



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

May 8, 2013

Mr. Thomas C. Powell
Vice president, Aggregate Resources
CEMEX Construction Materials Pacific, LLC
3990 E. Concours Street, Suite 200
Ontario, CA 91764

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. 7007 2560 0001 7889 6880

Dear Mr. Powell:

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

Our letters dated March 4, 2013, and April 9, 2013, transmitted the tentative and revised tentative Waste Discharge Requirements (WDRs) to CEMEX Construction Materials Pacific, LLC. Pursuant to Division 7 of the California Water Code, this Regional Water Board at a public hearing held on May 2, 2013, reviewed the tentative requirements, considered all factors in the case, and adopted Order No. R4-2013-0078.

Order R4-2013-0078 serves as an NPDES permit, and it expires on April 10, 2018. Section 13376 of the California Water Code requires that an application/Report of Waste Discharge for a new permit must be filed at least 180 days before the expiration date.

You are required to implement the MRP on the effective date (June 1, 2013) of Order No. R4-2013-0078. Your first monitoring report for the period of June 2013 through September 2013, is due by November 1, 2013. Submit all monitoring reports to the Regional Water Board, ATTN: Information Technology Unit. When submitting monitoring or technical reports to the Regional Water Board per these requirements, please include a reference to Compliance File CI-6658 and NPDES No. CA0059315, which will assure that the reports, are directed to the appropriate file and staff.

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

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles

Mr. Thomas C. Powell
CEMEX Construction Materials Pacific, LLC
Moorpark Facility

- 2 -

May 8, 2013

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

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

If you have any questions, please contact Mazhar Ali at (213) 576-6652.

Sincerely,



Cassandra D. Owens, Chief
Industrial Permitting Unit

Enclosures

cc: (Via E-mail Only)

Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
U.S. Army Corps of Engineers
NOAA, National Marine Fisheries Service
Department of Interior, U.S. Fish and Wildlife Service
NPDES Wastewater Unit, State Water Resources Control Board, Division of Water Quality
Mr. William Paznokas, Department of Fish and Game, Region 5
Department of Public Health, Sanitary Engineering Section
California State Parks and Recreation
California Coastal Commission, South Coast Region
Los Angeles County, Department of Public Works, Waste Management Division
Los Angeles County, Department of Public Health
Ms. Kirsten James, Heal the Bay
Ms. Liz Crosson, Los Angeles Waterkeeper
Ms. Anna Kheyfets, Natural Resources Defense Council
Ms. Christine Jones, CEMEX Construction Materials Pacific,
Ms. Mary Welch, PG Environmental, LLC
Mr. Jae Kim, Tetra Tech

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

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ORDER NO. R4-2013-0078

NPDES NO. CA0059315

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

The following Discharger is subject to waste discharge requirements as 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
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a minor discharge.	

The discharge by CEMEX Construction Materials Pacific, LLC from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Storm water runoff	34°, 20', 05.1" N	118°, 52', 41.7" W	Unnamed tributary to Happy Camp Wash

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	May 2, 2013
This Order shall become effective on:	June 1, 2013
This Order shall expire on:	April 10, 2018
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on May 2, 2013.



Samuel Unger, P.E.
Executive Officer

Table of Contents

I.	Facility Information	5
II.	Findings	6
III.	Discharge Prohibitions.....	14
IV.	Effluent Limitations and Discharge Specifications	14
	A. Effluent Limitations.....	14
	B. Land Discharge Specifications.....	18
	C. Reclamation Specifications.....	18
V.	Receiving Water Limitations	18
	A. Surface Water Limitation.....	18
	B. Groundwater Limitations	20
VI.	Provisions.....	20
	A. Standard Provisions.....	20
	B. Monitoring and Reporting Program (MRP) Requirements	23
	C. Special Provisions.....	23
	1. Reopener Provisions.....	23
	2. Special Studies, Technical Reports, and Additional Monitoring Requirements.....	24
	3. Storm Water Pollution Prevention Plan (SWPPP), Best Management Practices Plan (BMPP), and Spill Contingency Plan (SCP).....	24
	4. Construction, Operation and Maintenance Specifications.....	25
	5. Special Provisions for Municipal Facilities (POTWs Only)	25
	6. Other Special Provisions.....	25
	7. Compliance Schedules	25
VII.	Compliance Determination	25

List of Tables

Table 1.	Discharger Information	1
Table 2.	Discharge Location	1
Table 3.	Administrative Information	2
Table 4.	Facility Information	5
Table 5.	Basin Plan Beneficial Uses.....	11
Table 6.	Basin Plan Ground Water Beneficial Uses	11
Table 7.	Effluent Limitations for Discharge Point No. 001	15

List of Attachments

Attachment A – Definitions	A-1
Attachment B – Map	B-1
Attachment C – Flow Schematic.....	C-1
Attachment D – Standard Provisions.....	D-1
Attachment E – Monitoring and Reporting Program (MRP No. 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.....	H-1
Attachment I – List of Priority Pollutants	I-1
Attachment J – Effluent Limitations Calculations	J-1

I. FACILITY INFORMATION

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

Table 4. Facility Information

Discharger	CEMEX Construction Materials Pacific, LLC
Name of Facility	Moorpark Facility
Facility Address	9035 Roseland Avenue
	Moorpark, California 93021
	Ventura County
Facility Contact, Title, and Phone	Christine Jones, Environmental Manager, (909) 974-5471
Mailing Address	3990 E. Concours Street, Suite 200 Ontario, CA 91764
Type of Facility	Sand and gravel mining and processing
Facility Design Flow	0.120 million gallons per day (MGD) or 120,000 gallons per day (gpd)

II.FINDINGS

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

A. Background. CEMEX Construction Materials Pacific, LLC (hereinafter Discharger) is currently discharging pursuant to Order No. R4-2007-0060 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0059315. The Discharger submitted a Report of Waste Discharge, received July 18, 2012, and applied for an NPDES permit renewal to discharge up to 0.120 MGD from the Moorpark Facility (hereinafter Facility).

A site visit was conducted on July 26, 2012, to review current site conditions and operations.

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

B. Facility Description. The Discharger is the owner and operator of a 1400-acre sand and gravel mining and processing facility located at 9035 Roseland Avenue, Moorpark, California. The facility has been active since the early 1970s. Operations at the site include: sand and gravel mining, rock processing (crushing 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 sand, and dry plaster sand.

