than or equal to the laboratory’s MDL but less than the ML. The estimated chemical concentration of the sample shall also be reported; 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.

- I. The MLs employed for effluent analyses to determine compliance with effluent limitations shall be lower than the effluent limitations established in this Order for a given parameter as per the sufficiently sensitive regulations at 40 C.F.R. section 122.44(i)(1)(iv). If the ML value is not below the effluent limitations, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory QA/QC procedures.
- J. The MLs employed for effluent analyses not associated with determining compliance with effluent limitations in this Order shall be lower than the lowest applicable water quality objective, for a given parameter as per the sufficiently sensitive regulations at 40 C.F.R. section 122.44(i)(1)(iv). Water quality objectives for parameters may be found in Chapter 3 of the Basin Plan and the CTR (40 C.F.R. section 131.38). If the ML value is not below the water quality objective, 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, the associated laboratory QA/QC procedures, reporting levels (RLs), and method detection limits (MDLs).

Where no U.S. EPA-approved method exists, 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 August 28, 2017);
 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 U.S. EPA-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.
- K. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 C.F.R. section 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.

- L.** Field analyses with short sample holding times such as pH, total residual chlorine, dissolved oxygen and temperature, may be performed using properly calibrated and maintained portable instruments by trained personnel acting on the Discharger's behalf, using methods in accordance with 40 C.F.R. part 136. All field instruments must be calibrated per manufacturer's instructions. A manual containing the standard operating procedures for all field analyses, including records of personnel proficiency training, instruments calibration and maintenance, and quality control procedures shall be maintained onsite, and shall be available for inspection by Regional Water Board staff. Information including instrument calibration, time of sample collection, time of analysis, name of analyst, quality assurance/quality control data, and measurement values shall be clearly documented during each field analysis and submitted to the Regional Water Board as part of the corresponding regular monitoring report.
- M.** 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.
- N.** 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.
- O.** 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. 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.
- P.** The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board at the following address:

State Water Resources Control Board
Quality Assurance Program Officer
Office of Information Management and Analysis
1001 I Street,
Sacramento, CA 95814

- Q.** For parameters that both average monthly and maximum daily 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 may 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 may be increased to weekly and may 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.
- R.** In the event wastes are transported to a different disposal site during the reporting period, the following shall be reported in the monitoring report:

1. Types of wastes and quantity of each type;
2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and
3. Location of the final point(s) of disposal for each type of waste.

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

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

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	At the weir in Debris Basin 8, Discharge Point 001 Latitude: 34.3350°, Longitude: -118.8783°
--	RSW-001	Within the Happy Camp Wash, upstream of the confluence of the unnamed tributary containing the discharge with the Happy Camp Wash at Latitude: 34.3336°, Longitude: -118.8739°
--	RSW-002	At the flow gauge in the Arroyo Simi at Madera Road (ASNC1)

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

III. INFLUENT MONITORING REQUIREMENTS –NOT APPLICABLE

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

1. The Discharger shall monitor treated storm water at Monitoring Location EFF-001 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding minimum level.

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	gallons/day	Meter	1/Day ¹	--
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Oil and Grease	mg/L, lbs/day ²	Grab	1/Discharge Event ³	4
pH	standard units	Grab	1/Discharge Event ³	4
Total Suspended Solids (TSS)	mg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Ammonia Nitrogen, Total (as N)	mg/L, lbs/day ²	Grab	1/Year ¹⁰ (First discharge of the year)	4
Boron, Total	mg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Barium, Total	mg/L, lbs/day ²	Grab	1/Year ¹⁰ (First discharge of the year)	4

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Chloride	mg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Chlorpyrifos	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Chronic Toxicity	Pass or Fail, % Effect	Grab	1/Year ¹⁰ (First discharge of the year)	4, 5
Diazinon	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4
<i>E. coli</i>	CFU or MPN/100 mL	Grab	1/Year ¹⁰ (First discharge of the year)	4, 6
Methyl Tertiary Butyl Ether	µg/L, lbs/day ²	Grab	1/Year ¹⁰ (First discharge of the year)	4
Nitrite Plus Nitrate (as N)	mg/L, lbs/day ²	Grab	1/Year ¹⁰ (First discharge of the year)	4
Phenolic Compounds	µg/L, lbs/day ²	Grab	1/Year ¹⁰ (First discharge of the year)	4
Settleable Solids	mL/L	Grab	1/Discharge Event ³	4
Sulfate	mg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Temperature	°F	Grab	1/Discharge Event ³	4
Total Petroleum Hydrocarbons (TPH) as Gasoline (C ₄ -C ₁₂)	µg/L, lbs/day ²	Grab	1/Year ¹⁰ (First discharge of the year)	EPA Method 8015B
TPH as Diesel (C ₁₃ -C ₂₂)	µg/L, lbs/day ²	Grab	1/Year ¹⁰ (First discharge of the year)	EPA Method 8015B
TPH as Waste Oil (C ₂₃₊)	µg/L, lbs/day ²	Grab	1/Year ¹⁰ (First discharge of the year)	EPA Method 8015B
TPH (sum) ⁷	µg/L, lbs/day ²	Calculated	1/Year ¹⁰ (First discharge of the year)	--
Total Dissolved Solids (TDS)	mg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Turbidity	NTU	Grab	1/Discharge Event ³	4
Arsenic, Total Recoverable	µg/L, lbs/day ²	Grab	1/Year ¹⁰ (First discharge of the year)	4
Cadmium, Total Recoverable	µg/L, lbs/day ²	Grab	1/Year ¹⁰ (First discharge of the year)	4
Copper, Total Recoverable	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Lead, Total Recoverable	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Mercury, Total Recoverable	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4, 8
Nickel, Total Recoverable	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Selenium, Total Recoverable	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Silver, Total Recoverable	µg/L, lbs/day ²	Grab	1/Year ¹⁰ (First discharge of the year)	4
Zinc, Total Recoverable	µg/L, lbs/day ²	Grab	1/Year ¹⁰ (First discharge of the year)	4
4,4-DDD	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4
4,4-DDE	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4
4,4-DDT	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Chlordane	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Dieldrin	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4
PCBs	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4
Toxaphene	µg/L, lbs/day ²	Grab	1/Discharge Event ³	4
TCDD Equivalents ⁹	µg/L	Grab	1/Year ¹⁰ (First discharge of the year)	4
Remaining Priority Pollutants ¹¹	µg/L	Grab	1/Year ¹⁰ (First discharge of the year)	4

- ¹ Flow shall be recorded daily. Days with no flow shall also be recorded.
- ² The mass (lbs/day) for the discharge shall be calculated and reported using the measured concentration and the actual flow rate measured at the time of discharge, using the formula:

$$M = 8.34 \times C \times Q$$
 where: M = mass discharge for a pollutant, lbs/day
 C = Reported concentration for a pollutant (mg/L)
 Q = actual discharge flow rate (MGD).
- ³ Sampling from the discharge location shall be collected within four (4) hours of the start of discharge, or the start of facility operations if the discharge occurs within the previous 12 hours period (e.g. for storms with discharges that begin during the night). Sample collection is required during scheduled facility operating hours and when sampling conditions are safe. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, a sample shall be obtained at the first safe opportunity, and the reason for the delay shall be included in the report. Each separate period of discharge shall be sampled, but no more than one sample per week or any 7-day period is required during periods of extended discharge. If there is no discharge to surface waters, then no monitoring is required. In the corresponding monitoring report, the Discharger shall indicate under statement of perjury that no effluent was discharged to surface waters during the reporting period.
- ⁴ Pollutants shall be analyzed using the analytical methods described in 40 C.F.R. part 136; for priority pollutants; the methods must meet the lowest MLs specified in Appendix 4 of the SIP and included as Attachment H in this Order. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.
- ⁵ Refer to section V, Whole Effluent Toxicity Testing Requirements.
- ⁶ Detection methods used for *E. coli* shall be those presented in Table 1A of 40 C.F.R. part 136, unless alternate methods have been approved by U.S. EPA pursuant to 40 C.F.R. part 136 or improved methods have been determined by the Executive Officer and/or U.S. EPA.
- ⁷ The Discharger shall report the sum of TPH as Gasoline (C₄₋₁₂), TPH as Diesel (C₁₃₋₂₂), and TPH as Oil (C₂₃₊).
- ⁸ The Discharger shall use ultra-clean sampling (U.S. EPA Method 1669) and ultra-clean analytical methods (U.S. EPA Method 1631, Revision E) for mercury monitoring. The minimum level (ML) for mercury is 0.5 ng/L (or 0.005 µg/L) (U.S. EPA Method 1631, Revision E or U.S. EPA Method 245.7).
- ⁹ TCDD is 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD). TCDD equivalents include 2,3,7,8-TCDD plus 16 dioxin and furan congeners and shall be calculated using the following formula, where the MLs and the toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the MLs to zero. U.S. EPA 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

Congeners	Minimum Levels (pg/L)	Toxicity Equivalence Factor (TEF)
2,3,7,8 - tetra CDD	10	1.0

Congeners	Minimum Levels (pg/L)	Toxicity Equivalence Factor (TEF)
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

- ¹⁰ Annual samples shall be collected during the first discharge of the year. Sampling shall be performed during the first hour of discharge. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, a sample shall be obtained at the first safe opportunity, and the reason for the delay shall be included in the report. Monitoring is only required during years in which a discharge occurs.
- ¹¹ Priority pollutants as defined by the California Toxics Rule (CTR) are included in Attachment I of this Order.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Chronic Toxicity Testing

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

The chronic toxicity IWC for this discharge at Discharge Point 001 is 100 percent effluent.

2. 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. Sufficient sample volume shall also be collected for subsequent TIE studies, if necessary, at each sampling event. 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.

3. Chronic Toxicity Effluent Monitoring Program

For this Permit, samples are collected from an outfall discharging to the receiving water with a salinity of <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). In no case shall these species be substituted with another test species unless written authorization from the Regional Board 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 1002.0).
- c. A static renewal toxicity test with the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

4. Species Sensitivity Screening

Species sensitivity screening shall be conducted during this permit's first required sample collection. The Discharger shall collect a single effluent sample and concurrently conduct three toxicity tests using the fish, an invertebrate, and the algae species previously referenced. After this screening period, the species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during the permit cycle.

Rescreening is required at least once per five (5) 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 using enough collected effluent for a minimum of three, but not to exceed five suites.

5. 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 a 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) statistical approach described in the *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 statistical approach is:

Mean discharge IWC response \leq (0.75 x Mean control response).

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. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method, then the Discharger must re-sample and re-test for the subsequent discharge event.
- 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. All reference toxicant test results should be reviewed and reported. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).
- 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).

6. Preparation of Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan

The Discharger shall prepare 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 a minimum, the work plan shall include:

- a. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
- b. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the Facility.
- c. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of who would conduct the TIEs (i.e., an in-house expert or outside contractor).

7. Toxicity Identification Evaluation and Toxicity Reduction Evaluation Process

- a. **Toxicity Identification Evaluation (TIE).** A toxicity test sample is immediately subject to TIE procedures to identify the toxic chemical(s), if a chronic toxicity test shows "Fail and % Effect value ≥ 50 ". The Discharger shall initiate a TIE using, 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.
- b. **Toxicity Reduction Evaluation (TRE).** When a toxicant or class of toxicants is identified, a TRE shall be performed for that toxicant. The TRE shall include all reasonable steps to identify the source(s) of toxicity and discuss appropriate BMPs to eliminate the causes of toxicity. No later than 30 days after the source of toxicity and appropriate BMPs and/or treatment are identified, the Discharger shall submit a TRE Corrective Action Plan to the Executive Officer for approval. At minimum, the plan shall include:
 - i. The potential sources of pollutant(s) causing toxicity.
 - ii. Recommended BMPs and/or treatment to reduce the pollutant(s) causing toxicity.
 - iii. Follow-up monitoring to demonstrate that toxicity has been removed.
 - iv. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity.
 - v. A schedule for these actions, progress reports, and the final report.
- 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 TIE/TRE process.
- 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.

8. 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 titled *Report Preparation*, including:

- a. The toxicity test results for the TST statistical approach, reported as “Pass” or “Fail” and “Percent (%) Effect” at the chronic toxicity IWC for the discharge. All toxicity test results (whether identified as valid or otherwise) conducted during the calendar month shall be reported in the SMR for that testing month.
- b. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).
- c. The statistical analysis used in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010) Appendix A, Figure A-1, Table A-1, and Appendix B, Table B-1.
- d. 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.
- e. Statistical program (e.g., TST calculator, CETIS, etc.) output results for each toxicity test.
- f. Tabular data and graphical plots clearly showing the laboratory’s performance for the reference toxicant for the previous 20 tests and the laboratory’s performance for the control mean, control standard deviation, and control coefficient of variation for the previous 12-month period.
- g. Any additional QA/QC documentation or any additional chronic toxicity-related information, upon request from the Regional Water Board staff.

9. Ammonia Removal

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

- a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.
- b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.

- c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.
- d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.

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

10. Chlorine Removal

Except with prior approval from the Executive Office of the Regional Water Board, chlorine shall not be removed from bioassay samples.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECYCLING MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS

A. Monitoring Location RSW-001

- 1. The Discharger shall monitor the Happy Camp Wash, upstream of the confluence of the unnamed tributary containing the discharge, and the Happy Camp Wash at Monitoring Location RSW-001 as follows:

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	standard units	Grab	1/Year ¹	2
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Year ¹	2
Barium, Total	mg/L	Grab	1/Year ¹	2
Boron, Total	mg/L	Grab	1/Year ¹	2
Chloride	mg/L	Grab	1/Year ¹	2
Chlorpyrifos	µg/L	Grab	1/Year ¹	2
Diazinon	µg/L	Grab	1/Year ¹	2
Dissolved Oxygen	mg/L	Grab	1/Year ¹	2
<i>E. coli</i>	MPN or CFU/100 ml	Grab	1/Year ¹	2, 3
Hardness, Total (as CaCO ₃)	mg/L	Grab	1/Year ¹	2
Nitrite Plus Nitrate (as N)	mg/L	Grab	1/Year ¹	2
Sulfate	mg/L	Grab	1/Year ¹	2
Temperature	°F	Grab	1/Year ¹	2
TDS	mg/L	Grab	1/Year ¹	2
Turbidity	NTU	Grab	1/Year ¹	2
Arsenic, Total Recoverable	µg/L	Grab	1/Year ¹	2
Cadmium, Total Recoverable	µg/L	Grab	1/Year ¹	2
Copper, Total Recoverable	µg/L	Grab	1/Year ¹	2

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Lead, Total Recoverable	µg/L	Grab	1/Year ¹	2
Mercury, Total Recoverable	µg/L	Grab	1/Year ¹	2, 4
Nickel, Total Recoverable	µg/L	Grab	1/Year ¹	2
Selenium, Total Recoverable	µg/L	Grab	1/Year ¹	2
Silver, Total Recoverable	µg/L	Grab	1/Year ¹	2
Zinc, Total Recoverable	µg/L	Grab	1/Year ¹	2
4,4-DDD	µg/L	Grab	1/Year ¹	2
4,4-DDE	µg/L	Grab	1/Year ¹	2
4,4-DDT	µg/L	Grab	1/Year ¹	2
Dieldrin	µg/L	Grab	1/Year ¹	2
PCBs	µg/L	Grab	1/Year ¹	2
Toxaphene	µg/L	Grab	1/Year ¹	2
TCDD Equivalents ⁵	µg/L	Grab	1/Year ¹	2
Remaining Priority Pollutants ⁶	µg/L	Grab	1/Year ¹	2

- Receiving water samples should be collected at the same time as effluent samples, if possible, or at the first safe opportunity. If no discharge occurs, no receiving water sampling is required.
- 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 Appendix 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding minimum levels.
- Detection methods used for *E. coli* shall be those presented in Table 1A of 40 C.F.R. part 136, unless alternate methods have been approved by U.S. EPA pursuant to 40 C.F.R. part 136 or improved methods have been determined by the Executive Officer and/or U.S. EPA.
- The Discharger shall use ultra-clean sampling (U.S. EPA Method 1669) and ultra-clean analytical methods (U.S. EPA Method 1631, Revision E) for mercury monitoring. The ML for mercury is 0.5 ng/L (or 0.005 µg/L) (U.S. EPA Method 1631, Revision E or U.S. EPA Method 245.7).
- TCDD is 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD). TCDD equivalents include 2,3,7,8-TCDD plus 16 dioxin and furan congeners and shall be calculated using the following formula, where the MLs and the toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the MLs to zero. U.S. EPA method 1613 may be used to analyze dioxin and furan congeners.