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 basins, 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 extreme storm events.

Non-discharging 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 runoff resulting from washing of aggregate product to remove fines. The aggregate washwater runoff flows to the earthen primary and secondary settling pond for solids removal through settling. Water from the settling ponds infiltrates, evaporates, or is recycled back to the aggregate washing process. Discharges to the ground via infiltration within the settling ponds is regulated under separate Waste Discharge Requirements contained in Order No, R4-2008-0207 and are not included in this NPDES permit.

The non-discharging process waters from the Ready-Mix Plant are 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.

The discharge regulated under this Order consists of rainfall runoff from the eastern portion of the site, including roadways, equipment storage areas, and the recycled asphalt/concrete processing areas. These areas drain to the eight Debris Basins. The Debris Basins are 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 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. Under extreme precipitation, water from Debris Basin No. 5 may overflow into Debris Basins 6-8. Debris Basin 8 is the final storage basin prior to discharge to the receiving water. Similar to the upper Debris Basins, under most situations storm water in Debris Basin 8 infiltrates and evaporates. The Facility has not discharged from Debris Basin 8 to the receiving water since 2005.

During extreme storm events, storm water that has accumulated in Debris Basin 8 may be discharged to the receiving water in order to prevent flooding. The settled storm water discharges through Discharge Point No. 001 into an unnamed tributary, which flows approximately 0.5 miles to Happy Camp Wash. The unnamed tributary and Happy Camp Wash are both waters of the United States.

- C. Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this Facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with Section 13260).
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G through J are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code Sections 21100-21177.

F. Technology-based Effluent Limitations. Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, Title 40 of the Code of Federal Regulations¹ (CFR), 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 section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations. Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

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

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

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

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

Certain receiving waters in the Los Angeles watershed do not fully support beneficial uses. They have been classified as impaired on the 2010 303(d) list and have been scheduled for TMDL development. The USEPA approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. The 2010 State Water Board California 303(d) List does not include the classification of the Happy Camp Wash; however, it does include Calleguas Creek Reach 7, to which Happy Camp Wash is tributary via Arroyo Simi. The pollutants/stressors of concern for Calleguas Creek Reach 7 include ammonia, boron, chloride, indicator bacteria, chlorpyrifos, diazinon, organophosphorus pesticides, sedimentation/siltation, sulfates, total dissolved solids (TDS), toxicity, and trash.

The following are summaries of the TMDLs applicable to the discharge.

- 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, Office of Administrative Law (OAL) on November 6, 2008, and USEPA on December 2, 2008. As defined within the Salts TMDL, "Other NPDES Dischargers" 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 Discharger is considered an "Other NPDES Discharger" by the TMDL. The Salts TMDL assigns dry-weather WLAs applicable to "Other NPDES Dischargers", for boron, chloride, sulfates, 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 (Resolution No. 2009-0052). OAL and USEPA approved the TMDL on October 5, 2009, and October 15, 2009, respectively. The TMDL became effective on October 15, 2009. The source analysis identifies POTWs and agricultural runoff as the primary sources of nitrogen in the watershed and does not establish WLAs applicable to all other point source dischargers, including this Discharger.
- 3. Revolon Slough and Beardsley Wash Trash TMDL (Trash TMDL).** The Trash TMDL was approved through Resolution No. R4-2007-007. Although, a subwatershed in the Calleguas Creek watershed, Revolon Slough and Calleguas Creek run parallel to one another, until reaching the Mugu Lagoon. Calleguas Creek and the Arroyo Simi are not tributary to Revolon Slough and Beardsley Channel and are not subject to the Trash TMDL.
- 4. TMDL for Metals and Selenium in 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. The State Water Board, OAL, and USEPA, approved the Metals TMDL on October 25, 2006, February 6, 2007, and March 26, 2007, respectively. The Metals TMDL became effective on March 26, 2007. Discharges from the Facility to the unnamed tributary to the Happy Camp Wash (Discharge Point 001) ultimately enter Calleguas Creek in Reach 7, which was Arroyo Simi Reaches 1 and 2 in the 1998 303(d) List. The Metals TMDL includes final WLAs applicable to the Discharger for wet-weather total recoverable copper and nickel. The Metals TMDL further assigns a concentration-based WLA for mercury that applies to the Discharger during both wet and dry weather. This Order includes wet-weather effluent limitations for total recoverable copper and nickel based on the TMDL. Since the TMDL does not include dry-weather WLAs for these metals, effluent limits for copper and nickel in the discharge during dry weather have been developed based on CTR criteria and current Regional Water Board permitting procedures. This Order includes effluent limitations for mercury, applicable during both wet and dry weather, based on the TMDL.

- 5. 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 USEPA 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 "Other NPDES Permittee". 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.

- 6. TMDLs for Organochlorine (OC) Pesticides, Polychlorinated Biphenyls (PCBs), and Siltation in Calleguas Creek, its Tributaries, and Mugu Lagoon (Toxics TMDL).** The Regional Water Board approved a 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 (Resolution No. 2005-0068). OAL and USEPA approvals followed on January 20, 2006, and March 14, 2006, respectively. The Toxics TMDL became effective on March 24, 2006.

The Toxics 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 “Minor Point Sources”. Water column WLAs assigned to “Minor Point Sources” are provided for several constituents as daily maximum concentrations. Within this Order, these WLAs are translated directly as daily maximum effluent limitations.

I. Water Quality Control Plans. The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply (MUN). The receiving water is not designated as MUN. Beneficial uses applicable to the Happy Camp Wash are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Unnamed Tributary to Happy Camp Wash, a Tributary to Arroyo Simi (Happy Camp Canyon to Hitch Road)	<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)¹.</p>

¹. Designated under SB 88-63 and RB 89-03. Some designations may be considered for exemption at a later date.

Table 6. Basin Plan Ground Water Beneficial Uses

Discharge Point	Basin	Beneficial Use(s)
001	Las Posas Valley, North Las Posas Area	<u>Existing:</u> Municipal and domestic supply, industrial service supply (IND), industrial process supply (PROC), and agricultural supply (AGR).

Requirements of this Order implement the Basin Plan.