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

Congeners	Minimum Levels (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

Congeners	Minimum Levels (pg/L)	Toxicity Equivalence Factor (TEF)
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

6. Priority pollutants as defined by the CTR are included in Attachment I of this Order.

B. Monitoring Location RSW-002 – Arroyo Simi at Madera Road (ANSC1)

The Discharger shall report the maximum daily flow in the Arroyo Simi at Madera Road for each day in which there is a discharge from the Facility. The stream flow data can be obtained at

<http://www.vcwatershed.net/fws/VCAHPS/php/ahps.php?gage=803>

or by contacting Ventura County Watershed Protection District at (805)-654-2069.

IX. OTHER MONITORING REQUIREMENTS

A. Rainfall Monitoring.

The Discharger shall measure and record the rainfall on each day of the month or submit the data obtained from the nearest city/county operated rain gauge monitoring station. This information shall be included in the quarterly monitoring report.

B. Visual Monitoring

A visual observation station shall be established in the vicinity of RSW-001, at the confluence of the unnamed tributary to Happy Camp Wash. The Discharger shall make visual observations of all storm water discharge locations on at least one storm event per month that produces a significant storm water discharge to observe the presence of trash, floating and suspended materials, oil and grease, discoloration, turbidity, and odor. A "significant storm water discharge" is a continuous discharge of storm water for a minimum of one hour, or the intermittent discharge of storm water for a minimum of 3 hours in a 12-hour period.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the Discharger shall indicate under penalty of perjury in the corresponding monitoring report that no effluent was discharged to surface water during the reporting period.
3. If the Discharger conducts monitoring more frequently than required by this Order using approved analytical methods, the results of those analyses shall be included in the monitoring report. These results shall be reflected in the calculation of the average (or median) used in demonstrating compliance with this Order.
4. 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.

5. The Discharger shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.
6. The Discharger shall report the results of chronic toxicity testing, TRE and TIE as required in the Attachment E, Monitoring and Reporting, section V.

B. Self-Monitoring Reports (SMRs)

1. The Discharger shall electronically submit SMRs using the State Water Board’s California Integrated Water Quality System (CIWQS) Program website http://www.waterboards.ca.gov/water_issues/programs/ciwqs/. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit quarterly SMRs including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-4. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
1/Discharge Event	August 1, 2018	January 1 – March 31 April 1 – June 30 July 1 – September 30 October 1 - December 31	May 1 August 1 November 1 February 1
1/Day	August 1, 2018	Midnight through 11:59 PM or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submitted with quarterly SMR
1/Year	August 1, 2018	January 1 through December 31	February 1 of the following year

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

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.
- 5. 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 Water Board and State Water Board, 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).
- 6. 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.
- 7.** The Discharger shall submit SMRs in accordance with the following requirements:
- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

C. Discharge Monitoring Reports (DMRs)

DMRs are U.S. EPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the DMR website at: <http://www.waterboards.ca.gov/water_issues/programs/discharge_monitoring>.

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 Storm Water Pollution Prevention Plan (SWPPP)
 - c. Updated Best Management Practices Plan (BMPP)
 - d. Updated Spill Control Plan (SCP)

The SWPPP, BMPP, and SCP shall be reviewed at a minimum once per year and updated as needed to ensure all actual or potential sources of trash and pollutants discharged from the Facility are addressed. All changes or revisions to the SWPPP, BMPP, and SCP shall be submitted to the Regional Water Board within 30 days of revisions.

ATTACHMENT F – FACT SHEET

CONTENTS

I.	Permit Information.....	F-3
II.	Facility Description.....	F-4
	A. Description of Wastewater and Biosolids Treatment and Controls	F-4
	B. Discharge Points and Receiving Waters	F-5
	C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data	F-5
	D. Compliance Summary.....	F-7
	E. Planned Changes	F-7
III.	Applicable Plans, Policies, and Regulations	F-8
	A. Legal Authorities	F-8
	B. California Environmental Quality Act (CEQA).....	F-8
	C. State and Federal Laws, Regulations, Policies, and Plans	F-8
	D. Impaired Water Bodies on CWA 303(d) List.....	F-11
	E. Other Plans, Policies and Regulations – Not Applicable	F-13
IV.	Rationale For Effluent Limitations and Discharge Specifications	F-13
	A. Discharge Prohibitions	F-13
	B. Technology-Based Effluent Limitations	F-13
	1. Scope and Authority	F-13
	2. Applicable Technology-Based Effluent Limitations (TBELs).....	F-14
	C. Water Quality-Based Effluent Limitations (WQBELs)	F-16
	1. Scope and Authority	F-16
	2. Applicable Beneficial Uses and Water Quality Criteria and Objectives.....	F-17
	3. Determining the Need for WQBELs	F-18
	4. WQBEL Calculations	F-20
	5. WQBELs Based on Basin Plan Objectives	F-25
	6. Whole Effluent Toxicity (WET)	F-27
	D. Final Effluent Limitation Considerations	F-28
	1. Anti-Backsliding Requirements	F-28
	2. Antidegradation Policies	F-28
	3. Mass-based Effluent Limitations	F-29
	4. Stringency of Requirements for Individual Pollutants	F-29
	5. Summary of Final Effluent Limitations.....	F-30
	E. Interim Effluent Limitations – Not Applicable	F-31
	F. Land Discharge Specifications – Not Applicable	F-31
	G. Recycling Specifications – Not Applicable.....	F-31
V.	Rationale for Receiving Water Limitations	F-31
	A. Surface Water.....	F-32
	B. Groundwater – Not Applicable	F-32
VI.	Rationale for Provisions	F-32
	A. Standard Provisions.....	F-32
	B. Special Provisions.....	F-32
	1. Reopener Provisions	F-32
	2. Special Studies and Additional Monitoring Requirements	F-32
	3. Best Management Practices and Pollution Prevention.....	F-32
	4. Construction, Operation, and Maintenance Specifications	F-33
	5. Other Special Provisions – Not Applicable.....	F-33
	6. Compliance Schedules – Not Applicable	F-33

VII. Rationale for Monitoring and Reporting Requirements F-33

 A. Influent Monitoring – Not Applicable F-33

 B. Effluent Monitoring F-33

 C. Whole Effluent Toxicity Testing Requirements F-34

 D. Receiving Water Monitoring F-34

 1. Surface Water F-34

 2. Groundwater – Not Applicable F-35

 E. Other Monitoring Requirements F-35

VIII. Public Participation..... F-35

 A. Notification of Interested Parties F-35

 B. Written Comments F-35

 C. Public Hearing F-35

 D. Reconsideration of WDRs / NPDES Permit..... F-36

 E. Information and Copying F-36

 F. Register of Interested Persons F-36

 G. Additional Information F-36

TABLES

Table F-1. Facility Information..... F-3

Table F-2. Historic Effluent Limitations from Order No. R4-2013-0078 for Discharge Point 001 F-6

Table F-3. Basin Plan Beneficial Uses F-8

Table F-4. Basin Plan Ground Water Beneficial Use..... F-9

Table F-5. Factors Considered Pursuant to 40 C.F.R. section 125.3(c) and (d)(1) for Pollutant Effluent Limitations based on Best Professional Judgement..... F-15

Table F-6. Summary of Technology-based Effluent Limitations for Discharge Point 001..... F-16

Table F-7. Applicable Water Quality Criteria F-18

Table F-8. Summary of Reasonable Potential Analysis – Discharge Point 001 F-19

Table F-9. Applicable Basin Plan Numeric Water Quality Objectives F-25

Table F-10. Summary of Final Effluent Limitations at Discharge Point 001 F-30

ATTACHMENT F – FACT SHEET

As described in section II.B of this Order, the Los Angeles Regional Water 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	4A562022001
Discharger	CEMEX Construction Materials Pacific, LLC
Name of Facility	Moorpark Facility
Facility Address	9035 Roseland Ave
	Moorpark, California 93021
	Ventura County
Facility Contact, Title and Phone	Patricia Contreras, Environmental Manager, (909) 974-5429
Authorized Person to Sign and Submit Reports	Daniel Olivera, Vice President, General Manager, (714) 473-7576
Mailing Address	3990 E. Concours Street, Suite 3200, Ontario, CA, 91764
Billing Address	SAME
Type of Facility	Industrial (sand and gravel mining and processing)
Major or Minor Facility	Minor
Threat to Water Quality	3
Complexity	C
Pretreatment Program	No
Recycling Requirements	No
Facility Permitted Flow	0.120 million gallons per day (MGD)
Facility Design Flow	Not Applicable
Watershed	Calleguas Creek
Receiving Water	Unnamed Tributary to Happy Camp Wash
Receiving Water Type	Inland Surface Water

- A.** CEMEX Construction Materials Pacific, LLC (hereinafter Discharger) is the owner and operator of the Moorpark Facility (hereinafter Facility) a sand and gravel mining and processing facility.

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

- B. The Facility discharges wastewater to an unnamed tributary to the Happy Camp Wash, both of which are waters of the United States. The Discharger is currently regulated by Order R4-2013-0078 which was adopted on May 2, 2013 and expired on April 10, 2018. Attachment B provides a map of the area around the Facility. Attachment C provides a storm water flow schematic of the Facility.
- C. The Discharger filed a report of waste discharge and submitted an application for renewal of its waste discharge requirements (WDRs) and the National Pollution Discharge Elimination System (NPDES) permit on November 22, 2017. Supplemental information and clarifications was requested on March 20, 2018 and received on April 9, 2018. The application was deemed complete on April 10, 2018.
- D. Regulations at 40 C.F.R. section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, Table 3 of this Order limits the duration of the discharge authorization. However, pursuant to California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all federal NPDES requirements for continuation of expired permits. Here, the Discharger has met the requirements.

II. FACILITY DESCRIPTION

The Discharger owns and operates the Moorpark Facility located at 9035 Roseland Avenue, Moorpark, California, 93021, a 1,440-acre sand and gravel mining facility. Operations at the site include: sand and gravel mining, rock processing (crush and screening), chemical storage, concrete mixing, concrete and asphalt recycling, vehicle fueling, and vehicle maintenance. The maximum production rate is 3 million tons per year of wash plaster sand, wash concrete sand, rock, pea gravel, fill, and dry plaster sand.

A. Description of Wastewater and Biosolids Treatment and Controls

In 2002, Order No. R4-2002-0102 was issued to the Facility on May 23, 2002 and it became effective on the same date. This Order required that annual sampling of wastewater contained in the Debris Basin No. 8 be performed if no surface water discharges occurred. During the term of Order No. R4-2002-0102, three such sampling events were conducted when no discharges from the Facility occurred. In addition, there were two sampling events conducted during discharges from the Facility. The samples collected during the discharges were also collected from the Debris Basin No. 8, as the Discharger determined it was unsafe during the rain event to sample at the discharge point. Order No. R4-2002-0102 was superceded by Order No. R4-2007-0060 that was effective on January 1, 2008. Subsequently, Order No. R4-2013-0078 superceded Order No. R4-2007-0060. It was adopted on May 2, 2013 and it became effective on June 1, 2013.

Prior to 2007, the Facility was designed to intermittently discharge 120,000 gallons per day (gpd) or more (depending on the severity of the storm) of wastewater consisting of storm water runoff, external rinse water from concrete trucks, and wet down of aggregate trucks. Prior to discharge, these waste streams were treated by settling within eight earthen berms, referred to as Debris Basins, placed in series. The Facility reconfigured the process and storm water system in 2007 such that process waters were eliminated from the discharge. Currently, only storm water runoff would be discharged and only during heavy rainfall events.

Contained storm water runoff and process waters are generated at two Facility locations: the Aggregate Plant and the Ready-Mix Plant (where concrete mixing occurs). The wastewaters at the Aggregate Plant consist of rainfall runoff from the aggregate mining and processing area and the runoff resulting from washing of aggregate product to remove fines. Historically, this runoff and wash water was discharged to earthen settling ponds unconnected to any surface waters of the United States, and therefore regulated under separate waste discharge

requirements, Order No. R4-2008-0207. During the term of Order R4-2013-0078, the Discharger constructed a water recycling facility so that aggregate wash water runoff is now collected, recycled, and reused in washing operations. The discharger no longer uses the settling ponds and has placed berms around them. Order No. R4-2008-0207 was terminated on April 12, 2018.

The non-discharging process water from the Ready-Mix Plant is handled in a central location of the site. A concrete lined, 3-stage weir system receives and treats runoff from the Ready-Mix Plant, concrete truck rinse water, and overspray from truck wet down (dust control). Water from the 3-stage weir system is recycled for blending at the Ready-Mix Plant. The recycle demand exceeds the supply; therefore, makeup water is purchased from the local water purveyor. No discharges occur from the 3-stage weir system.

Historically, a portion of the facility known as Fruitvale that was mined in the past was covered under the General Permit for Storm Water Discharges Associated with Industrial Activities. This area no longer has any mining activities and is being restored to the original natural status. The General Permit covering the discharges from this area was terminated on May 29, 2014.

The discharge regulated under this Order consists of rainfall runoff from the site, including roadways, equipment storage areas, and the recycled asphalt processing area. These areas drain to eight Debris Basins, numbered sequentially with Debris Basin 1 at the highest elevation and Debris Basin 8 at the lowest elevation. During extreme storm events, the Facility constructs large earthen berms across the roadways to further manage storm water and prevent road washout. Accumulated sediment in the debris basins is removed annually and placed in designated areas on site. Under most circumstances accumulated storm water in the upper five basins infiltrates and evaporates. During the term of Order R4-2013-0078, the Discharger blocked off an underdrain pipe that connected Debris Basin 5 to Debris Basin 6. In this way the Discharger more fully utilizes the storage capacity of Debris Basin 5, reduces flow to Debris Basins 6, 7, and 8, and thereby reduces the potential for a discharge event. Under extreme storm events, water from Debris Basin 5 may overflow over a dirt road into Debris Basin 6 and then to Debris Basins 7 and 8. Debris Basin 8 is the final storage basin prior to discharge to the receiving water. Similar to the upper Debris Basins, in most situations storm water in Debris Basin 8 infiltrates and evaporates. If Debris Basin 8 reaches capacity, the water would flow through a weir to an unnamed tributary, and then to Happy Camp Wash. The Facility has not discharged from Debris Basin 8 to the receiving water since 2005.

B. Discharge Points and Receiving Waters

The Facility may discharge up to 0.120 MGD of storm water from Discharge Point 001 to the unnamed tributary to Happy Camp Wash. The location of Discharge Point 001 is latitude 34.33475^o and longitude -118.87825^o. The unnamed tributary flows approximately 0.5 mile to Happy Camp Wash, a tributary to Arroyo Simi which flows to Arroyo Las Posas and Calleguas Creek. Happy Camp Wash is part of the Calleguas Creek Watershed Area.

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

Effluent limitations contained in Order No. R4-2013-0078 for discharges from Discharge Point 001 are summarized in Table F-2 below. No monitoring data are included because no discharges from the Facility occurred during the term of the Order.