J. National Toxics Rule (NTR) and California Toxics Rule (CTR). USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were

applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

- K. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- L. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 CFR 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.
- M. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (BOD), oil and grease, total suspended solids (TSS), settleable solids, and turbidity. Restrictions on these constituents are discussed in section IV.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.
- N. Antidegradation Policy.** 40 CFR 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of Section 131.12 and State Water Board Resolution No. 68-16.
- O. Anti-Backsliding Requirements.** Section 402(o) of the CWA and federal regulations at 40 Code of Federal Regulations (CFR) Part 122.44(l) prohibit backsliding from certain effluent limitations 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. Most effluent limitations in this

Order are at least as stringent as the effluent limitations in Order No. R4-2007-0060. Some effluent limitations in this Order are less stringent than those in the previous Order based on material and substantial alterations for additions to the permitted facility which justify relaxation (CWA section 402(o)(2)(A)). For WQBELs based on the implementation of TMDL WLAs, the less stringent effluent limitations are consistent with anti-backsliding provisions included in CWA section 402(o)(1) because no increase in the discharge is anticipated, and no lowering of the receiving water quality should result from the discharge. The less stringent effluent limitations resulting from WLAs are consistent with CWA section 303(d)(4)(A) because the TMDL process is such that the cumulative effect of all revised effluent limitations based on scientifically derived WLAs will assure the attainment of the water quality standard. As discussed in the Fact Sheet, the relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

- P. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code Sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
- Q. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code Sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with Section 122.41, and additional conditions applicable to specified categories of permits in accordance with Section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under Section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- S. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- T. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

THEREFORE, IT IS HEREBY ORDERED, that this Order supersedes R4-2007-0060 except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the Water Code (commencing with Section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

- A.** Wastes discharged shall be limited to treated storm water from Discharge Point No. 001. The estimated discharge flow is 0.120 MGD. The discharge of wastes from accidental spills or other sources is prohibited.
- B.** Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to the 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 Board as required by the federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.
- F.** The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.
- G.** Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations

1. Final Effluent Limitations

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

Table 7. Effluent Limitations for Discharge Point No. 001

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Flow	MGD	--	0.120	--	--
Conventional Pollutants					
pH	s.u.	--	--	6.5	8.5
BOD (5-day @ 20 Deg. C)	mg/L	--	30	--	--
	lbs/day ¹	--	30	--	--
Oil and Grease	mg/L	--	15	--	--
	lbs/day ¹	--	15	--	--
TSS	mg/L	--	75	--	--
	lbs/day ¹	--	75	--	--
Non-conventional Pollutants					
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	--	0.10	--	--
	lbs/day ¹	--	0.0001	--	--
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
TDS	mg/L	--	850	--	--
	lbs/day ¹	--	850	--	--
Turbidity	NTU	--	75	--	--
Acute Toxicity	% Survival and "Pass" or "Fail"	See Order section IV.A.1.b.		--	--
Chronic Toxicity	TUc and "Pass" or "Fail"	--	See Order section IV.A.1.c.	--	--

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Priority Pollutants					
Arsenic, Total Recoverable	µg/L	--	10	--	--
	lbs/day ¹	--	0.010	--	--
Cadmium, Total Recoverable	µg/L	--	5	--	--
	lbs/day ¹	--	0.005	--	--
Copper, Total Recoverable (Dry-weather) ²	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 (Dry-weather) ²	µg/L	--	100	--	--
	lbs/day ¹	--	0.10	--	--
Nickel, Total Recoverable (Wet-weather) ³	µg/L	--	957	--	--
	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	--	1.2E-6	--	--
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	--	--
Dieldrin	µg/L	--	0.00028	--	--
	lbs/day ¹	--	2.8E-7	--	--
PCBs	µg/L	--	0.00034	--	--
	lbs/day ¹	--	3.4E-7	--	--
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 and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. If the flow is greater than 0.12 MGD, the mass loading is to be recalculated using the event specific flow.

- 2 Effluent limitations apply except when the flow at ASMC1 gauge station (Arroyo Simi at Madera Rd.) equals 10 cubic feet per second (cfs) or greater.
- 3 Within this Order, wet-weather effluent limitations apply when the flow at ASMC1 gauge station (Arroyo Simi at Madera Rd.) equals 10 cfs or greater.

b. Acute Toxicity Limitation Requirements. There shall be no acute toxicity in the discharge. The acute toxicity of the effluent shall be such that:

- i. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay test shall be at least 90%, and
- ii. No single test shall produce less than 70% survival.

Compliance with the toxicity objectives will be determined by the method described in section V of the MRP No. 6658 (Attachment E).

c. Chronic Toxicity Limitation and Requirements:

- i. This Order includes a chronic testing toxicity trigger defined as an exceedance of 1.0 TUc in a critical life stage test for 100% effluent. (The monthly median for chronic toxicity of 100% effluent shall not exceed 1.0 TUc in a critical life stage test.)
- ii. If the chronic toxicity of the effluent exceeds 1.0 TUc, the Discharger shall immediately implement an accelerated chronic toxicity testing according to MRP No. 6658, Section V.K. If the results of two of the six accelerated tests exceed 1.0 TUc, the Discharger shall initiate a Toxicity identification Evaluation (TIE) and implement the initial investigation Toxicity Reduction Evaluation (TRE) Workplan. (see MRP No. 6658, Section V.E and V.F).
- iii. The Discharger shall conduct chronic toxicity monitoring as specified in MRP No.6658.
- iv. The chronic toxicity of the effluent shall be expressed and reported in toxic units,where:

$$\text{TUc} = 100/\text{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

- v. Preparation of an Initial Investigation TRE Workplan
 - (i). The Discharger shall submit a detailed initial investigation Toxicity Reduction Evaluation (TRE) workplan to the Executive Officer of the Regional Board within 90 days of the effective date of this permit. The Discharger shall use EPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal)as guidance or current versions. At a

minimum, the TRE workplan must contain the provisions in Section VI.C.2. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

- (ii). 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;
- (iii). A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility; and,
- (iv). If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor) (See MRP Section V.E.3. for guidance manuals).

B. Land Discharge Specifications

Not Applicable

C. Reclamation Specifications

Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitation

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the Happy Camp Wash.

1. The normal ambient pH to fall below 6.5 nor exceed 8.5 units nor vary from normal ambient pH levels by more than 0.5 units.
2. Surface water temperature to rise greater than 5° F above the natural temperature of the receiving waters at any time or place. At no time the temperature be raised above 80° F as a result of waste discharged.
3. The waste discharged shall not cause the following bacterial standards to be exceeded in the receiving water:
 - a. Geometric Mean Limits
 - i. *E. Coli* density shall not exceed 126/100 ml.
 - b. Single Sample Maximum
 - i. *E. Coli* density shall not exceed 235/100 ml.

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. Depress the concentration of dissolved oxygen to fall below 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.
5. Exceed total ammonia (as N) concentrations specified in the Regional Water Board Resolution No. 2002-011. Resolution No. 2002-011 revised the ammonia water quality objectives for inland surface waters characteristic of freshwater in the 1994 Basin Plan, to be consistent with the *"1999 Update of Ambient Water Quality Criteria for Ammonia"*. Adopted on April 25, 2002, Resolution No. 2002-011 was approved by State Water Board, Office of Administrative Law (OAL) and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively and is now in effect.
6. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
7. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.
8. Suspended or settleable materials, chemical substances, or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
9. Toxic or other deleterious substances in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
10. Accumulation of bottom deposits or aquatic growths.
11. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
12. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
13. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.
14. Alteration of turbidity, or apparent color beyond present natural background levels.
15. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.
16. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.

17. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
18. Create nuisance, or adversely affect beneficial uses of the receiving water.
19. Violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

B. Groundwater Limitations

Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. Federal Standard Provisions. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. Regional Water Board Standard Provisions. The Discharger shall comply with the following provisions:
 - a. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
 - b. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Water Board to local agencies.
 - c. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.
 - d. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations

established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, 318, 405, and 423 of the Federal CWA and amendments thereto.

- e. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
- f. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- g. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.
- h. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - i. Violation of any term or condition contained in this Order;
 - ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- i. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- j. The Discharger shall notify the Regional Water Board not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.
- k. The Discharger shall file with the Regional Water Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.
- l. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Water Board as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.

- m.** In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Regional Water Board.
- n.** The Water Code provides that any person who violates a waste discharge requirement or a provision of the Water Code is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

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

- o.** The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.
- p.** The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.
- q.** The Discharger shall notify the Executive Officer in writing no later than 6 months prior to the planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:
 - i.** Name and general composition of the chemical,
 - ii.** Frequency of use,
 - iii.** Quantities to be used,
 - iv.** Proposed discharge concentrations, and
 - v.** USEPA registration number, if applicable.
- r.** Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

- s. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, Average Monthly Effluent Limitation (AMEL), Maximum Daily Effluent Limitation (MDEL), instantaneous, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (216)-576-6652 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.
- t. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Water Code § 1211.)

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

1. Reopener Provisions

- a. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.
- b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the reasonable potential analysis.
- c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, requirements for the implementation of the watershed management approach or to include new Minimum Levels (MLs).
- d. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Calleguas Creek or tributaries thereto.

- 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.

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 acute or chronic toxicity, as defined in the MRP section V.A and B is detected, and should include at a minimum:
 - i. A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency;
 - ii. A description of the facility's method of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility;
 - iii. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor) (section V of the MRP, Attachment E provides references for the guidance manuals that should be used for performing TIEs).

3. Storm Water Pollution Prevention Plan (SWPPP), and Best Management Practices Plan (BMPP)

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

- a. An updated SWPPP that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the state. The SWPPP shall be developed in accordance with the requirements in Attachment G.
- b. An updated 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 from being discharged to waters of the state. Further, the Discharger shall assure that the storm water discharges from the Facility would neither cause, nor contribute to the exceedance of water quality standards and

objectives, nor create conditions of nuisance in the receiving water, and that the unauthorized discharges (i.e., spills) to the receiving water have been effectively prohibited. In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material discharge to surface waters. The BMPP shall be developed in accordance with requirements in Attachment G.

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

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

4. Construction, Operation and Maintenance Specifications

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

5. Special Provisions for Municipal Facilities (POTWs Only)

Not Applicable

6. Other Special Provisions

Not Applicable

7. Compliance Schedules

Not Applicable

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV of this Order will be determined using sample reporting protocols defined in the MRP and Attachments A and G of the Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and is greater than or equal to the Reporting Level (RL).

A. Single Constituent Effluent Limitation.

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

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

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

C. Effluent Limitations Expressed as a Median.

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

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

D. Mass-based Effluent Limitations.

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

E. Multiple Sample Data.

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

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

the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

F. Average Monthly Effluent Limitation (AMEL).

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

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

1. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for that constituent, the Discharger has demonstrated compliance with the AMEL for that month;
2. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any constituent, the Discharger shall collect four additional samples at approximately equal intervals during the month. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later.

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

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

3. In the event of noncompliance with an AMEL, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.
4. If only one sample was obtained for the month or more than a monthly period and the result exceeds the AMEL, then the Discharger is in violation of the AMEL.

G. Maximum Daily Effluent Limitations (MDEL).

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for that parameter

for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

H. Instantaneous Minimum Effluent Limitation.

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

I. Instantaneous Maximum Effluent Limitation.

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

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)

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

$$\text{Arithmetic mean} = \mu = \Sigma x / n$$

where:

Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)

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

Best Management Practices (BMPs)

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

Bioaccumulative

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

Carcinogenic

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

Coefficient of Variation (CV)

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

Daily Discharge

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

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

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

Detected, but Not Quantified (DNQ)

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

Dilution Credit

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

Effluent Concentration Allowance (ECA)

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

Emergency Storm Event

A rainfall equal to or greater than the 24-hour, 50 year storm event.

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 freshwater and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Existing Discharger

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

Inland Surface Waters

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

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Maximum Daily Effluent Limitation (MDEL)

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

Median

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

Method Detection Limit (MDL)

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in Title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)

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

Mixing Zone

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

Not Detected (ND)

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

Ocean Waters

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

Persistent Pollutants

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

Pollutant Minimization Program (PMP)

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

Pollution Prevention

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

Reporting Level (RL)

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

Satellite Collection System

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

Source of Drinking Water

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

Standard Deviation (σ)

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

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

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

Toxicity Reduction Evaluation (TRE)

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

Wet Weather

Within this Order, wet-weather is assumed for any discharge that occurs during a time where the flow at ASMC1 gauge (Arroyo Simi at Madera Road) equals 10 cfs or greater.