Table F-2. Historic Effluent Limitations from Order No. R4-2013-0078 for Discharge Point 001

Parameter	Units	Effluent Limitation	
		Maximum Daily	Instantaneous Minimum/Maximum
Flow	MGD	0.120	--
Conventional Pollutants			
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	30	--
	lbs/day ¹	30	--
Oil and Grease	mg/L	15	--
	lbs/day ¹	15	--
pH	standard units	--	6.5/8.5 ²
Total Suspended Solids (TSS)	mg/L	75	--
	lbs/day ¹	75	--
Non-Conventional Pollutants			
Acute Toxicity	% Survival	3	
Chronic Toxicity	TUc	4	
Barium	µg/L	1,000	--
	lbs/day ¹	1.0	--
Boron	mg/L	1.0	--
	lbs/day ¹	1.0	--
Chloride	mg/L	150	--
	lbs/day ¹	150	--
Chlorpyrifos	µg/L	0.023	--
	lbs/day ¹	0.000023	--
Diazinon	µg/L	0.1	--
	lbs/day ¹	0.00010	--
Nitrite Plus Nitrate (as N)	mg/L	10	--
	lbs/day ¹	10	--
Settleable Solids	ml/L	0.3	--
Sulfates	mg/L	250	--
	lbs/day ¹	250	--
Temperature	°F	--	86 (maximum)
Total Dissolved Solids (TDS)	µg/L	850	--
	lbs/day ¹	850	--
Turbidity	NTU	75	--
Priority Pollutants			
Arsenic, Total Recoverable	µg/L	10	--
	lbs/day ¹	0.010	--
Cadmium, Total Recoverable	µg/L	5	--
	lbs/day ¹	0.005	--
Chlordane, Total Recoverable	µg/L	0.0012	--
	lbs/day ¹	1.2E-6	--
Copper, Total Recoverable (Dry-weather) ⁵	µg/L	22	--
	lbs/day ¹	0.022	--

Parameter	Units	Effluent Limitation	
		Maximum Daily	Instantaneous Minimum/Maximum
Copper, Total Recoverable (Wet-weather) ⁵	µg/L	31	--
	lbs/day ¹	0.31	--
Dieldrin	µg/L	0.00028	--
	lbs/day ¹	2.8E-7	--
Lead, Total Recoverable	µg/L	9.5	--
	lbs/day ¹	0.0095	--
Mercury, Total Recoverable	µg/L	0.10	--
	lbs/day ¹	0.00010	--
Nickel, Total Recoverable (Dry-weather) ⁵	µg/L	100	--
	lbs/day ¹	0.10	--
Nickel, Total Recoverable (Wet-weather) ⁵	µg/L	960	--
	lbs/day ¹	0.96	--
PCBs	µg/L	0.00034	--
	lbs/day ¹	3.4E-7	--
Selenium, Total Recoverable	µg/L	8.2	--
	lbs/day ¹	0.0082	--
4,4-DDD	µg/L	0.0017	--
	lbs/day ¹	1.7E-6	--
4,4-DDE	µg/L	0.0012	--
	lbs/day ¹	1.2E-6	--
4,4 – DDT	µg/L	0.0012	--
	lbs/day ¹	1.2E-6	--
Toxaphene	µg/L	0.00033	--
	lbs/day ¹	3.3E-7	--

1. The mass limitations are based on a maximum flow of 0.120 MGD.
2. Instantaneous minimum/instantaneous maximum.
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 shall produce less than 70% survival. Compliance with the toxicity objectives will be determined by the method described in section V of the MRP (Attachment E).
4. The monthly median for chronic toxicity of 100% effluent shall not exceed 1.0 TUC in a critical life stage test.
5. Wet-weather effluent limitations apply when the flow at ASMC1 gauge station (Arroyo Simi at Madera Rd.) equals 10 cubic feet per second or greater. Otherwise, dry-weather effluent limitations apply.

D. Compliance Summary

The Facility did not discharge during the permit term. As a result, there were no violations of the numeric effluent limitations.

E. Planned Changes

The Discharger does not have any planned changes to the Facility.

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 U.S. EPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 2 subject to the WDRs in this Order.

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 for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) 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.

The Basin Plan states that “waters not specifically listed (generally smaller tributaries), are designated with the same beneficial uses as the streams, lakes, or reservoirs to which they are tributary.” The Basin Plan does not specifically identify beneficial uses for the Unnamed Tributary to Happy Camp Wash but does identify present and potential uses for Arroyo Simi, to which the Unnamed Tributary to Happy Camp Wash is tributary. The beneficial uses of Arroyo Simi are applicable to the unnamed tributary and to the Happy Camp Wash as follows:

Table F-3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Unnamed Tributary to Happy Camp Wash, a Tributary to Arroyo Simi (Hitch Road to Happy Camp Canyon)	<p><u>Existing:</u> Wildlife Habitat (WILD) and preservation of rare, threatened, or endangered species (RARE).</p> <p><u>Intermittent:</u> Industrial process supply (IND), ground water recharge (GWR), freshwater replenishment (FRSH), warm freshwater habitat (WARM), water contact recreation (REC-1), and non-contact water recreation (REC-2).</p> <p><u>Potential:</u> Municipal and domestic supply (MUN)*.</p>

* Designated under State Water Board Resolution No. 88-63 and Regional Water Board Resolution No. 89-03. Some designations may be considered for exemption at a later date. In the interim, no new effluent limitations will be placed in WDRs as a result of these designations until the Regional Board adopts this amendment.

Table F-4. Basin Plan Ground Water Beneficial Use

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Las Posas Valley	<u>Existing:</u> Municipal and domestic supply (MUN), industrial service supply (IND), industrial process supply (PROC), and agriculture supply (AGR)

Title 22 of the California Code of Regulations. The California Department of Public Health established primary and secondary maximum contaminant level of (MCLs) for inorganic, organic, and radioactive contaminants in drinking water. These MCLs are codified in Title 22, California Code of regulations (Title 22). The Basin Plan (Chapter 3) incorporates Title 22 primary MCLs by reference. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. Title 22 primary MCLs have been considered in WDRs and NPDES permits to protect the groundwater recharge beneficial use when that receiving groundwater is designed as MUN.

Groundwater Recharge (GWR). The Arroyo Simi (Calleguas Creek Reach 7) is designated as GWR. Surface water from the Arroyo Simi percolates into the North Las Posas Area of the Las Posas Valley Basin. Since groundwater from this Basin may be used to provide drinking water to the community, the groundwater aquifers should be protected, therefore, Title 22 primary MCLs were considered in developing effluent limitations.

2. **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 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*. 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. A maximum effluent temperature limitation of 86°F was determined to be appropriate for protection of aquatic life and is included in this Order. This temperature limitation is based on the foregoing and best professional judgment (BPJ).
3. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** U.S. EPA 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, U.S. EPA 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.
4. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became

effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the U.S. EPA 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 U.S. EPA 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.

5. **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 ("*Statement of Policy with Respect to Maintaining High Quality of Waters in California*"). 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.
6. **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.
7. **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.
8. **Part 1 Trash Provisions Requirements.** The State Water Board adopted a narrative water quality objective and implementation requirements to control trash, through Resolution No. 2015-0019 "*Amendment to the Ocean Plan and Part I Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California*" (Trash Amendments). The Resolution was approved by Office of Administrative Law (OAL) on December 2, 2015 and became effective upon U.S. EPA approval on January 12, 2016. The Trash Amendments apply to all surface waters of the State, with the exception of those waters within the jurisdiction of the Regional Water Board where trash or debris Total Maximum Daily Loads (TMDLs) are in effect prior to the effective date of the Trash Amendments. There are currently no Trash TMDLs for the Arroyo Simi or its tributaries; therefore, the discharges described in this Order are subject to the Trash Amendments.

In the absence of TMDL requirements, the Trash Amendments establish a narrative water quality objective for trash and a prohibition on the discharge of trash, implemented through permits issued pursuant to CWA section 402(p), waste discharge requirements, or waivers of waste discharge requirements. No specific implementation provisions were

prescribed for individual industrial permittees, and no references were made to the monitoring and reporting requirements for individual industrial permits. To be consistent with the Trash Amendments, this Order incorporates the requirements of the Trash Amendments through the prohibition of trash discharges to the NPDES discharge points. The Trash Amendments did not prescribe specific monitoring and reporting requirements applicable to the Discharger; therefore, this Order requires the Discharger to develop and implement an updated Storm Water Pollution Prevention Plan (SWPPP), which shall include specific BMPs used for storm water control measures that the Discharger will undertake to prevent the discharge of trash from the Facility to the Arroyo Simi or its tributaries. The Discharger is required to detail and submit to the Regional Water Board the updated SWPPP.

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 CWA section 303(d)-listed water bodies and pollutants, the Regional Water Board plans to develop and adopt total maximum daily loads (TMDLs) that will specify waste load allocations (WLAs) for point sources and load allocations (LAs) for non-point sources, as appropriate.

U.S. EPA approved the State's 2012 CWA section 303(d) list of impaired water bodies on June 26, 2015. 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 2012 CWA section 303(d) List of Water Quality Limited Segments (hereinafter 303(d) list) and have been scheduled for TMDL development. The 303(d) List does not include the unnamed tributary to the Happy Camp Wash; however, the downstream, Calleguas Creek Reach 7 (Arroyo Simi Reaches 1 & 2), is listed for ammonia, boron, chloride, chlorpyrifos, diazinon, indicator bacteria, organophosphorus pesticides, sedimentation/siltation, sulfates, total dissolved solids (TDS), toxicity, and trash. All listed pollutants except indicator bacteria were addressed through TMDLs as detailed below. The TMDL to address indicator bacteria is scheduled for completion by 2019.

- 1. Total Maximum Daily Load for Boron, Chloride, Sulfate, and TDS in the Calleguas Creek Watershed (Salts TMDL).** The Regional Water Board approved the Basin Plan amendment to incorporate the Salts TMDL (Resolution No. R4-2007-016) on October 4, 2007. The TMDL was approved by the State Water Board on May 20, 2008, OAL on November 6, 2008, and U.S. EPA on December 2, 2008. As defined within the Salts TMDL, "Other NPDES Discharges" includes those dischargers that do not discharge under an individual POTW permit, MS4 permit, or general construction or industrial permit. Discharging under an individual industrial permit, the Discharge is considered an "Other NPDES Discharger" by the TMDL. The Salts TMDL assigns WLAs applicable to "Other NPDES Dischargers", for boron, chloride, sulfate, and TDS. The implementation plan specifies these WLAs be incorporated into NPDES permits as concentration-based limits with compliance determined end-of-pipe. The salts TMDL final WLAs are included in this Order.
- 2. Revision of the WLAs of the Calleguas Creek Watershed Nitrogen Compounds and Related Effects TMDL (Nutrients TMDL).** The Regional Water Board approved the Basin Plan amendment to incorporate the Revision of the Nutrients TMDL (R4-2008-009) on September 11, 2008. The State Water Board approved the TMDL on June 16, 2009 (State Board Resolution No. 2009-0052). OAL and U.S. EPA approved the TMDL on October 5, 2009 and October 15, 2009, respectively. The TMDL became effective on October 15, 2009. The source analysis identifies publicly owned treatment works

(POTWs) and agriculture runoff as the primary sources of nitrogen in the watershed and does not establish WLAs applicable to all other point source discharges, including this Discharger. This Order does not include effluent limitations based on the Nutrients TMDL.

3. **TMDL for Metals and Selenium for the Calleguas Creek, its Tributaries and Mugu Lagoon (Metals TMDL).** The Regional Water Board approved the Basin Plan Amendment to incorporate the Metals TMDL through Resolution No. R4-2006-012 on June 8, 2006 and it became effective on March 26, 2008. The Regional Water Board later revised the Metals TMDL through Resolution R16-007. The State Water Board, OAL, and U.S. EPA approved the revised TMDL on February 22, 2017, May 18, 2017, and June 9, 2017, respectively. Discharges from the Facility to the unnamed tributary to the Happy Camp Wash (Discharge Point 001) ultimately enter Reach 7 of Calleguas Creek. The Calleguas Creek Metals TMDL includes requirements for discharges from facilities regulated by individual industrial NPDES permits under the category of Other NPDES Dischargers. The Metals TMDL includes final concentration-based WLAs applicable to the discharge for wet-weather total recoverable copper and wet-weather total recoverable nickel. This Order also includes effluent limitations for mercury, applicable during both wet and dry weather, based on the TMDL. The effluent limitations included in this Order for copper, nickel, and mercury are consistent with the methods and assumptions of the Metals TMDL.

4. **TMDL for Toxicity, Chlorpyrifos, and Diazinon in the Calleguas Creek, its Tributaries and Mugu Lagoon (Toxicity TMDL).** The Regional Water Board approved the Basin Plan amendment to incorporate the Toxicity TMDL through Resolution No. R4-2005-009, on July 7, 2005. The State Water Board, OAL, and U.S. EPA approved the amendment on September 22, 2005, November 27, 2005, and March 14, 2006, respectively. The Toxicity TMDL became effective on March 24, 2006. The Toxicity TMDL addresses impairment to water quality due to elevated levels of chlorpyrifos, diazinon, other pesticides and/or other toxicants and includes numeric targets, WLAs, and LAs for these parameters.

The Discharger meets the TMDL category description of "Minor Point Sources". The Toxicity TMDL provides interim and final WLAs; however, the interim WLAs expired on March 23, 2008. Final WLAs applicable to the Discharger are provided for chronic toxicity, chlorpyrifos, and diazinon. This Order includes effluent limitations that are based on these final WLAs.

5. **TMDLs for Organochlorine (OC) Pesticides, Polychlorinated Biphenyls (PCB), and Siltation in Calleguas Creek, its Tributaries, and Mugu Lagoon (Toxics TMDL).** The Regional Water Board approved the Basin Plan amendment to incorporate the Toxics TMDL through Resolution No. R4-2005-0010, on July 7, 2005. The State Water Board approved the TMDL on September 22, 2005 (State Board Resolution No. 2005-0068). OAL and U.S. EPA approvals followed on January 20, 2006, and March 14, 2006, respectively. The Toxics TMDL became effective on March 24, 2006.

The Toxic TMDL addresses impairment to water quality due to elevated concentrations of OC pesticides and PCBs, which can bioaccumulate in fish tissue and cause toxicity to aquatic life in estuarine and inland waters. Siltation may transport these contaminants to surface waters and impair aquatic life and wildlife habitats.

Within the Toxics TMDL, the Discharger is included in the category of "Minor Point Sources". Water column WLAs assigned to "Minor Point Sources" are provided for several constituents as daily maximum. Within this Order, these WLAs are translated directly as daily maximum effluent limitations.

The provisions of this permit implement and are consistent with the assumptions and requirements of all WLAs established in the applicable Calleguas Creek Watershed TMDLs.

E. Other Plans, Policies 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 (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

The Facility is a sand and gravel mining and processing facility, and potential sources of storm water runoff pollution at the Facility include solids from aggregate operations, oil and gas from equipment operations and maintenance, hydrocarbons from fuel and oil dispensing and increased pH due to cement and fly ash from the concrete batch plant. Several pollutants of concern were identified in Order No. R4-2013-0078, for which limitations and/or monitoring requirements were included. These pollutants include pH, temperature, ammonia, TSS, turbidity, biochemical oxygen demand @ 20°C (BOD), metals, methyl tert-butyl ether, oil and grease, phenolic compounds, TDS, settleable solids, sulfates, chloride, boron, nitrate-nitrogen plus nitrite-nitrogen, arsenic, barium, and cadmium. Additional pollutants of concern were identified based on 303(d) listing and corresponding TMDLs, including metals, pesticides, PCBs, and toxicity.

Pursuant to 40 C.F.R. section 122.45(d), permit limitations for continuous discharges shall be expressed, unless impracticable, as both average monthly effluent limitations (AMELs) and maximum daily effluent limitations (MDELs). However, discharges through Discharge Point 001 consist of storm water only. They are intermittent and of short duration. Therefore, only MDELs are included to ensure protection of the beneficial uses associated with the receiving water.

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

A. Discharge Prohibitions

The discharge prohibitions enumerated in section III of the Waste Discharge Requirements of this Order are based on the requirements of the Basin Plan, State Water Board's plans and policies, the Water Code, federal law, and previous permit provisions. They are consistent with the requirements set for other discharges within the Los Angeles Region that are regulated by NPDES permits.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing U.S. EPA 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 Best Professional Judgment (BPJ) in accordance with 40 C.F.R. section 125.3.

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

- a. Best practicable treatment control technology (BPT) represents the average of the best existing performance by well-operated facilities within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering 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 U.S. EPA 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 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 (TBELs)

The Facility operations were evaluated with respect to applicability of ELGs. Based on activities at the site, the Facility would fall under the Mineral Mining and Processing Point Source Category, Construction Sand and Gravel Subcategory; however, the ELGs for this subcategory do not address stormwater runoff, and therefore do not apply to the discharge.

The technology-based requirements in the Order represent case-by-case numeric limitations using BPJ. Since the discharge consists entirely of storm water, discharges are infrequent and of short duration, with the last discharge event occurring in 2005. As a result, average monthly effluent limits are not included in this Order. Rather, technology-based effluent limitations are only expressed as maximum daily effluent limitations (MDELs) in this Order. This is consistent with the previous Order No. R4-2013-0078. MDELs were established for BOD, TSS, oil and grease, settleable solids, and turbidity

based on BPJ because they are pollutants of concern for these types of discharges. These limitations are consistent with effluent limitations included in other Orders within the State for similar types of discharges and compliance with these limitations is not expected to require additional treatment equipment as process waters have been excluded from the discharge.

Order R4-2013-0078 required the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). This Order requires the Discharger to update and continue to implement the SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water contamination and for preventing contaminated storm water from being discharged directly to the receiving water. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water. This Order requires the Discharger to update and continue to implement a SWPPP consistent with requirements in Attachment G.

This Order requires the Discharger develop and implement a Best Management Practices Plan that addresses specific areas considered sources of pollutants. The BMPs shall include measures to minimize the amount of pollutants entering the discharge.

This Order requires the Discharger to update the Spill Control Plan (SCP). The SCP Plan is required in order to report on preventative and contingency (cleanup) procedures for controlling accidental discharges and for minimizing the adverse effects of such events.

The combination of the SWPPP, BMPs, and SCP Plan and permit limitations reflecting BPJ will serve as the equivalent of technology-based effluent limitations, in the absence of established ELGs, in order to carry out the purposes and intent of the CWA.

Regional Board staff has considered factors outlined in 40 CFR sections 125.3(c) and (d)(1) in establishing TBELs based on BPJ. The considerations are addressed in following table.

Table F-5. Factors Considered Pursuant to 40 C.F.R. section 125.3(c) and (d)(1) for Pollutant Effluent Limitations based on Best Professional Judgement

Factors	Considerations
The appropriate technology for the category or class of point sources of which the applicant is a member, based upon all available information	Although the Regional Board makes no determination as to what the appropriate technology is, dischargers in Region 4 have and continue to comply with the effluent limitations for BOD ₅ , TSS, oil and grease, settleable solids and turbidity using existing practicable and economically achievable treatment technologies. Such technology has been in use for decades.
Any unique factors relating to the applicant	Effluent limitations for these pollutants in storm water have been included in a number of individual industrial permittees for in excess of ten years. The data submitted by these permittees has been in compliance with these limits for storm water discharges. These effluent limitations have been in the permit for the Facility since 2002.
Cost of effluent reduction	The cost of achieving effluent reductions is reasonable because such technologies are readily available and affordable. Most storm water dischargers are already employing practicable and economically achievable treatment technologies to ensure compliance with the Basin Plan criteria in storm water discharges.

Factors	Considerations
Age of equipment and facilities	Regardless of the age of their existing equipment and facilities, discharge of storm water to waters of the State are required to comply with the Basin Plan criteria.
Processes employed	Most dischargers with effluent limitations for these Basin Plan criteria already employ BMPs or treatment technologies to comply with the effluent limitations.
Engineering aspects of application of control techniques	Most storm water dischargers already employ BMPs that comply with these limitations. BMPs such as covering areas that have contaminants that may be transported by storm water runoff, completing pre-storm event inspections and securing areas that may contribute to pollutant concentrations in the discharges, and any other operating procedures that will result in ensuring that pollutants are not discharged offsite will reduce the pollutant concentrations in the discharge.
Process changes	The discharger may need to modify their existing BMPs and/or treatment processes.
Non-water-quality environmental impact (including energy requirement)	The discharger may need to modify their existing BMPs and/or treatment processes, such as including some type of filtration on the runoff that exits the retention basin. The non-water-quality environmental impact of such changes may involve additional cost for upgraded or new BMPs.

Table F-6 summarizes the technology-based effluent limitations for Discharge Point 001.

Table F-6. Summary of Technology-based Effluent Limitations for Discharge Point 001

Parameter	Units	Effluent Limitation
		Maximum Daily
BOD	mg/L ¹	30
	lbs/day ¹	30
Oil and Grease	mg/L ¹	15
	lbs/day ¹	15
TSS	mg/L	75
	lbs/day ¹	75
Settleable Solids	ml/L	0.3
Turbidity	NTU	75

¹. The mass-limitations are based on the Facility's maximum permitted flow rate of 0.120 MGD at Discharge Point 001, and are calculated as follows:

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

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,

WQBELs must be established using: (1) U.S. EPA 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 beneficial uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

The specific procedures for determining reasonable potential and, if necessary, for calculating WQBELs are contained in the Technical Support Document (TSD) for storm water discharges and in the SIP for non-storm water discharges. However, section 3.3.8 of the TSD states that "an analogous approach developed by a regulatory authority can be used to determine the reasonable potential" (for storm water discharges). The Regional Water Board has determined that the procedures for determining reasonable potential and calculating WQBELs contained in the SIP for non-storm water discharges may also be used to evaluate reasonable potential and calculate WQBELs for storm water discharges. Hence, in this Order, the SIP methodology is used to evaluate reasonable potential for storm water discharges through Discharge Point 001.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in section III of this Fact Sheet, 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 receiving water 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 Calleguas Creek Reach 7. 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 C.F.R. section 131.38(c)(3): saltwater criteria apply at salinities of 10 parts per thousand (ppt) and above at locations where this occurs 95 percent or more of the time. The CTR criteria for freshwater apply at 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 apply to the unnamed tributary to the Happy Camp Wash within Calleguas Creek Reach 7. The CTR criteria for freshwater or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations to protect the beneficial uses of the receiving water.

The Arroyo Simi, at the Facility discharge location, does not have an existing or intermittent beneficial use of municipal and domestic supply (MUN). Therefore, the CTR human health criteria for water and organisms were not considered in developing effluent limitations. However, the Arroyo Simi (Calleguas Creek Reach 7) does have a beneficial use of ground water recharge (GWR). In this case, because the underlying groundwater basin has a beneficial use of MUN, California Title 22 Primary MCLs were also considered to protect the MUN beneficial use of the Los Posas Valley groundwater basin.

The following table summarizes the applicable water quality criteria/objective for priority pollutants either limited in Order No. R4-2013-0078 or reported in detectable concentrations in the effluent or receiving water based on data submitted to the Regional Water Board during the permit term of Order No. R4-2002-0102. Since no discharge event occurred at the Facility during the term of Order No. R4-2013-0078, no recent data was available. The last discharge event occurred in February 2005. Therefore, five data points from Debris Basin No. 8 reported during the term of Order No. R4-2002-0102 were considered herein. These criteria were used to conduct the RPA for this Order.

Table F-7. Applicable Water Quality Criteria

CTR No.	Constituent	Selected Criteria	CTR/NTR Water Quality Criteria			Maximum Contaminant Level (MCL)
			Freshwater		Human Health for Consumption of: Organisms only	
			Acute	Chronic		
		µg/L	µg/L	µg/L	µg/L	
2	Arsenic	10	340	150	--	10
--	Barium	1,000	--	--	--	1,000
4	Cadmium, Total Recoverable	4.78	11.7*	4.78*	--	5
5a	Chromium (III)	414	3470*	414*	--	--
5b	Chromium (VI)	10	16	11	--	10
6	Copper, Total Recoverable	19	31*	19*	--	1,300
7	Lead, Total Recoverable	9.34	239*	9.34*	--	15
8	Mercury, Total Recoverable	0.051	--	--	0.051	2
9	Nickel, Total Recoverable	100	960*	107*	4,600	100
10	Selenium, Total Recoverable	5.0	20.0	5.0	--	50
13	Zinc, Total Recoverable	245	245*	245*	--	--
54	Phenol	4.6 x 10 ⁶	--	--	4.6 x 10 ⁶	--

* These criteria are based on a hardness value of 233 mg/L as CaCO₃ that is the 50th percentile hardness calculated from all wet weather freshwater hardness data in the subwatershed and was used in the 2006 Metals TMDL for developing the wet weather criteria. This hardness was also applied to the calculation of chronic (dry weather) criteria.

3. Determining the Need for WQBELs

a. Reasonable Potential Analysis Methodology

In accordance with section 1.3 of the SIP, the Regional Water Board conducted a Reasonable Potential Analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. If there is a TMDL WLA approved by U.S. EPA, then WQBELs are developed using the WLA. Otherwise, the Regional Water Board analyzes effluent and receiving water data and identifies the maximum observed effluent concentration (MEC) and maximum background concentration (B) in the receiving water for each constituent. To determine reasonable potential, the MEC and the B are then compared with the applicable water quality objectives (C) outlined in the CTR, NTR, as well as the Basin Plan. For all pollutants that have a reasonable potential to cause or contribute to an excursion above a state water quality standard, numeric WQBELs are required.

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 an RPA:

- i. Trigger 1 – if $MEC \geq C$, a limit is needed.
- ii. Trigger 2 – If the background concentration $B > C$ and the pollutant is detected in the effluent, a limit is needed.
- iii. Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, or other applicable factors indicate 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.

No discharge event occurred at the Facility during the term of Order No. R4-2013-0078. Therefore, no recent data was available. The last discharge event occurred in February 2005 with an estimated discharge volume of 60,700 gallons. Order No. R4-2002-0102 required annual sampling of wastewater contained in the lower debris basin (Debris Basin No. 8) be performed if no surface water discharges occurred or if it was not safe to collect a sample at the discharge location. Samples collected from the Debris Basin No. 8 are considered representative of the storm effluent discharged because the Debris Basin No. 8 is the last basin that contains the storm water for the discharge prior to it being discharged and access to the discharge point was considered too dangerous during the discharge event. During the term of Order No. R4-2002-0102, there were five sampling data points from Debris Basin No. 8. Two samples were taken from Debris Basin No. 8 within 2 days of each of two discharge events which occurred in 2005. The results of the RPA based on monitoring data from the Debris Basin No. 8 during the term of Order No. R4-2002-0102 is summarized in the following table.

Table F-8. Summary of Reasonable Potential Analysis – Discharge Point 001

CTR No.	Constituent	Applicable Water Quality Criteria (µg/L) (C)	Max Effluent Conc. (µg/L) (MEC)	Maximum Detected Receiving Water Conc. (µg/L) (B)	Metals TMDL WLAs	RPA Result - Need Limit?	Reason
2	Arsenic	10 (MCL)	3.5	1.6	No	No	$MEC < C$ & $B \leq C$
--	Barium	1,000 (MCL)	49	--	No	No	$MEC < C$
4	Cadmium, Total Recoverable	4.78	0.25	0.25	No	No	$MEC < C$ & $B \leq C$
5a	Chromium (III)	414	6.9	0.21	No	No	$MEC < C$ & $B \leq C$
5b	Chromium (VI)	10 (MCL)	9.6	0.03	No	No	$MEC < C$ & $B \leq C$
6	Copper, Total Recoverable (Dry Weather)	19	110	48	No	Yes	$MEC > C$

CTR No.	Constituent	Applicable Water Quality Criteria (µg/L) (C)	Max Effluent Conc. (µg/L) (MEC)	Maximum Detected Receiving Water Conc. (µg/L) (B)	Metals TMDL WLAs	RPA Result - Need Limit?	Reason
6	Copper, Total Recoverable (Wet Weather)	31 (WLA)	110	48	Yes	Yes	TMDL
7	Lead, Total Recoverable	9.34	3.7	25	Yes	Yes	MEC>ND & B>C
8	Mercury, Total Recoverable	0.051	<0.1	<0.1	Yes	Yes	TMDL
9	Nickel, Total Recoverable (Dry Weather)	100 (MCL)	4	<4	No	No	MEC<C & B≤C
9	Nickel, Total Recoverable (Wet Weather)	958 (WLA)	4	<4	Yes	Yes	TMDL
10	Selenium, Total Recoverable	5.0	1.6	5.7	Yes	Yes	MEC>ND & B>C
13	Zinc, Total Recoverable	245	85	34	No	No	MEC<C & B≤C

ND = Not Detected; MCL = Maximum Contaminant Level; WLA = Waste Load Allocation.

In addition, the Regional Water Board developed WQBELs for boron, chloride, sulfate and TDS based on the final WLAs applicable to “Other NPDES Dischargers” in the Salts TMDL, for chlorpyrifos, diazinon and chronic toxicity based on WLAs in Toxicity TMDL, and for organochlorine pesticides and PCBs based on final WLAs in the Toxic TMDL as described in section III.D of the Fact Sheet. The effluent limitations for these parameters were established regardless of whether or not there is reasonable potential for these pollutants to be present in the discharge at levels that would cause or contribute to a violation of water quality standards. The WQBELs for these parameters were developed 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 a reasonable potential analysis is not required if a TMDL that includes WLAs is in effect.

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 the WLA established as part of a TMDL.
 - ii. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).
 - iii. Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.
- b. Since, no discharges have occurred since 2005, no RPA was performed based on recent data and no new WQBELs were calculated based on the RPA.

- c. During the development of Order R4-2007-0060, effluent limitations for copper (dry weather), lead, and selenium were based on SIP procedures using effluent and receiving water data available at that time. Since no discharge have occurred since 2005, the MDELs established in Order No. R4-2007-0060 were included in Order No. R4-2013-0078. Order No. R4-2018-0085 also retained MDELs for these pollutants in Order No. R4-2013-0078 to adhere to anti-backsliding regulations.
- d. Effluent limitations for boron, chloride, sulfate, and TDS are based on concentration-based WLAs established in the Salts TMDL.
- e. Effluent limitations for copper (wet-weather), nickel (wet-weather), mercury, chlorpyrifos, diazinon, chlordane, 4,4-DDD, 4,4-DDT, dieldrin, PCBs, and toxaphene are calculated based on concentration-based WLAs established in TMDLs.
- f. **WQBELs Calculations Example:**

Using chlorpyrifos, wet-weather total recoverable copper, and total recoverable mercury as examples, the following demonstrates how WQBELs were established in previous Orders based on WLAs. The tables in Attachment J summarize the development and calculations of all WQBELs for this Order using the process described below.

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

Concentration-based Effluent Limitations

Two sets of AMEL and MDEL values are calculated separately, one set for the protection of aquatic life and the other for the protection of human health. The AMEL and MDEL limitations for aquatic life and human health are compared, and the most restrictive AMEL and the most restrictive MDEL are selected as the WQBEL

Calculations of Aquatic life AMEL and MDEL for Chlorpyrifos and Copper:

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:

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

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

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

When a WLA has been established through a TMDL for a parameter, the WLA is set to equal the ECA.

As discussed above no dilution was allowed. For chlorpyrifos, the applicable water quality criterion is the TMDL WLA which was expressed as both acute and chronic aquatic life criteria. Thus, for chlorpyrifos, there are two ECAs:

$$ECA_{\text{acute}} = WLA_{\text{acute (wet weather)}} = 0.025 \mu\text{g/L}$$

$$ECA_{\text{chronic}} = WLA_{\text{chronic (day weather)}} = 0.014 \mu\text{g/L}$$

For total recoverable copper (wet weather), the applicable water quality criterion is the wet-weather WLA of 31 $\mu\text{g/L}$:

$$WLA_{\text{wet}} = 31 \mu\text{g/L}$$

Step 2: For each ECA 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.

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

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

The CV for the data set must be determined before the multiplier can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6. If the data set is greater than 10 samples, and at least 20% of the samples in the data set are reported as detected, the CV shall be equal to the standard deviation of the data set divided by the average of the data set. There were no data available for chlorpyrifos, copper and mercury; therefore the CV was set to equal 0.6.

For chlorpyrifos and total recoverable copper (wet weather) 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}
0	0.6	0.321	0.527

For chlorpyrifos,

$$LTA_{acute} = 0.025 \mu\text{g/L} \times 0.321 = 0.008 \mu\text{g/L}$$

$$LTA_{chronic} = 0.014 \mu\text{g/L} \times 0.527 = 0.007 \mu\text{g/L}$$

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

$$LTA_{wet} = 31 \mu\text{g/L} \times 0.321 = 10 \mu\text{g/L}$$

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

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

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

$$LTA_{chlorpyrifos} = LTA_{chronic} = 0.007 \mu\text{g/L}$$

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

$$LTA_{copper} = LTA_{wet} = 10 \mu\text{g/L}$$

Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as AMEL and MDEL. The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the CV of the data set, the number of samples

(for AMEL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in section 1.4, Step 5 of the SIP and will not be repeated here.

$$AMEL_{\text{aquatic life}} = LTA \times AMEL_{\text{multiplier95}}$$

$$MDEL_{\text{aquatic life}} = LTA \times MDEL_{\text{multiplier99}}$$

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

For chlorpyrifos and total recoverable copper (wet weather), the following data were used to develop the AMEL and MDEL using equations provided in section 1.4, Step 5 of the SIP (Table 2 of the SIP also provides this data up to two decimals):

No. of Samples Per Month	CV	Multiplier _{MDEL99}	Multiplier _{AMEL95}
4	0.6	3.11	1.55

For chlorpyrifos

$$AMEL = 0.007 \mu\text{g/L} \times 1.55 = 0.011 \mu\text{g/L}$$

$$MDEL = 0.007 \mu\text{g/L} \times 3.11 = 0.023 \mu\text{g/L}$$

For total recoverable copper

$$AMEL = 10 \mu\text{g/L} \times 1.55 = 16 \mu\text{g/L}$$

$$MDEL = 10 \mu\text{g/L} \times 3.11 = 31 \mu\text{g/L}$$

Discharges from the Facility are infrequent and expected to be of short duration. As a result, only the MDEL is applied in this Order.