ACRONYMS AND ABBREVIATIONS

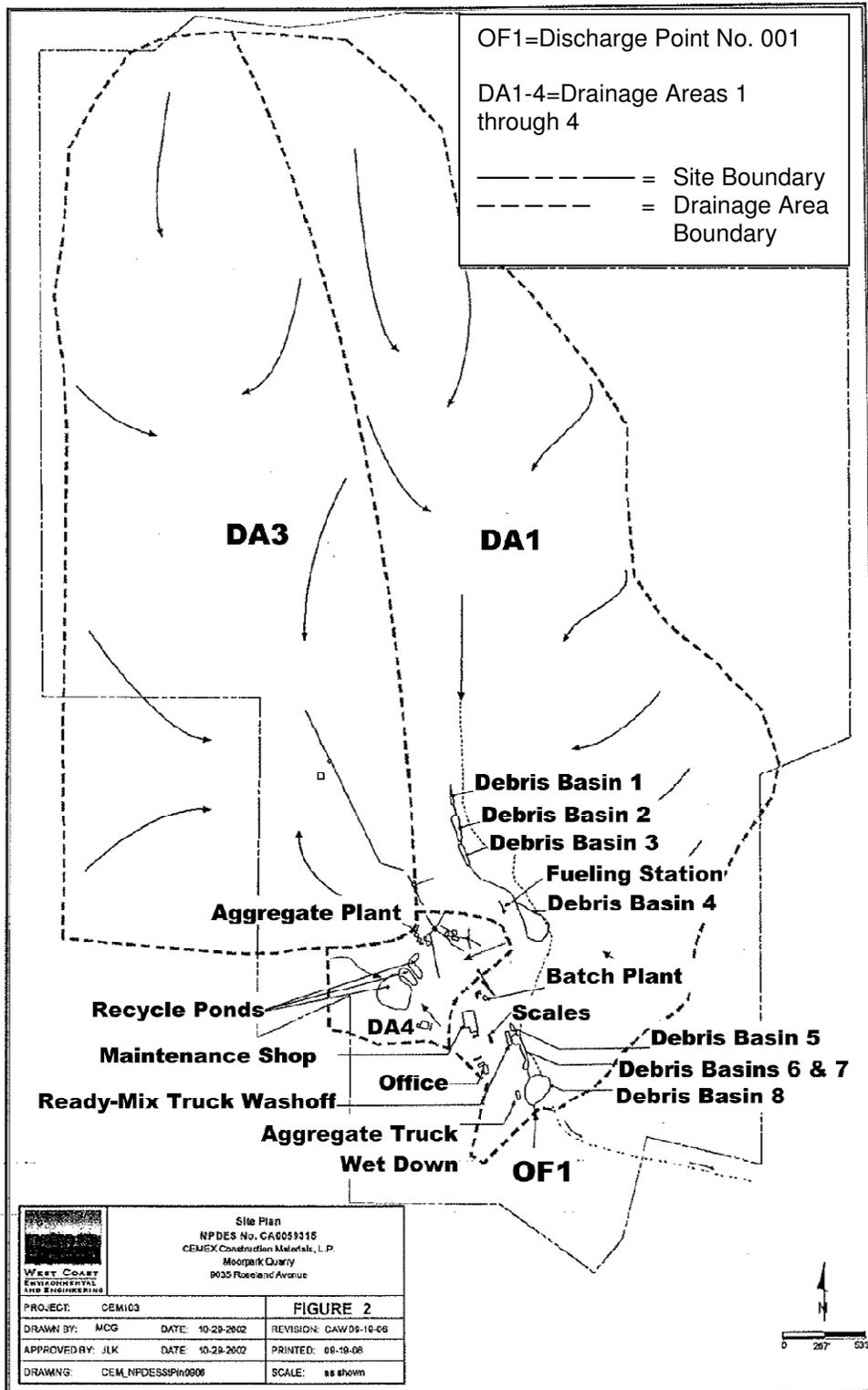
AMEL	Average Monthly Effluent Limitation
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	<i>Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management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

OAL	Office of Administrative Law
PMEL	Proposed Maximum Daily Effluent Limitation
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
Ocean Plan	<i>Water Quality Control Plan for Ocean Waters of California</i>
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RPA	Reasonable Potential Analysis
SIP	State Implementation Policy (<i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California</i>)
SMR	Self Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	Test Acceptability Criteria
Thermal Plan	<i>Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California</i>
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TSS	Total Suspended Solids
TU _c	Chronic Toxicity Unit
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WET	Whole Effluent Toxicity
WLA	Waste Load Allocations
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
%	Percent

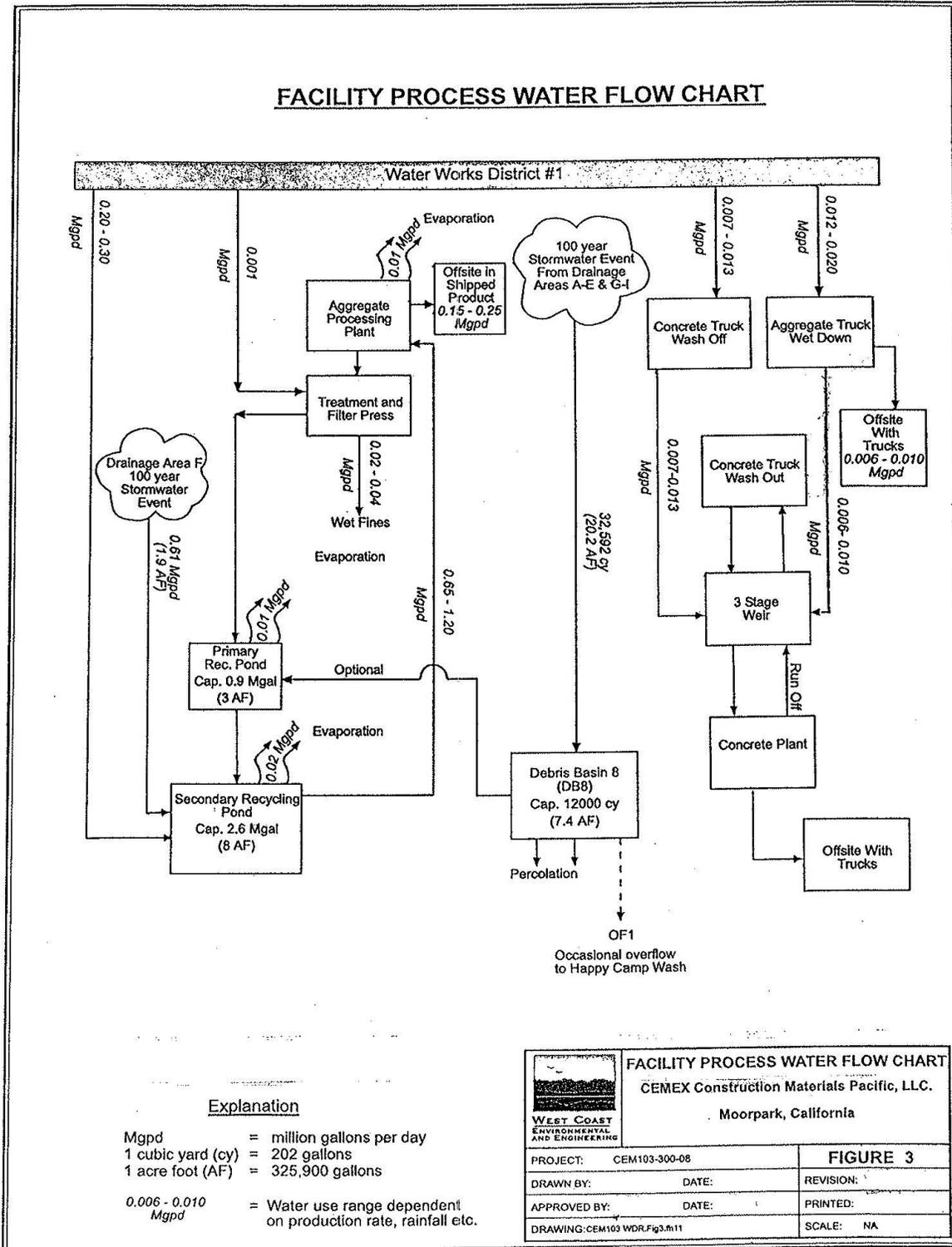
ATTACHMENT B – MAP



Figure B-1: Topographic Location Map of Cemex - Moorpark Facility



ATTACHMENT C – FLOW SCHEMATIC



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [section 122.41(a)].
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement [section 122.41(a)(1)].

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges [section 122.41(g)].

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations [section 122.5(c)].

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [section 122.41(i)] [Water Code section 13383]:

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

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [section 122.41(m)(1)(i)].
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [section 122.41(m)(1)(ii)].
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below [section 122.41(m)(2)].

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [section 122.41(m)(4)(i)]:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [section 122.41(m)(4)(i)(A)];
 - 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 [section 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 [section 122.41(m)(4)(i)(C)].
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [section 122.41(m)(4)(ii)].
5. Notice
 - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [section 122.41(m)(3)(i)].
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice) [section 122.41(m)(3)(ii)].

H. Upset

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

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

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [section 122.41(n)(3)]:
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [section 122.41(n)(3)(i)];
 - b. The permitted facility was, at the time, being properly operated [section 122.41(n)(3)(ii)];
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) [section 122.41(n)(3)(iii)]; and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [section 122.41(n)(3)(iv)].
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [section 122.41(n)(4)].

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit [section 122.41(b)].

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [section 122.41(j)(1)].
- B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified

in Part 503 unless other test procedures have been specified in this Order [section 122.41(j)(4) and section 122.44(i)(1)(iv)].

IV. STANDARD PROVISIONS – RECORDS

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

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements [section 122.41(j)(3)(i)];
2. The individual(s) who performed the sampling or measurements [section 122.41(j)(3)(ii)];
3. The date(s) analyses were performed [section 122.41(j)(3)(iii)];
4. The individual(s) who performed the analyses [section 122.41(j)(3)(iv)];
5. The analytical techniques or methods used [section 122.41(j)(3)(v)]; and
6. The results of such analyses [section 122.41(j)(3)(vi)].

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

1. The name and address of any permit applicant or Discharger [section 122.7(b)(1)]; and
2. Permit applications and attachments, permits and effluent data [section 122.7(b)(2)].

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

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

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below [section 122.41(k)].
2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. [section 122.22(a)(1)].
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above [section 122.22(b)(1)];
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) [section 122.22(b)(2)]; and
 - c. The written authorization is submitted to the Regional Water Board and State Water Board [section 122.22(b)(3)].
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative [section 122.22(c)].

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

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

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order [section 122.22(l)(4)].
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices [section 122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board [section 122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order [section 122.41(l)(4)(iii)].

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it

is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [section 122.41(l)(6)(i)].

2. The following shall be included as information that must be reported within 24 hours under this paragraph [section 122.41(l)(6)(ii)]:
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [section 122.41(l)(6)(ii)(A)].
 - b. Any upset that exceeds any effluent limitation in this Order [section 122.41(l)(6)(ii)(B)].
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [section 122.41(l)(6)(iii)].

F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) [section 122.41(l)(1)(i)]; or.
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order [section 122.41(l)(1)(ii)].

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

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements [section 122.41(l)(2)].

H. Other Noncompliance

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

I. Other Information

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

VI. STANDARD PROVISIONS – ENFORCEMENT

- A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.
- B.** The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [*section 122.41(a)(2)*] [*Water Code sections 13385 and 13387*].
- C.** Any person may be assessed an administrative penalty by the Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed

\$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [section 122.41(a)(3)].

- D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [section 122.41(j)(5)].
- E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [section 122.41(k)(2)].

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe [section 122.42(a)]:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [section 122.42(a)(1)]:
 - a. 100 micrograms per liter ($\mu\text{g/L}$) [section 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 [section 122.42(a)(1)(ii)];
 - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [section 122.42(a)(1)(iii)]; or
 - d. The level established by the Regional Water Board in accordance with section 122.44(f) [section 122.42(a)(1)(iv)].
2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [section 122.42(a)(2)]:

- a.** 500 micrograms per liter ($\mu\text{g/L}$) [section 122.42(a)(2)(i)];
- b.** 1 milligram per liter (mg/L) for antimony [section 122.42(a)(2)(ii)];
- c.** Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [section 122.42(a)(2)(iii)]; or
- d.** The level established by the Regional Water Board in accordance with section 122.44(f) [section 122.42(a)(2)(iv)].