Calculations of human health AMEL and MDEL for Chlorpyrifos and Copper

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

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

For chlorpyrifos and total recoverable copper, there are no applicable human health criteria. Therefore, no $AMEL_{\text{human health}}$ can be derived.

Step 6: Calculate the MDEL for human health by multiplying the AMEL in Step 5 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.

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

This procedure is not applicable for chlorpyrifos and total recoverable copper.

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

Since the discharge from the Facility is not continuous, average monthly effluent limitations (AMELs) are not prescribed in the Order.

Final WQBELs for Chlorpyrifos and Copper

The lowest (most restrictive) MDELs are incorporated into the Order.

For chlorpyrifos

$$\text{MDEL} = 0.007 \mu\text{g/L} \times 3.11 = 0.023 \mu\text{g/L}$$

For total recoverable copper

$$\text{MDEL} = 10 \mu\text{g/L} \times 3.11 = 31 \mu\text{g/L}$$

Calculation of Aquatic life AMEL and MDEL for Mercury:

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:

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

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

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

For mercury, this step is not applicable because the WLAs [wet weather (acute) or dry weather (chronic)] provided in the TMDL are not based on protection of aquatic life.

$$\text{ECA}_{\text{acute (mercury)}} = \text{Not Available}$$

$$\text{ECA}_{\text{chronic (mercury)}} = \text{Not Available}$$

Therefore, **Steps 2, 3, and 4** are not included since ECA derived from acute or chronic criterion for protection of aquatic life are not available. The WLA provided in the Metals TMDL for mercury is based on protection of human health from consumption of organisms only.

Calculations of human health AMEL and MDEL for Mercury

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

$$\text{AMEL}_{\text{human health}} = \text{ECA}_{\text{human health}}$$

For mercury, the ECA is set equal to the TMDL WLA, which is based on CTR human health criterion; therefore:

$$\text{AMEL}_{\text{human health}} = \text{ECA}_{\text{human health}} = \text{WLA}_{\text{Human Health}} = 0.051 \mu\text{g/L}$$

Step 6: Calculate the MDEL for human health by multiplying the AMEL by the ratio of $\text{Multiplier}_{\text{MDEL}}$ to the $\text{Multiplier}_{\text{AMEL}}$. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples. In the example below, results are rounded to two significant figures.

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

For mercury, the following data were used to develop the $\text{MDEL}_{\text{human health}}$:

No. of Samples Per Month	CV	Multiplier _{MDEL 99}	Multiplier _{AMEL 95}	Ratio
4	0.60	3.11	1.55	2.0

$$MDEL_{\text{human health(mercury)}} = 0.051 \mu\text{g/L} \times 2.0 = 0.10 \mu\text{g/L}$$

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

For mercury, the human health MDEL is selected since there is no aquatic life MDEL.

Final WQBELs for Mercury

$$MDEL_{\text{(mercury)}} = 0.10 \mu\text{g/L}$$

5. WQBELs Based on Basin Plan Objectives

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

Table F-9. Applicable Basin Plan Numeric Water Quality Objectives

Constituent	Units	Water Quality Objective
pH	standard units	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.
Ammonia	mg/L	Waters not designated cold and/or MIGR $1 - \text{hour avg.} = \frac{0.411}{(1 + 10^{7.204 - pH})} + \frac{58.4}{(1 + 10^{pH - 7.204})}$ Early Life Stages (ELS) Absent 30 - day avg. $= \left(\frac{0.0577}{(1 + 10^{7.688 - pH})} + \frac{2.487}{(1 + 10^{pH - 7.688})} \right) \times 1.45 \times 10^{0.028 \times [25 - \text{MAX}(T, 7)]}$ Where T = temperature expressed in °C The freshwater four-day average objective is 2.5 times the 30-day average objective.
Bacteria	MPN/100 ml	Fresh Waters Designated for Water Contact Recreation (REC-1) <u>Geometric Mean Limits</u> <i>E. coli</i> density shall not exceed 126/100 ml. <u>Single Sample Limits</u> <i>E. coli</i> density shall not exceed 235/100 ml.
Boron	mg/L	1.0
Chloride	mg/L	150
Dissolved Oxygen	mg/L	The mean annual dissolved oxygen concentration of all waters shall be greater than 7.0 mg/L, and no single determination shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations.
Nitrite Plus Nitrate	mg/L	10
Sulfate	mg/L	250

Constituent	Units	Water Quality Objective
Temperature	°F	For waters designated WARM, water temperature shall not be altered by more than 5°F above the natural temperature. At no time shall these WARM-designated waters be raised above 80°F as a result of waste discharges.
Turbidity	NTU	Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.

- a. **pH.** This Order includes instantaneous minimum and maximum effluent limitations for pH based on Basin Plan Objectives (6.5 – 8.5).
- b. **Ammonia.** Due to a lack of discharge events, effluent and receiving water data were insufficient to evaluate ammonia in the discharge. This Order requires the discharger to monitor effluent from EFF-001 for ammonia. In addition, this Order requires receiving water monitoring for pH and temperature in order to provide the data necessary to calculate ammonia objectives and conduct future RPAs.
- c. **Bacteria.** The Basin Plan Objectives for *E. coli*, are not established as effluent limitations for this permit as the discharge is primarily composed of storm water. This order retains effluent monitoring requirements in lieu of effluent limitations for bacteria from Order R4-2013-0078.
- d. **Boron, Chloride, Sulfate, and TDS.** This Order includes MDELS for boron, chloride, sulfate, and TDS based on TMDL WLAs described in section III.D.1. The TMDL Implementation Plan states “The proposed permit limits will be applied as end-of-pipe concentration-based effluent limits, and compliance determined through monitoring of final effluent discharge as defined in the NPDES permit.” In Order No. R4-2013-0078 the concentration-based WLAs, which are equal to the Basin Plan Objectives, were directly applied as MDELS. This Order retains the limitations from that Order.
- e. **Dissolved Oxygen.** This Order applies the water quality objective for dissolved oxygen as a receiving water limit.
- f. **Nitrite Plus Nitrate (as N).** This Order retains effluent limitations for nitrite plus nitrate as nitrogen from Order No. R4-2013-0078. The limitation is based on the Basin Plan Objective for the pollutant.
- g. **Temperature.** The existing Order includes an instantaneous effluent temperature limitation of 86°F based on the Thermal Plan and a white paper titled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. A survey of several kinds of fish indicated that the 86°F temperature is protective of aquatic life. This effluent limitation was determined to be appropriate for protection of the Basin Plan Objective for temperature and is retained from Order R4-2013-0078. This temperature limitation is based on the foregoing and best professional judgment (BPJ).
- h. **Turbidity.** This Order retains the effluent limitation for turbidity from Order R4-2013-0078. This effluent limitation is determined to be protective of the Basin Plan Objective.

6. 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 is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses in aquatic organisms. Detrimental responses include, but are 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.

Order R4-2013-0078 included acute toxicity limitations and monitoring requirements at Discharge Point 001 in accordance with the Basin Plan, in which the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. There was no acute toxicity monitoring conducted at Discharge Point 001 during the term of Order No. R4-2013-0078 due to the lack of discharge events.

Order R4-2013-0078 also contained a chronic toxicity trigger of 1.0 TUc. Chronic toxicity is a more stringent requirement than acute toxicity. A chemical at a low concentration can have chronic effects but no acute effects. Therefore, this Order discontinues the acute toxicity limitation and prescribes the chronic toxicity limitation to address both acute and chronic toxicity endpoints in organisms exposed to the discharge.

This Order establishes a MDEL of “Pass or % effect<50” as a chronic toxicity effluent limitation. While the Toxicity TMDL uses U.S. EPA’s multi-concentration NOEC-LOEC statistical approach and recommended numeric water quality criterion of 1.0 TUc to set and measure the toxicity target, the numeric chronic toxicity effluent limit prescribed in this Order uses U.S. EPA’s TST statistical approach to evaluate the data. 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.A. of Attachment E – Monitoring and Reporting Program of this Order.

In 2010, U.S.EPA endorsed the peer-reviewed Test of Significant Toxicity (TST) approach in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010) as an improved statistical tool to evaluate data from US.EPA’s toxicity test methods. The TST statistical approach is the superior statistical approach for addressing statistical uncertainty when used in

combination with U.S. EPA's toxicity test methods and is implemented in federal permits issued by U.S. EPA Region 9.

The TST's null hypothesis for chronic toxicity is:

$$H_0: \text{Mean response (In-stream Waste Concentration (IWC) in \% \text{ effluent})} \\ \leq 0.75 \text{ mean response (Control).}$$

Results obtained from a chronic toxicity test are analyzed using the TST statistical approach and an acceptable level of chronic toxicity is demonstrated by rejecting the null hypothesis and reporting "Pass" or "P". Chronic toxicity results are expressed as "Pass" or "Fail" and "% Effect". Since no dilution credit is allowed for the discharge, the chronic toxicity IWC for Discharge Point 001 is 100 percent effluent. The MDEL for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed at the IWC using the TST statistical approach, results in "Fail" and the Percent Effect is $\geq 50\%$.

This Order includes a chronic toxicity limitation and chronic toxicity monitoring with interpretation using TST methods. The acute toxicity limitation is discontinued as chronic toxicity is a more stringent requirement than acute toxicity, and it evaluates the mortality endpoint as does the acute toxicity testing as well as deleterious effects such as reductions in growth and reproduction which will likely occur prior to mortality.

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R4-2013-0078 with the exception of the limitations for barium, arsenic, cadmium and nickel (dry weather). A review of the last data available from the Facility indicates no reasonable potential for these pollutants to be discharged as specified in Table F-8. When preparing the previous Orders, the effluent limitations in Order No. R4-2002-0102 were carried over to the subsequent orders, Order No. R4-2007-0060 and Order No. 2013-0078, regardless of the fact that there was no reasonable potential for these pollutant concentrations to exceed water quality objectives. The removal of the requirements is justified because material and substantial alterations or additions to the Facility occurred after the last discharge at the Facility occurred in 2005. The decision not to include these effluent limitations is therefore based on the reasonable potential analyses and is consistent with the anti-backsliding requirements of the CWA and federal regulations. (40 C.F.R. § 122.44(l)(2)(i)(A), (B)(1); 40 C.F.R. § 122.62(a)(1),(2) and 33 U.S.C. 1342(o)(2)(A),(B)(i).)

Order R4-2013-0078 established effluent limitations for acute toxicity. This Order discontinues acute toxicity limitations but retains the chronic toxicity limitations. Chronic toxicity is more stringent than acute toxicity. It evaluates the acute mortality endpoint in addition to assessing reductions in growth and reproduction.

2. Antidegradation Policies

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 incorporates 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. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge and ensures that any discharges permitted herein will not violate the antidegradation policies.

This Order does not provide for an increase in the permitted design flow and the final limitations in this Order hold the Discharger to performance levels that will not cause or contribute to water quality impairment or degradation of water quality. Therefore, the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution 68-16.

3. Mass-based Effluent Limitations

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

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).

The last two discharge events occurred in January 2005 and February 2005 were with estimated discharge volumes of 76,000 gallons and 60,700 gallons, respectively. The data indicated that the permitted flow of 0.120 MGD included in Order No. R4-2013-0078 is adequate. As such, the Order retains the permit flow of 0.12 MGD and the mass-based effluent limitations are calculated using this flow rate.

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 consist of restrictions on TSS, oil and grease, BOD, settleable solids, and turbidity at Discharge Point 001. Restrictions on these parameters are discussed in section IV.B.2 of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

WQBELs have been 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 procedures for calculating the individual WQBELs for priority pollutants are based on the CTR implemented by the SIP, which was approved by U.S. EPA on May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by U.S. EPA prior to May 30, 2000. The remaining water

quality objectives and beneficial uses implemented by this Order were approved by U.S. EPA and are applicable water quality standards pursuant to section 131.21(c)(2). 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-10. Summary of Final Effluent Limitations at Discharge Point 001

Parameter	Units	Effluent Limitations			Basis ¹
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Conventional / Non-Conventional Pollutants					
BOD	mg/L	30	--	--	E, BPJ
	lbs/day ²	30	--	--	
Oil and Grease	mg/L	15	--	--	E, BPJ
	lbs/day ²	15	--	--	
pH	standard units	--	6.5	8.5	E, BP
TSS	mg/L	75	--	--	E, BPJ
	lbs/day ²	75	--	--	
Boron, Total	mg/L	1.0	--	--	BP, TMDL, E
	lbs/day ²	1.0	--	--	
Chloride	mg/L	150	--	--	BP, TMDL, E
	lbs/day ²	150	--	--	
Chlorpyrifos	µg/L	0.023	--	--	TMDL, E
	lbs/day ²	0.000023	--	--	
Chronic Toxicity ³	Pass or Fail, % Effect	Pass or % Effect <50	--	--	BP, TST, E
Diazinon	µg/L	0.10	--	--	TMDL, E
	lbs/day ²	0.00010	--	--	
Nitrite Plus Nitrate (as N)	mg/L	10	--	--	BP, E
	lbs/day ²	10	--	--	
Settleable Solids	ml/L	0.3	--	--	BPJ, E
Sulfates	mg/L	250	--	--	BP, TMDL, E
	lbs/day ²	250	--	--	
Temperature	°F	--	--	86	BP, TP, WP, BPJ, E
TDS	mg/L	850	--	--	BP, TMDL, E
	lbs/day ²	850	--	--	
Turbidity	NTU	75	--	--	BPJ, E
Priority Pollutants					
Copper, Total Recoverable (Dry Weather) ⁴	µg/L	22	--	--	CTR, SIP, E
	lbs/day ²	0.022	--	--	
Copper, Total Recoverable, (Wet Weather) ⁵	µg/L	31	--	--	TMDL, E
	lbs/day ²	0.031	--	--	
Lead, Total Recoverable	µg/L	9.5	--	--	CTR, SIP, E
	lbs/day ²	0.0095	--	--	

Parameter	Units	Effluent Limitations			Basis ¹
		Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Mercury, Total Recoverable	µg/L	0.10	--	--	TMDL, E
	lbs/day ²	0.00010	--	--	
Nickel, Total Recoverable (Wet Weather) ⁵	µg/L	958	--	--	TMDL, E
	lbs/day ²	0.96	--	--	
Selenium, Total Recoverable	µg/L	8.2	--	--	CTR, SIP, E
	lbs/day ²	0.0082	--	--	
Chlordane	µg/L	0.0012	--	--	TMDL, E
	lbs/day ²	1.2 x 10 ⁻⁶	--	--	
4,4-DDD	µg/L	0.0017	--	--	TMDL, E
	lbs/day ²	1.7 x 10 ⁻⁶	--	--	
4,4-DDE	µg/L	0.0012	--	--	TMDL, E
	lbs/day ²	1.2 x 10 ⁻⁶	--	--	
4,4-DDT	µg/L	0.0012	--	--	TMDL, E
	lbs/day ²	1.2 x 10 ⁻⁶	--	--	
Dieldrin	µg/L	0.00028	--	--	TMDL, E
	lbs/day ²	2.8 x 10 ⁻⁷	--	--	
PCBs	µg/L	0.00034	--	--	TMDL, E
	lbs/day ²	3.4 x 10 ⁻⁷	--	--	
Toxaphene	µg/L	0.00033	--	--	TMDL, E
	lbs/day ²	3.3 x 10 ⁻⁷	--	--	

¹ BP = Basin Plan; BPJ = Best Professional Judgment; CTR = California Toxics Rule; E = Existing Order No. R4-2013-0078; SIP = State Implementation Policy; TMDL = Total Maximum Daily Load; TST = National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010); TP = Thermal Plan; WP = White Paper.

² Mass loading limitations are based on a maximum permitted flow of 0.120 MGD and are calculated as follows:
 Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.
 For reporting, the actual mass for a pollutant shall be calculated based on the actual measured concentration and the actual measured flow of the discharge.

³ The maximum daily effluent limitation (MDEL) shall be reported as "Pass" or "Fail" and "% Effect". The MDEL is exceeded when a toxicity test results in a "Fail," and the percent effect is greater than or equal to 0.50. Report "Pass" or "Fail" and "% Effect" for the MDEL.

⁴ Effluent limitations apply except when the flow at ASMC1 gauge (Arroyo Simi at Madera Rd.) equals 10 cubic feet per second (cfs) or greater.

⁵ Within this Order, wet weather effluent limitations apply when the flow at ASMC1 gauge (Arroyo Simi at Madera Rd.) equals 10 cfs or greater.

- E. Interim Effluent Limitations – Not Applicable**
- F. Land Discharge Specifications – Not Applicable**
- G. Recycling Specifications – Not Applicable**

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in the proposed Order are based upon the water quality objectives contained in the Basin Plan. As such, they are a required part of the proposed Order.

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. section 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of the beneficial uses of the receiving water. If there is reasonable potential or a U.S. EPA-approved TMDL WLA, then WQBELs are included in this Order to ensure protection of the beneficial uses of the receiving water.

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. 40 C.F.R. section 123.25(a)(12) 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. part 123 and Order No. R4-2013-0078. 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 or adoption of applicable TMDLs associated with the receiving water.

2. Special Studies and Additional Monitoring Requirements

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

3. Best Management Practices and Pollution Prevention

a. Storm Water Pollution Prevention Plan.

The previous Order required the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). This Order requires the Discharger to update, as necessary, and continue to implement the SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water runoff

contamination and for preventing trash and contaminated storm water runoff from being discharged directly into the unnamed tributary and/or the Arroyo Simi. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water, and to prevent the entrainment of trash in storm water that is discharged through Discharge Point 001. SWPPP requirements are included as Attachment G, based on 40 C.F.R. section 122.44(k).

b. Best Management Practices Plan (BMPP)

This Order requires the Discharger to develop and implement a BMPP. The BMPP may be included as a component of the SWPPP. 40 C.F.R. section 122.44(k) requires that permits include best management practices when reasonably necessary to achieve the effluent limitations and standards or to carry out the purpose and intent of the CWA. Consistent with 40 C.F.R. section 122.44(k), this Order requires the Discharger to update and implement a BMPP. The purpose of the BMPP is to establish site-specific procedures that minimize the potential of hazardous waste/materials and other contaminants to discharge to surface waters. The BMPP shall incorporate the requirements contained in Attachment G. Attachment G requires a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges.

c. Spill Control Plan (SCP)

This Order requires the Discharger to develop and implement a SCP to control the discharge of pollutants. The SCP shall include a technical report on the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events at the site. This provision is included in this Order to minimize and control the amount of pollutants discharged in case of a spill. The SCP shall be site specific and shall cover all areas of the Facility. A Spill Prevention, Control, and Countermeasure (SPCC) Plan may satisfy this requirement.

4. Construction, Operation, and Maintenance Specifications

- a. This provision is based on the requirements of 40 C.F.R. section 122.41(e).

5. Other Special Provisions – Not Applicable

6. Compliance Schedules – Not Applicable

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping 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

1. Discharge Point 001 (Monitoring Location EFF-001)

Monitoring for pollutants expected to be present in the discharge will be required at Monitoring Location EFF-001 as established in the MRP (Attachment E). To demonstrate

compliance with established effluent limitations, the Order retains most of monitoring requirements in Order No. R4-2013-0078. Monitoring frequency for those pollutants with effluent limitations is once per discharge event, but no more than once per week or any 7-day period. For other pollutants of concern such as arsenic, ammonia, barium, cadmium, E. coli, methyl-ter-butyl ether, phenolic compounds, total petroleum hydrocarbons, silver and zinc, the monitoring frequency has been reduced from one per discharge event to one per year at the first discharge event of the year since the discharge is storm water only and infrequent. There was no discharge during the previous permit term.

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

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. A chronic toxicity test measures mortality, reproduction, and growth. A chemical at a low concentration can have chronic effects but no acute effects. Chronic toxicity is a more stringent requirement than acute toxicity. For this Order, chronic toxicity monitoring in the discharge is required. The chronic toxicity testing results are analyzed using U.S. EPA's 2010 TST statistical approach. This Order includes a MDEL for chronic toxicity and therefore, monitoring requirements are included in the MRP to determine compliance with the effluent limitation established in this Order.

D. Receiving Water Monitoring

1. Surface Water

RSW-001. According to the SIP, the Discharger is required to monitor the upstream receiving water for the CTR priority pollutants including TCDD equivalents, to determine reasonable potential and to assess compliance with receiving water limitations and Basin Plan Objectives. The receiving water is an ephemeral stream that originates within the Facility property. There is no discreet conveyance upstream of the Facility runoff that would serve as an upstream monitoring location within the unnamed tributary. Instead as was done in the previous Order No. R4-2013-0078, the Discharger is required to monitor the Happy Camp Wash for RSW-001, upstream of the confluence with the unnamed tributary that contains the discharge from the Facility. This Order retains the monitoring requirements for RSW-001. Additionally, the Discharger must also perform general observations and include them in the monitoring report. Attention shall be given to the presence or absence of: floating or suspended matter, discoloration, aquatic life, visible film, sheen or coating, and fungi, slime or other growths. This Order replaces the acute toxicity monitoring with the chronic toxicity monitoring as chronic toxicity is a more stringent requirement than acute toxicity.

In addition, the Discharger must monitor temperature and pH to calculate instream ammonia objectives and hardness to evaluate instream metals objectives. This Order includes new monitoring requirements at RSW-001 for boron, chloride, nitrite plus nitrate, sulfate, TDS, turbidity, chlorpyrifos, and diazinon in order to assess the potential for the discharge to contribute to exceedances of Basin Plan Objectives and/or to obtain information to support TMDL implementation.

RSW-002. The Ventura County Watershed Protection District operates flow gauge station No. 803 within Arroyo Simi at Madera Road. Order R4-2013-0078 required the Discharger to report the daily flow at this gauge station during periods of discharge. To clarify and improve reporting, this Order establishes a new receiving water monitoring location RSW-002, assigned to the existing requirement to report stream flow. This information is necessary to delineate when wet-weather effluent limitations apply, consistent with the Metals TMDL.

2. Groundwater – Not Applicable

E. Other Monitoring Requirements

Because the discharge is comprised of storm water runoff, the Discharger is required to measure and record the rainfall each day of the month. The Discharger is also required to conduct visual observations of all storm water discharges in the vicinity of the discharge points. The visual observations may be used to assess compliance with receiving water limitations.

VIII. PUBLIC PARTICIPATION

The 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 the Facility. As a step in the WDR/NPDES permit adoption process, the Regional Water Board staff developed tentative WDR and NPDES permit, and released it for comment to the public (see section C below). The Regional Water Board encourages public participation in the WDR/NPDES permit adoption process.

A. Notification of Interested Parties

The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDR's/NPDES permit for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through a local newspaper, electronic mailing and posting on the Los Angeles Water Board Website. The public had access to the agenda and any changes in dates and locations through the Los Angeles Water Board's website at:

<http://www.waterboards.ca.gov/losangeles>

B. Written Comments

Interested persons were invited to submit written comments concerning the tentative WDR/NPDES permit as provided through the notification process electronically at losangeles@waterboards.ca.gov with a copy to jauren.chen@waterboards.ca.gov.

To be fully responded to by staff and considered by the Regional Water Board, the written comments were due at the Regional Water Board office by 5:00 p.m. on May 24, 2018.

C. Public Hearing

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

Date: **June 14, 2018**
Time: **9:00 a.m.**
Location: **Metropolitan Water District of Southern California, Board Room
700 North Alameda Street
Los Angeles, California**

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

You can access the current agenda for changes in dates and locations at <http://www.waterboards.ca.gov/losangeles>. Please be aware that dates and venues may change.

D. Reconsideration of WDRs / NPDES Permit

Any person aggrieved by this action of the Los Angeles Regional Water Board Name 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., within 30 calendar days of the date of adoption of this Order at the following address, 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:

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

Or by email at waterqualitypetitions@waterboards.ca.gov

For instructions on how to file a petition for review, see http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

E. Information and Copying

The Report of Waste Discharge, other supporting documents, and comments received 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 Los Angeles Water Board by calling 213-576-6600.

F. 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.

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Jau Ren Chen at jauren.chen@waterboards.ca.gov or at (213)576-6656.

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 no later than 90 days from the date of the submittal of the SWPPP to the Regional Water Board (whichever comes first).

II. OBJECTIVES

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 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, overhead 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.

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 Permit-related responsibilities, duties, and activities of each team member. For small facilities, storm water pollution prevention teams may consist of one individual where appropriate.

B. Review Other Requirements and Existing Facility Plans

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

operators whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

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

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.

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 VI.A.4 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 materials¹ 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 IV.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.

¹ "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to section 313 of Title III of Superfund Amendments and Reauthorization Act (SARA); fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges.

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 authorized non-storm water discharges since April 17, 1994. Include toxic chemicals (listed in 40 Code of Federal Regulations (C.F.R.) part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (U.S. EPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 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 authorized non-storm water discharges and associated drainage area.

Non-storm water discharges that are not authorized by this Permit, other waste discharge requirements, or other NPDES permits are prohibited. The SWPPP must include BMPs to prevent or reduce contact of authorized non-storm water discharges with significant materials (as defined in Footnote 1 of section V above) 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.
7. **Trash.** Describe the facility locations where trash may be generated as a result of facility operations and on-site activities.

- 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 VIII 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 section VI above to determine:
 1. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and
 2. Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. Facility operators shall consider and evaluate various factors

when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.

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

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

VIII. STORM WATER BEST MANAGEMENT PRACTICES

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (sections VI and VII 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 VIII.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 VIII.A above are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:

1. **Overhead Coverage.** This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.
2. **Retention Ponds.** This includes basins, ponds, surface impoundments, bermed areas, etc. that do not allow storm water to discharge from the facility.
3. **Control Devices.** This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.
4. **Secondary Containment Structures.** This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.
5. **Treatment.** This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc. that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

IX. ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION

The facility operator shall conduct one comprehensive site compliance evaluation (evaluation) in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 10 days of the approval by the Executive Officer or no later than 90 days after submission to the Regional Water Board, whichever comes first. 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 X.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 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.B.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 (µG/L)

The Minimum Levels (MLs) 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
Chlorodibromomethane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromomethane	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	
Hexachlorocyclopentadiene	5	5		
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		

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

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

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

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

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

Table 2d – PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
alpha-BHC	0.01
Aldrin	0.005
b-Endosulfan	0.01
Beta-BHC	0.005
Chlordane	0.1
Delta-BHC	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01

Table 2d – PESTICIDES – PCBs*	GC
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	Analytical Methods
1	Antimony	7440360	1
2	Arsenic	7440382	1
3	Beryllium	7440417	1
4	Cadmium	7440439	1
5a	Chromium (III)	16065831	1
5a	Chromium (VI)	18540299	1
6	Copper	7440508	1
7	Lead	7439921	1
8	Mercury	7439976	1
9	Nickel	7440020	1
11	Selenium	7782492	1
11	Silver	7440224	1
12	Thallium	7440280	1
13	Zinc	7440666	1
14	Cyanide	57125	1
15	Asbestos	1332214	1
16	2,3,7,8-TCDD	1746016	1
17	Acrolein	117028	1
18	Acrylonitrile	117131	1
19	Benzene	71432	1
20	Bromoform	75252	1
21	Carbon Tetrachloride	56235	1
22	Chlorobenzene	118907	1
23	Chlorodibromomethane	124481	1
24	Chloroethane	75003	1
25	2-Chloroethylvinyl Ether	111758	1
26	Chloroform	67663	1
27	Dichlorobromomethane	75274	1
28	1,1-Dichloroethane	75343	1
29	1,2-Dichloroethane	117062	1
30	1,1-Dichloroethylene	75354	1
31	1,2-Dichloropropane	78875	1
32	1,3-Dichloropropylene	542756	1
33	Ethylbenzene	110414	1
34	Methyl Bromide	74839	1
35	Methyl Chloride	74873	1
36	Methylene Chloride	75092	1
37	1,1,2,2-Tetrachloroethane	79345	1
38	Tetrachloroethylene	127184	1
39	Toluene	118883	1
40	1,2-Trans-Dichloroethylene	156605	1
41	1,1,1-Trichloroethane	71556	1
42	1,1,2-Trichloroethane	79005	1
43	Trichloroethylene	79016	1
44	Vinyl Chloride	75014	1
45	2-Chlorophenol	95578	1

CTR Number	Parameter	CAS Number	Analytical Methods
46	2,4-Dichlorophenol	120832	1
47	2,4-Dimethylphenol	115679	1
48	2-Methyl-4,6-Dinitrophenol	534521	1
49	2,4-Dinitrophenol	51285	1
50	2-Nitrophenol	88755	1
51	4-Nitrophenol	110027	1
52	3-Methyl-4-Chlorophenol	59507	1
53	Pentachlorophenol	87865	1
54	Phenol	118952	1
55	2,4,6-Trichlorophenol	88062	1
56	Acenaphthene	83329	1
57	Acenaphthylene	208968	1
58	Anthracene	120127	1
59	Benzidine	92875	1
60	Benzo(a)Anthracene	56553	1
61	Benzo(a)Pyrene	50328	1
62	Benzo(b)Fluoranthene	205992	1
63	Benzo(ghi)Perylene	191242	1
64	Benzo(k)Fluoranthene	207089	1
65	Bis(2-Chloroethoxy) Methane	111911	1
66	Bis(2-Chloroethyl) Ether	111444	1
67	Bis(2-Chloroisopropyl) Ether	118601	1
68	Bis(2-Ethylhexyl) Phthalate	117817	1
69	4-Bromophenyl Phenyl Ether	111553	1
70	Butylbenzyl Phthalate	85687	1
71	2-Chloronaphthalene	91587	1
72	4-Chlorophenyl Phenyl Ether	7005723	1
73	Chrysene	218019	1
74	Dibenzo(a,h)Anthracene	53703	1
75	1,2-Dichlorobenzene	95501	1
76	1,3-Dichlorobenzene	541731	1
77	1,4-Dichlorobenzene	116467	1
78	3,3'-Dichlorobenzidine	91941	1
79	Diethyl Phthalate	84662	1
80	Dimethyl Phthalate	131113	1
81	Di-n-Butyl Phthalate	84742	1
82	2,4-Dinitrotoluene	121142	1
83	2,6-Dinitrotoluene	606202	1
84	Di-n-Octyl Phthalate	117840	1
85	1,2-Diphenylhydrazine	122667	1
86	Fluoranthene	206440	1
87	Fluorene	86737	1
88	Hexachlorobenzene	118741	1
89	Hexachlorobutadiene	87863	1
90	Hexachlorocyclopentadiene	77474	1
91	Hexachloroethane	67721	1
92	Indeno(1,2,3-cd)Pyrene	193395	1
93	Isophorone	78591	1
94	Naphthalene	91203	1
95	Nitrobenzene	98953	1

CTR Number	Parameter	CAS Number	Analytical Methods
96	N-Nitrosodimethylamine	62759	1
97	N-Nitrosodi-n-Propylamine	621647	1
98	N-Nitrosodiphenylamine	86306	1
99	Phenanthrene	85018	1
110	Pyrene	129000	1
111	1,2,4-Trichlorobenzene	120821	1
112	Aldrin	309002	1
113	alpha-BHC	319846	1
114	beta-BHC	319857	1
115	gamma-BHC	58899	1
116	delta-BHC	319868	1
117	Chlordane	57749	1
118	4,4'-DDT	50293	1
119	4,4'-DDE	72559	1
111	4,4'-DDD	72548	1
111	Dieldrin	60571	1
112	alpha-Endosulfan	959988	1
113	beta-Endosulfan	33213659	1
114	Endosulfan Sulfate	1131178	1
115	Endrin	72208	1
116	Endrin Aldehyde	7421934	1
117	Heptachlor	76448	1
118	Heptachlor Epoxide	1124573	1
119	PCB-1116	12674112	1
120	PCB-1221	11114282	1
121	PCB-1232	11141165	1
122	PCB-1242	53469219	1
123	PCB-1248	12672296	1
124	PCB-1254	11197691	1
125	PCB-1260	11196825	1
126	Toxaphene	8001352	1

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

ATTACHMENT J – SUMMARY OF EFFLUENT LIMITATIONS CALCULATIONS

Fact Sheet Attachment J
Reasonable Potential Analysis and WQBELs Calculations
Cemex Construction Materials Pacific, LLC, Moorpark Facility, (Discharge Point 001)