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

Table of Contents

I.	General Monitoring Provisions.....	E-2
II.	Monitoring Locations	E-5
III.	Influent Monitoring Requirements.....	E-5
IV.	Effluent Monitoring Requirements	E-5
	A. Monitoring Location EFF-001.....	E-5
V.	ACUTE AND CHRONIC TOXICITY MONITORING	E-9
VI.	Land Discharge Monitoring Requirements	E-13
VII.	Reclamation Monitoring Requirements.....	E-13
VIII.	Receiving Water Monitoring Requirements – Surface Water.....	E-13
	A. Monitoring Location RSW-001	E-13
IX.	Other Monitoring Requirements.....	E-15
	A. Storm Water Monitoring	E-15
	B. Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices Plan (BMPP)	E-16
	C. Chemical Use Report.....	E-16
X.	Reporting Requirements.....	E-16
	A. General Monitoring and Reporting Requirements.....	E-16
	B. Self Monitoring Reports (SMRs)	E-17
	C. Other Reports	E-19

List of 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 Monitoring Location RSW-001	E-14
Table E-5.	Monitoring Periods and Reporting Schedule	E-17

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

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

I. GENERAL MONITORING PROVISIONS

- A.** An effluent sampling station shall be established for Discharge Point No. 001 and shall be located where representative samples of that effluent can be obtained.
- B.** Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.
- C.** The Regional Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
- D.** Pollutants shall be analyzed using the analytical methods described in Sections 136.3, 136.4, and 136.5 (revised May 18, 2012); or, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.
- E.** For any analyses performed for which no procedure is specified in the United States Environmental Protection Agency (USEPA) guidelines or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.
- F.** Each monitoring report must affirm in writing that “all analyses were conducted at a laboratory certified for such analyses by the Department of Public Health or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP”.
- G.** The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:
 - 1.** An actual numerical value for sample results greater than or equal to the ML; or

2. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML; or,
3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

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

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

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

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

1. When the pollutant under consideration is not included in Attachment H;
 2. When the Discharger and Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in 40 CFR Part 136 (revised May 18, 2012);
 3. When the Discharger agrees to use an ML that is lower than that listed in Attachment H;
 4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment H, and proposes an appropriate ML for their matrix; or,
 5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the Regional Water Board, and the State Water Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.
- I. Water/wastewater samples must be analyzed within allowable holding time limits as specified in Section 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Water

Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.

- J.** All analyses shall be accompanied by the chain of custody, including but not limited to data and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.
- K.** The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.
- L.** The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. The annual monitoring report required in section XI.B shall also summarize the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per sampling period, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples.
- M.** When requested by the Regional Water Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.
- N.** For parameters that both average monthly and daily maximum limits are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the average monthly limit, the Discharger shall collect four additional samples at approximately equal intervals during the month, if possible, until compliance with the average monthly limit has been demonstrated. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. In the event of noncompliance with an average monthly effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the average monthly effluent limitation has been demonstrated. The Discharger shall provide for the approval of the Executive Officer a program to ensure future compliance with the average monthly limit.
- O.** Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.
- P.** Laboratories analyzing monitoring samples shall be certified by the Department of Public Health, in accordance with the provision of Water Code Section 13176, and must include quality assurance/quality control data with their reports.

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	At the weir in Debris Basin 8, latitude 34° 20' 06", longitude 118° 52' 41.8".
--	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 degrees 20' 00.94" N longitude: 118 degrees 52' 26.08" W.

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.

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

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total Waste Flow	MGD ¹	Flow Meter	1/Discharge Event	--
Conventional Pollutants				
pH	std. units	Grab	1/Discharge Event ²	3
Biochemical Oxygen Demand (BOD) (5-day @ 20 deg. C) ⁴	mg/L and lbs/day	Grab	1/Discharge Event ²	3
Oil and Grease ⁴	mg/L and lbs/day	Grab	1/Discharge Event ²	3
Total Suspended Solids (TSS) ⁴	mg/L and lbs/day	Grab	1/Discharge Event ²	3
Non-Conventional Pollutants				
Acute Toxicity	% survival and TST t-test	Grab	1/Discharge Event ²	3,5
Chronic Toxicity	TU _c and TST t-test	Grab	1/Discharge Event ²	3,5

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Discharge Event ²	3
Boron ⁴	mg/L and lbs/day	Grab	1/Discharge Event ²	3
Barium, Total Recoverable ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
Chloride ⁴	mg/L and lbs/day	Grab	1/Discharge Event ²	3
Chlorpyrifos ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
Diazinon ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
Escherichia coli (E. coli)	MPN/100 ml	Grab	1/Discharge Event ²	3
Methyl-Tert Butyl Ether	µg/L	Grab	1/Discharge Event ²	3
Nitrite Plus Nitrate (as N) ⁴	mg/L and lbs/day	Grab	1/Discharge Event ²	3
Phenolic Compounds, Total ⁶	µg/L	Grab	1/Discharge Event ²	3
Settleable Solids	ml/L	Grab	1/Discharge Event ²	3
Sulfate ⁴	mg/L and lbs/day	Grab	1/Discharge Event ²	3
Temperature	°F	Grab	1/Discharge Event ²	3
Total Petroleum Hydrocarbons (TPH) as Gasoline (C ₄ -C ₁₂)	µg/L	Grab	1/Discharge Event ²	EPA Method 503.1 or 8015B
TPH as Diesel (C ₁₃ -C ₂₂)	µg/L	Grab	1/Discharge Event ²	EPA Method 503.1, 8015B, or 8270
TPH as Waste Oil (C ₂₃₊)	µg/L	Grab	1/Discharge Event ²	EPA Method 503.1, 8015B, or 8270
Total Dissolved Solids (TDS) ⁴	mg/L and lbs/day	Grab	1/Discharge Event ²	3
Turbidity	NTU	Grab	1/Discharge Event ²	3
Priority Pollutants				
Arsenic, Total Recoverable ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
Cadmium, Total Recoverable ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
Copper, Total Recoverable ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
Lead, Total Recoverable ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
Mercury, Total Recoverable ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Nickel, Total Recoverable ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
Selenium, Total Recoverable ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
Silver, Total Recoverable	µg/L	Grab	1/Discharge Event ²	3
Zinc, Total Recoverable	µg/L	Grab	1/Discharge Event ²	3
Chlordane ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
4,4-DDD ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
4,4-DDE ⁴	µg/ and lbs/day L	Grab	1/Discharge Event ²	3
4,4-DDT ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
Dieldrin ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
PCBs ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	7
Toxaphene ⁴	µg/L and lbs/day	Grab	1/Discharge Event ²	3
Remaining Priority Pollutants ⁸	µg/L	Grab	1/Year ⁹	3
TCDD Equivalents ¹⁰	µg/L	Grab	1/Year ⁹	3, 10

¹ MGD= million gallons per day.