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)						Human Health for consumption of:	TMDL		Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?
					Freshwater		Saltwater		Primary MCLs	Organisms only		Dry Weather or Chronic WLA	Wet Weather or Acute WLA					
					C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot										
1	Antimony	ug/L		0.005					6.00	4300.00			6.00	No	No	Y	N	
2	Arsenic	ug/L	0.6	3.5	340.00	150.00			10.00				10.00	No	No	Y	N	
3	Beryllium	ug/L							4.00	Narrative			4.00			Y	Y	
4	Cadmium	ug/L	0.6	0.25	11.73	4.78			5.00	Narrative			4.78	No	No	Y	N	
5a	Chromium (III)	ug/L		6.9	3471.70	413.81				Narrative			413.81	No	No	Y	N	
5b	Chromium (VI)	ug/L		9.6	16.00	11.00			10.00	Narrative			10.00	No	No	Y	Y	
6	Copper, Dry Weather	ug/L	0.6	110	31.06	19.22			1300.00				19.22	Yes	Yes	Y	N	
6	Copper, Wet Weather	ug/L	0.6	110	31.06						31.06		31.06	Yes	Yes	Y	N	
7	Lead	ug/L	0.6	3.7	239.65	9.34			15.00	Narrative			9.34	No	No	Y	N	
8	Mercury, All Weather	ug/L	0.6						2.00	0.05	0.05	0.05	0.05			Y	Y	
9	Nickel, Dry Weather	ug/L	0.6	4	959.66	106.70			100.00	4600.00			100.00	No	No	Y	Y	
9	Nickel, Wet Weather	ug/L	0.6	4	958.00				100.00	4600.00	958.00		100.00	No	No	Y	Y	
10	Selenium	ug/L	0.6	1.6	20.00	5.00			50.00	Narrative			5.00	No	No	Y	N	
11	Silver	ug/L		0.5	17.39								17.39	No	No	Y	Y	
12	Thallium	ug/L		0.5					2.00	6.30			2.00	No	No	Y	Y	
13	Zinc	ug/L		85	245.34	245.34							245.34	No	No	Y	N	
14	Cyanide	ug/L		0.3	22.00	5.20			150.00	220000.00			5.20	No	No	Y	N	
15	Asbestos	Fibers/							7.00				7.00			Y	Y	
16	2,3,7,8 TCDD	ug/L								0.00			0.00			N		
	TCDD Equivalents	ug/L								0.00			0.00			N		
17	Acrolein	ug/L		4						780.00			780.00	No	No	Y	Y	
18	Acrylonitrile	ug/L								0.66			0.66			Y	Y	
19	Benzene	ug/L		0.2					1.00	71.00			1.00	No	No	Y	Y	
20	Bromoform	ug/L		0.2					80.00	360.00			80.00	No	No	Y	Y	
21	Carbon Tetrachloride	ug/L		0.1					0.50	4.40			0.50	No	No	Y	Y	
22	Chlorobenzene	ug/L		0.2					70.00	21000.00			70.00	No	No	Y	Y	
23	Chlorodibromomethane	ug/L		0.2					80.00	34.00			34.00	No	No	Y	Y	
24	Chloroethane	ug/L		Criteria									No Criteria	No Criteria	No Criteria	Y	Y	
25	2-Chloroethylvinyl ether	ug/L		Criteria									No Criteria	No Criteria	No Criteria	Y	Y	
26	Chloroform	ug/L		0.2					80.00				80.00	No	No	Y	Y	
27	Dichlorobromomethane	ug/L		0.2					80.00	46.00			46.00	No	No	Y	Y	
28	1,1-Dichloroethane	ug/L		0.1					5.00				5.00	No	No	Y	Y	
29	1,2-Dichloroethane	ug/L		0.2					0.50	99.00			0.50	No	No	Y	Y	
30	1,1-Dichloroethylene	ug/L		0.1					6.00	3.20			3.20	No	No	Y	Y	
31	1,2-Dichloropropane	ug/L		0.1					5.00	39.00			5.00	No	No	Y	Y	
32	1,3-Dichloropropylene	ug/L		0.1					0.50	1700.00			0.50	No	No	Y	Y	
33	Ethylbenzene	ug/L		0.2					300.00	29000.00			300.00	No	No	Y	Y	
34	Methyl Bromide	ug/L		0.1						4000.00			4000.00	No	No	Y	Y	
35	Methyl Chloride	ug/L		Criteria									No Criteria	No Criteria	No Criteria	Y	Y	
36	Methylene Chloride	ug/L		0.4					5.00	1600.00			5.00	No	No	Y	Y	
37	1,1,2,2-Tetrachloroethane	ug/L		0.2					1.00	11.00			1.00	No	No	Y	Y	
38	Tetrachloroethylene	ug/L		0.2					5.00	8.85			5.00	No	No	Y	Y	
39	Toluene	ug/L		0.2					150.00	200000.00			150.00	No	No	Y	Y	
40	1,2-Trans-Dichloroethylene	ug/L		0.1					10.00	140000.00			10.00	No	No	Y	Y	
41	1,1,1-Trichloroethane	ug/L		0.2					200.00				200.00	No	No	Y	Y	
42	1,1,2-Trichloroethane	ug/L		0.2					5.00	42.00			5.00	No	No	Y	Y	
43	Trichloroethylene	ug/L		0.2					5.00	81.00			5.00	No	No	Y	Y	
44	Vinyl Chloride	ug/L		0.2					0.50	525.00			0.50	No	No	Y	Y	
45	2-Chlorophenol	ug/L		10						400.00			400.00	No	No	Y	Y	
46	2,4-Dichlorophenol	ug/L		10						790.00			790.00	No	No	Y	Y	
47	2,4-Dimethylphenol	ug/L		20						2300.00			2300.00	No	No	Y	Y	

Fact Sheet Attachment J
 Reasonable Potential Analysis and WQBELs Calculations
 Cemex Construction Materials Pacific, LLC, Moorpark Facility, (Discharge Point 001)

CTR#	Parameters	REASONABLE POTENTIAL ANALYSIS (RPA)							HUMAN HEALTH CALCULATIONS			ECA acute multiplier (p.7)	LTA acute
		If all data points ND Enter the min detection limit (MDL) (ug/L)	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?	Reason	Organisms only				
									AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh		
1	Antimony		2		B<=C, Step 7		No	MEC<C & B<=C					
2	Arsenic		1.6		B<=C, Step 7		No	MEC<C & B<=C					
3	Beryllium	0.2		N	No detected value of B, Step 7		ud	No effluent data & B					
4	Cadmium		0.25		B<=C, Step 7		No	MEC<C & B<=C					
5a	Chromium (III)		0.21		B<=C, Step 7		No	MEC<C & B<=C					
5b	Chromium (VI)	0.03		N	No detected value of B, Step 7		No	MEC<C & B is ND					
6	Copper, Dry Weather		48		Limit required, B>C & pollutant detected		Yes	MEC>=C		2.01		0.32	9.97
6	Copper, Wet Weather		48		Limit required, B>C & pollutant detected		Yes	MEC>=C		2.01		0.32	9.97
7	Lead		25		Limit required, B>C & pollutant detected		Yes	B>C & pollutant detected		2.01		0.32	76.95
8	Mercury, All Weather	0.1		Y	No detected value of B, Step 7		ud	No effluent data & B	0.051	2.01	0.10232		
9	Nickel, Dry Weather	4		N	No detected value of B, Step 7		No	MEC<C & B is ND					
9	Nickel, Wet Weather	4		N	No detected value of B, Step 7		No	MEC<C & B is ND		2.01		0.32	307.60
10	Selenium		5.7		Limit required, B>C & pollutant detected		Yes	B>C & pollutant detected		2.01		0.32	6.42
11	Silver	0.4		N	No detected value of B, Step 7		No	MEC<C & B is ND					
12	Thallium	2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
13	Zinc		34		B<=C, Step 7		No	MEC<C & B<=C					
14	Cyanide		42		B>C & eff ND, Step 7		No	ud; B>C & effluent N					
15	Asbestos	1.1		N	No detected value of B, Step 7		ud	No effluent data & B					
16	2,3,7,8 TCDD				No detected value of B, Step 7		Ud	No effluent data & n					
	TCDD Equivalents				No detected value of B, Step 7		Ud	No effluent data & n					
17	Acrolein	4		N	No detected value of B, Step 7		No	MEC<C & B is ND					
18	Acrylonitrile	18		Y	No detected value of B, Step 7		ud	No effluent data & B					
19	Benzene	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
20	Bromoform	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
21	Carbon Tetrachloride	0.1		N	No detected value of B, Step 7		No	MEC<C & B is ND					
22	Chlorobenzene	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
23	Chlorodibromomethane	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
24	Chloroethane	0.2		N	No Criteria	No Criteria	Uc	No Criteria					
25	2-Chloroethylvinyl ether	0.2		N	No Criteria	No Criteria	Uc	No Criteria					
26	Chloroform	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
27	Dichlorobromomethane	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
28	1,1-Dichloroethane	0.1		N	No detected value of B, Step 7		No	MEC<C & B is ND					
29	1,2-Dichloroethane	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
30	1,1-Dichloroethylene	0.1		N	No detected value of B, Step 7		No	MEC<C & B is ND					
31	1,2-Dichloropropane	0.1		N	No detected value of B, Step 7		No	MEC<C & B is ND					
32	1,3-Dichloropropylene	0.1		N	No detected value of B, Step 7		No	MEC<C & B is ND					
33	Ethylbenzene	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
34	Methyl Bromide	0.1		N	No detected value of B, Step 7		No	MEC<C & B is ND					
35	Methyl Chloride	0.1		N	No Criteria	No Criteria	Uc	No Criteria					
36	Methylene Chloride	0.4		N	No detected value of B, Step 7		No	MEC<C & B is ND					
37	1,1,2,2-Tetrachloroethane	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
38	Tetrachloroethylene	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
39	Toluene	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
40	1,2-Trans-Dichloroethylene	0.1		N	No detected value of B, Step 7		No	MEC<C & B is ND					
41	1,1,1-Trichloroethane	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
42	1,1,2-Trichloroethane	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
43	Trichloroethylene	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
44	Vinyl Chloride	0.2		N	No detected value of B, Step 7		No	MEC<C & B is ND					
45	2-Chlorophenol	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
46	2,4-Dichlorophenol	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
47	2,4-Dimethylphenol	20		N	No detected value of B, Step 7		No	MEC<C & B is ND					

Fact Sheet Attachment J
Reasonable Potential Analysis and WQBELs Calculations
Cemex Construction Materials Pacific, LLC, Moorpark Facility, (Discharge Point 001)

CTR#	Parameters	AQUATIC LIFE CALCULATIONS							LIMITS			Recommendation	Comment/Recommendation
		Saltwater / Freshwater / Basin Plan							RPA				
		ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life	Lowest AMEL	Lowest MDEL	Title 22 (MCL)		
1	Antimony											No Limit	
2	Arsenic										10	No Limit	
3	Beryllium											No Limit	
4	Cadmium										5.0	No Limit	
5a	Chromium (III)											No Limit	
5b	Chromium (VI)											No Limit	
6	Copper, Dry Weather	0.53	10.14	9.97	1.55	15.48	3.11	31.061	15	31	1300		Retain existing limit (22 ug/L)
6	Copper, Wet Weather	0.53		9.97	1.55	15.48	3.11	31.061	15	31			Retain existing limit (31 ug/L)
7	Lead	0.53	4.93	4.93	1.55	7.65	3.11	15.34	7.6	15	15		Retain existing limit (9.5 ug/L)
8	Mercury, All Weather				1.55		3.11		0.051	0.10	2.0		Retain existing limit (0.10 ug/L)
9	Nickel, Dry Weather										100	No Limit	
9	Nickel, Wet Weather	0.53		307.60	1.55	477.52	3.11	958	478	958	100		Two Significant Digits at 960 ug/L
10	Selenium	0.53	2.64	2.64	1.55	4.09	3.11	8.2133	4.1	8.2	50		Retain existing limit (8.2 ug/L)
11	Silver											No Limit	
12	Thallium											No Limit	
13	Zinc											No Limit	
14	Cyanide											No Limit	
15	Asbestos											No Limit	
16	2,3,7,8 TCDD											No Limit	
	TCDD Equivalents											No Limit	
17	Acrolein											No Limit	
18	Acrylonitrile											No Limit	
19	Benzene											No Limit	
20	Bromoform											No Limit	
21	Carbon Tetrachloride											No Limit	
22	Chlorobenzene											No Limit	
23	Chlorodibromomethane											No Limit	
24	Chloroethane											No Limit	
25	2-Chloroethylvinyl ether											No Limit	
26	Chloroform											No Limit	
27	Dichlorobromomethane											No Limit	
28	1,1-Dichloroethane											No Limit	
29	1,2-Dichloroethane											No Limit	
30	1,1-Dichloroethylene											No Limit	
31	1,2-Dichloropropane											No Limit	
32	1,3-Dichloropropylene											No Limit	
33	Ethylbenzene											No Limit	
34	Methyl Bromide											No Limit	
35	Methyl Chloride											No Limit	
36	Methylene Chloride											No Limit	
37	1,1,1,2-Tetrachloroethane											No Limit	
38	Tetrachloroethylene											No Limit	
39	Toluene											No Limit	
40	1,2-Trans-Dichloroethylene											No Limit	
41	1,1,1-Trichloroethane											No Limit	
42	1,1,2-Trichloroethane											No Limit	
43	Trichloroethylene											No Limit	
44	Vinyl Chloride											No Limit	
45	2-Chlorophenol											No Limit	
46	2,4-Dichlorophenol											No Limit	
47	2,4-Dimethylphenol											No Limit	

Fact Sheet Attachment J
Reasonable Potential Analysis and WQBELs Calculations
Cemex Construction Materials Pacific, LLC, Moorpark Facility, (Discharge Point 001)

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)				Human Health for consumption of:		TMDL		Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?
					Freshwater		Saltwater		Primary MCLs	Organisms only	Dry Weather or Chronic WLA	Wet Weather or Acute WLA					
					C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot									
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	ug/L		20						765.00		765.00	No	No	Y	Y	
49	2,4-Dinitrophenol	ug/L		20						14000.00		14000.00	No	No	Y	Y	
50	2-Nitrophenol	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y	
51	4-Nitrophenol	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y	
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y	
53	Pentachlorophenol	ug/L			5.28	4.05		1.00	8.20			1.00			Y	Y	
54	Phenol	ug/L		1.6					4600000.00			4600000.00	No	No	Y	Y	
55	2,4,6-Trichlorophenol	ug/L							6.50			6.50			Y	Y	
56	Acenaphthene	ug/L		10					2700.00			2700.00	No	No	Y	Y	
57	Acenaphthylene	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y	
58	Anthracene	ug/L		10					110000.00			110000.00	No	No	Y	Y	
59	Benzidine	ug/L							0.00			0.00			Y	Y	
60	Benzo(a)Anthracene	ug/L							0.05			0.05			Y	Y	
61	Benzo(a)Pyrene	ug/L							0.05			0.05			Y	Y	
62	Benzo(b)Fluoranthene	ug/L							0.05			0.05			Y	Y	
63	Benzo(ghi)Perylene	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y	
64	Benzo(k)Fluoranthene	ug/L							0.05			0.05			Y	Y	
65	Bis(2-Chloroethoxy)Methane	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y	
66	Bis(2-Chloroethyl)Ether	ug/L							1.40			1.40			Y	Y	
67	Bis(2-Chloroisopropyl)Ether	ug/L		10					170000.00			170000.00	No	No	Y	Y	
68	Bis(2-Ethylhexyl)Phthalate	ug/L						4.00	5.90			4.00			Y	Y	
69	4-Bromophenyl Phenyl Ether	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y	
70	Butylbenzyl Phthalate	ug/L		20					5200.00			5200.00	No	No	Y	Y	
71	2-Chloronaphthalene	ug/L		10					4300.00			4300.00	No	No	Y	Y	
72	4-Chlorophenyl Phenyl Ether	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y	
73	Chrysene	ug/L							0.05			0.05			Y	Y	
74	Dibenzo(a,h)Anthracene	ug/L							0.05			0.05			Y	Y	
75	1,2-Dichlorobenzene	ug/L		10				600.00	17000.00			600.00	No	No	Y	Y	
76	1,3-Dichlorobenzene	ug/L		10					2600.00			2600.00	No	No	Y	Y	
77	1,4-Dichlorobenzene	ug/L						5.00	2600.00			5.00			Y	Y	
78	3,3 Dichlorobenzidine	ug/L							0.08			0.08			Y	Y	
79	Diethyl Phthalate	ug/L		20					120000.00			120000.00	No	No	Y	Y	
80	Dimethyl Phthalate	ug/L		10					2900000.00			2900000.00	No	No	Y	Y	
81	Di-n-Butyl Phthalate	ug/L		10					12000.00			12000.00	No	No	Y	Y	
82	2,4-Dinitrotoluene	ug/L							9.10			9.10			Y	Y	
83	2,6-Dinitrotoluene	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y	
84	Di-n-Octyl Phthalate	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y	
85	1,2-Diphenylhydrazine	ug/L							0.54			0.54			Y	Y	
86	Fluoranthene	ug/L		10					370.00			370.00	No	No	Y	Y	
87	Fluorene	ug/L		10					14000.00			14000.00	No	No	Y	Y	
88	Hexachlorobenzene	ug/L						1.00	0.00			0.00			Y	Y	
89	Hexachlorobutadiene	ug/L		0.1					50.00			50.00	No	No	Y	Y	
90	Hexachlorocyclopentadiene	ug/L		20				50.00	17000.00			50.00	No	No	Y	Y	
91	Hexachloroethane	ug/L							8.90			8.90			Y	Y	
92	Indeno(1,2,3-cd)Pyrene	ug/L							0.05			0.05			Y	Y	
93	Isophorone	ug/L		10					600.00			600.00	No	No	Y	Y	
94	Naphthalene	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y	
95	Nitrobenzene	ug/L		20					1900.00			1900.00	No	No	Y	Y	
96	N-Nitrosodimethylamine	ug/L							8.10			8.10			N		
97	N-Nitrosodi-n-Propylamine	ug/L							1.40			1.40			Y	Y	

Fact Sheet Attachment J
Reasonable Potential Analysis and WQBELs Calculations
Cemex Construction Materials Pacific, LLC, Moorpark Facility, (Discharge Point 001)

CTR#	Parameters	REASONABLE POTENTIAL ANALYSIS (RPA)							HUMAN HEALTH CALCULATIONS			ECA acute multiplier (p.7)	LTA acute
		If all data points ND Enter the min detection limit (MDL) (ug/L)	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?	Reason	Organisms only				
									AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh		
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)	20		N	No detected value of B, Step 7		No	MEC<C & B is ND					
49	2,4-Dinitrophenol	20		N	No detected value of B, Step 7		No	MEC<C & B is ND					
50	2-Nitrophenol	10		N	No Criteria	No Criteri	Uc	No Criteria					
51	4-Nitrophenol	20		N	No Criteria	No Criteri	Uc	No Criteria					
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	20		N	No Criteria	No Criteri	Uc	No Criteria					
53	Pentachlorophenol	20		Y	No detected value of B, Step 7		ud	No effluent data & B					
54	Phenol	20		N	No detected value of B, Step 7		No	MEC<C & B is ND					
55	2,4,6-Trichlorophenol	20		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
56	Acenaphthene	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
57	Acenaphthylene	10		N	No Criteria	No Criteri	Uc	No Criteria					
58	Anthracene	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
59	Benzidine	20		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
60	Benzo(a)Anthracene	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
61	Benzo(a)Pyrene	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
62	Benzo(b)Fluoranthene	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
63	Benzo(ghi)Perylene	10		N	No Criteria	No Criteri	Uc	No Criteria					
64	Benzo(k)Fluoranthene	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
65	Bis(2-Chloroethoxy)Methane	10		N	No Criteria	No Criteri	Uc	No Criteria					
66	Bis(2-Chloroethyl)Ether	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
67	Bis(2-Chloroisopropyl)Ether	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
68	Bis(2-Ethylhexyl)Phthalate	50		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
69	4-Bromophenyl Phenyl Ether	10		N	No Criteria	No Criteri	Uc	No Criteria					
70	Butylbenzyl Phthalate	20		N	No detected value of B, Step 7		No	MEC<C & B is ND					
71	2-Chloronaphthalene	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
72	4-Chlorophenyl Phenyl Ether	10		N	No Criteria	No Criteri	Uc	No Criteria					
73	Chrysene	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
74	Dibenzo(a,h)Anthracene	20		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
75	1,2-Dichlorobenzene	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
76	1,3-Dichlorobenzene	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
77	1,4-Dichlorobenzene	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
78	3,3 Dichlorobenzidine	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
79	Diethyl Phthalate	20		N	No detected value of B, Step 7		No	MEC<C & B is ND					
80	Dimethyl Phthalate	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
81	Di-n-Butyl Phthalate	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
82	2,4-Dinitrotoluene	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
83	2,6-Dinitrotoluene	10		N	No Criteria	No Criteri	Uc	No Criteria					
84	Di-n-Octyl Phthalate	20		N	No Criteria	No Criteri	Uc	No Criteria					
85	1,2-Diphenylhydrazine	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
86	Fluoranthene	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
87	Fluorene	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
88	Hexachlorobenzene	0.1		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
89	Hexachlorobutadiene	0.1		N	No detected value of B, Step 7		No	MEC<C & B is ND					
90	Hexachlorocyclopentadiene	20		N	No detected value of B, Step 7		No	MEC<C & B is ND					
91	Hexachloroethane	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
92	Indeno(1,2,3-cd)Pyrene	20		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
93	Isophorone	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
94	Naphthalene	0.2		N	No Criteria	No Criteri	Uc	No Criteria					
95	Nitrobenzene	20		N	No detected value of B, Step 7		No	MEC<C & B is ND					
96	N-Nitrosodimethylamine				No detected value of B, Step 7		Ud	No effluent data & n					
97	N-Nitrosodi-n-Propylamine	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					

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Reasonable Potential Analysis and WQBELs Calculations
Cemex Construction Materials Pacific, LLC, Moorpark Facility, (Discharge Point 001)

CTR#	Parameters	AQUATIC LIFE CALCULATIONS							LIMITS			Recommendation	Comment/Recommendation
		Saltwater / Freshwater / Basin Plan							RPA		Title 22 (MCL)		
		ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life	Lowest AMEL	Lowest MDEL			
48	4,6-dinitro-o-resol (aka2-methyl-4,6-Dinitrophenol)											No Limit	
49	2,4-Dinitrophenol											No Limit	
50	2-Nitrophenol											No Limit	
51	4-Nitrophenol											No Limit	
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)											No Limit	
53	Pentachlorophenol											No Limit	
54	Phenol											No Limit	
55	2,4,6-Trichlorophenol											No Limit	
56	Acenaphthene											No Limit	
57	Acenaphthylene											No Limit	
58	Anthracene											No Limit	
59	Benzidine											No Limit	
60	Benzo(a)Anthracene											No Limit	
61	Benzo(a)Pyrene											No Limit	
62	Benzo(b)Fluoranthene											No Limit	
63	Benzo(ghi)Perylene											No Limit	
64	Benzo(k)Fluoranthene											No Limit	
65	Bis(2-Chloroethoxy)Methane											No Limit	
66	Bis(2-Chloroethyl)Ether											No Limit	
67	Bis(2-Chloroisopropyl)Ether											No Limit	
68	Bis(2-Ethylhexyl)Phthalate											No Limit	
69	4-Bromophenyl Phenyl Ether											No Limit	
70	Butylbenzyl Phthalate											No Limit	
71	2-Chloronaphthalene											No Limit	
72	4-Chlorophenyl Phenyl Ether											No Limit	
73	Chrysene											No Limit	
74	Dibenzo(a,h)Anthracene											No Limit	
75	1,2-Dichlorobenzene											No Limit	
76	1,3-Dichlorobenzene											No Limit	
77	1,4-Dichlorobenzene											No Limit	
78	3,3 Dichlorobenzidine											No Limit	
79	Diethyl Phthalate											No Limit	
80	Dimethyl Phthalate											No Limit	
81	Di-n-Butyl Phthalate											No Limit	
82	2,4-Dinitrotoluene											No Limit	
83	2,6-Dinitrotoluene											No Limit	
84	Di-n-Octyl Phthalate											No Limit	
85	1,2-Diphenylhydrazine											No Limit	
86	Fluoranthene											No Limit	
87	Fluorene											No Limit	
88	Hexachlorobenzene											No Limit	
89	Hexachlorobutadiene											No Limit	
90	Hexachlorocyclopentadiene											No Limit	
91	Hexachloroethane											No Limit	
92	Indeno(1,2,3-cd)Pyrene											No Limit	
93	Isophorone											No Limit	
94	Naphthalene											No Limit	
95	Nitrobenzene											No Limit	
96	N-Nitrosodimethylamine											No Limit	
97	N-Nitrosodi-n-Propylamine											No Limit	

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Reasonable Potential Analysis and WQBELs Calculations
Cemex Construction Materials Pacific, LLC, Moorpark Facility, (Discharge Point 001)

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)						Human Health for consumption of:	TMDL		Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?
					Freshwater		Saltwater		Primary MCLs	Organisms only		Dry Weather or Chronic WLA	Wet Weather or Acute WLA					
					C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot										
98	N-Nitrosodiphenylamine	ug/L		10						16.00		16.00	No	No	Y	Y		
99	Phenanthrene	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y		
100	Pyrene	ug/L		10						11000.00		11000.00	No	No	Y	Y		
101	1,2,4-Trichlorobenzene	ug/L						5.00				5.00			Y	Y		
102	Aldrin	ug/L			3.00					0.00		0.00			Y	Y		
103	alpha-BHC	ug/L								0.01		0.01			Y	Y		
104	beta-BHC	ug/L								0.05		0.05			Y	Y		
105	gamma-BHC	ug/L		0.06	0.95					0.06		0.06	No	No	Y	Y		
106	delta-BHC	ug/L		Criteria								No Criteria	No Criteria	No Criteria	Y	Y		
107	Chlordane, All Weather	ug/L	0.6		2.40	0.00				0.00		0.00			Y	Y		
108	4,4'-DDT, All Weather	ug/L	0.6		1.10	0.00				0.00		0.00			Y	Y		
109	4,4'-DDE, All Weather	ug/L	0.6							0.00		0.00			Y	Y		
110	4,4'-DDD, All Weather	ug/L	0.6							0.00		0.00			Y	Y		
111	Dieldrin, All Weather	ug/L	0.6		0.24	0.06				0.00		0.00			Y	Y		
112	alpha-Endosulfan	ug/L		0.04	0.22	0.06				240.00		0.06	No	No	Y	Y		
113	beta-Endosulfan	ug/L			0.22	0.06				240.00		0.06			Y	Y		
114	Endosulfan Sulfate	ug/L		0.4						240.00		240.00	No	No	Y	Y		
115	Endrin	ug/L			0.09	0.04			2.00	0.81		0.04			Y	Y		
116	Endrin Aldehyde	ug/L		0.04						0.81		0.81	No	No	Y	Y		
117	Heptachlor	ug/L			0.52	0.00				0.00		0.00			Y	Y		
118	Heptachlor Epoxide	ug/L			0.52	0.00				0.00		0.00			Y	Y		
119-125	PCBs sum (2), All Weather	ug/L	0.6			0.01				0.00		0.00			Y	Y		
126	Toxaphene, All Weather	ug/L	0.6		0.73	0.00				0.00		0.00			Y	Y		
	Chlorpyrifos, All Weather	ug/L	0.6		0.03	0.01						0.01			N			
	Diazinon, All Weather	ug/L	0.6		0.10	0.10						0.10			N			

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
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CTR#	Parameters	REASONABLE POTENTIAL ANALYSIS (RPA)							HUMAN HEALTH CALCULATIONS				
		If all data points ND Enter the min detection limit (MDL) (ug/L)	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?	Reason	Organisms only			ECA acute multiplier (p.7)	LTA acute
									AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh		
98	N-Nitrosodiphenylamine	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
99	Phenanthrene	10		N	No Criteria	No Criteri	Uc	No Criteria					
100	Pyrene	10		N	No detected value of B, Step 7		No	MEC<C & B is ND					
101	1,2,4-Trichlorobenzene	10		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
102	Aldrin	0.06		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
103	alpha-BHC	0.06		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
104	beta-BHC	0.06		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
105	gamma-BHC	0.06		N	No detected value of B, Step 7		No	MEC<C & B is ND					
106	delta-BHC	0.06		N	No Criteria	No Criteri	Uc	No Criteria					
107	Chlordane, All Weather	0.2		Y	No detected value of B, Step 7		No	UD; effluent ND, MD	0.00059	2.01	0.00118	0.32	0.77
108	4,4'-DDT, All Weather	0.2		Y	No detected value of B, Step 7		No	UD; effluent ND, MD	0.00059	2.01	0.00118	0.32	0.35
109	4,4'-DDE, All Weather	0.04		Y	No detected value of B, Step 7		No	UD; effluent ND, MD	0.00059	2.01	0.00118		
110	4,4'-DDD, All Weather	0.1		Y	No detected value of B, Step 7		No	UD; effluent ND, MD	0.00084	2.01	0.00169		
111	Dieldrin, All Weather	0.04		Y	No detected value of B, Step 7		No	UD; effluent ND, MD	0.00014	2.01	0.00028	0.32	0.08
112	alpha-Endosulfan	0.04		N	No detected value of B, Step 7		No	MEC<C & B is ND					
113	beta-Endosulfan	0.06		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
114	Endosulfan Sulfate	0.4		N	No detected value of B, Step 7		No	MEC<C & B is ND					
115	Endrin	0.06		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
116	Endrin Aldehyde	0.04		N	No detected value of B, Step 7		No	MEC<C & B is ND					
117	Heptachlor	0.06		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
118	Heptachlor Epoxide	0.06		Y	No detected value of B, Step 7		No	UD; effluent ND, MD					
119-125	PCBs sum (2), All Weather	0.35		Y	No detected value of B, Step 7		No	UD; effluent ND, MD	0.00017	2.01	0.00034	0.32	
126	Toxaphene, All Weather	0.2		Y	No detected value of B, Step 7		No	UD; effluent ND, MD	0.00075	2.01	0.00150	0.32	0.23
	Chlorpyrifos, All Weather				No detected value of B, Step 7		Ud	No effluent data & n		2.01		0.32	0.01
	Diazinon, All Weather				No detected value of B, Step 7		Ud	No effluent data & n		2.01		0.32	0.03

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CTR#	Parameters	AQUATIC LIFE CALCULATIONS							LIMITS			Recommendation	Comment/Recommendation
		Saltwater / Freshwater / Basin Plan							RPA				
		ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life	Lowest AMEL	Lowest MDEL	Title 22 (MCL)		
98	N-Nitrosodiphenylamine											No Limit	
99	Phenanthrene											No Limit	
100	Pyrene											No Limit	
101	1,2,4-Trichlorobenzene											No Limit	
102	Aldrin											No Limit	
103	alpha-BHC											No Limit	
104	beta-BHC											No Limit	
105	gamma-BHC											No Limit	
106	delta-BHC											No Limit	
107	Chlordane, All Weather	0.53	0.00	0.00	1.55	0.00	3.11	0.0071	0.00059	0.0012			Retain existing limit (0.0012 ug/L)
108	4,4'-DDT, All Weather	0.53	0.00	0.00	1.55	0.00	3.11	0.0016	0.00059	0.0012			Retain existing limit (0.0012 ug/L)
109	4,4'-DDE, All Weather				1.55		3.11		0.00059	0.0012			Retain existing limit (0.0012 ug/L)
110	4,4'-DDD, All Weather				1.55		3.11		0.00084	0.0017			Retain existing limit (0.0017 ug/L)
111	Dieldrin, All Weather	0.53	0.03	0.03	1.55	0.05	3.11	0.092	0.00014	0.00028			Retain existing limit (0.00028 ug/L)
112	alpha-Endosulfan											No Limit	
113	beta-Endosulfan											No Limit	
114	Endosulfan Sulfate											No Limit	
115	Endrin											No Limit	
116	Endrin Aldehyde											No Limit	
117	Heptachlor											No Limit	
118	Heptachlor Epoxide											No Limit	
119-125	PCBs sum (2), All Weather	0.53	0.01	0.01	1.55	0.01	3.11	0.023	0.00017	0.00034			Retain existing limit (0.00034 ug/L)
126	Toxaphene, All Weather	0.53	0.00	0.00	1.55	0.00	3.11	0.0003	0.00016	0.00033			Retain existing limit (0.00033 ug/L)
	Chlorpyrifos, All Weather	0.53	0.01	0.01	1.55	0.01	3.11	0.023	0.011	0.023			Retain existing limit (0.023 ug/L)
	Diazinon, All Weather	0.53	0.05	0.03	1.55	0.05	3.11	0.1	0.050	0.10			Retain existing limit (0.10 ug/L)

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