² 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. Each separate period of discharge shall be sampled, but no more than one sample per week is required. For acute and chronic toxicity, no more than one sample per quarter is required. If there is no discharge to surface waters, then no monitoring is required. In the corresponding monitoring report, the Discharger will indicate under statement of perjury that no effluent was discharged to surface water during the reporting period.

³ Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; for priority pollutants, the methods must meet the lowest MLs specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level.

⁴ The mass emission (lbs/day) for the discharge shall be calculated and reported using the limitation concentration and the actual flow rate measured at the time of discharge, using the formula.

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

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

C_e = limitation concentration for a pollutant, mg/L

Q = actual discharge flow rate,

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

⁶ "Phenolic Compounds" is an aggregate measure of compounds with a phenol like structure, as measured by EPA Methods 420.1 and 420.4. Phenolic compounds include the sum of the following individual chlorinated and non-chlorinated phenolic compounds: 2-chlorophenol; 2-nitrophenol; phenol; 2,4-

dimethylphenol; 2,4-dichlorophenol; 2,4,6-trichlorophenol; 4-chloro-3-methylphenol; 2,4-dinitrophenol; 2-methyl-4,6-dinitrophenol; pentachlorophenol; and 4-nitrophenol.

- 7 Pollutants shall be analyzed using the USEPA Method 608 for PCBs (as arochlors). PCBs (sum) are defined as the sum of Aroclor-1016, 1221, 1232, 1242, 1248, 1254, and 1260.
- 8 Priority Pollutants as defined by the CTR defined in Finding II.J of the Limitations and Discharge Requirements of this Order, and included as Attachment I.
- 9 Sampling shall be performed during the first hour of discharge during the first discharge of the year. 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 discharge occurs. If there is no discharge to surface waters, the Discharger will indicate in the corresponding monitoring report, under statement of perjury that no effluent was discharged to surface water during the reporting period.
- 10 TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are as listed in the Table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

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

where:

C_x = concentration of dioxin or furan congener x

TEF_x = TEF for congener x

Toxicity Equivalency Factors

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

V. ACUTE AND CHRONIC TOXICITY MONITORING

- A. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.
- B. Toxicity samples may be flow-weighted composite samples, or grab samples.
- C. The total sample volume shall be determined both by the specific toxicity test method used and the additional volume necessary for TIE studies. Sufficient sample volume shall be collected to perform both the required toxicity tests and TIE studies.
- D. Holding Times. All toxicity tests shall be conducted as soon as possible following sample collection. The 36-hour sample holding time for test initiation shall be targeted. However, no more than 72 hours shall elapse before the conclusion of sample collection and test initiation.
- E. Definition of Acute Toxicity. Acute toxicity is a measure of primarily lethal effects that occur over a 96-hour period.
1. The average survival for any three (3) consecutive toxicity tests shall be at least 90%, and
 2. The survival for a single toxicity test shall be at least 70%.
- F. Definition of Chronic Toxicity. Chronic toxicity measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or receiving waters compared to that of the control organisms.
- G. Definition of Percent Effect. Percent Effect is defined as the effect value—denoted as the difference between the mean control response and the mean IWC response, divided by the mean control response—multiplied by 100.
- H. Acute Toxicity Effluent Monitoring Program.
1. Freshwater Test Species and Methods.
For this permit, samples are collected from outfalls discharging to receiving waters with salinity <1 ppt. The Permittee shall conduct the following acute toxicity tests on undiluted samples in accordance with freshwater species and test methods in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine* (EPA/821/R-02/012, 2002; Table IA, 40 CFR Part 136). In no case shall the following test species and methods be substituted with another organism unless written authorization from the Regional Water Board Executive Officer is received.
 - a. A 96-hour static renewal toxicity test with the fathead minnow, *Pimephales promelas* (Acute Toxicity Test Method 2000.0).
 - b. A 96-hour static renewal toxicity test with the daphnid, *Ceriodaphnia dubia* (Acute Toxicity Test Method 2002.0).

2. Test Species Sensitivity Screening.

To determine the most sensitive test species, the Permittee shall conduct two toxicity tests, during two consecutive discharge events, with a vertebrate and an invertebrate. After this screening period, subsequent monitoring shall be conducted using the most sensitive test species. Alternatively, if a sensitive test species has already been determined, or if there is prior knowledge of potential toxicant(s) and a test species is sensitive to such toxicant(s), then monitoring shall be conducted using only that test species. After the screening period, subsequent monitoring shall be conducted using the most sensitive test species.

3. For this monitoring program, the critical acute instream waste concentration (IWC) is set at 100% effluent. A 100% effluent sample and a control shall be tested. Acute toxicity test biological endpoint data shall be statistically analyzed using the Test of Significant Toxicity t-test approach specified in Appendix A of *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, DC. EPA 833-R-10-003, 2010).

4. For this monitoring program to evaluate compliance with the acute toxicity WQBEL based on the acute toxicity objective in the Basin Plan, the critical acute instream waste concentration (IWC) is set at 100% effluent. A 100% effluent sample and a control shall be tested. Acute toxicity test biological endpoint data shall be analyzed directly to report % survival in the 100% effluent sample.

I. Chronic Toxicity Effluent Monitoring Program.

1. Freshwater Test Species and Methods.

For this permit, samples are collected from outfalls discharging to receiving waters with salinity <1 ppt. The Permittee shall conduct the following critical life stage chronic toxicity tests on undiluted samples in accordance with species and test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR Part 136). In no case shall the following test species and methods be substituted with another organism unless written authorization from the Regional Water Board Executive Officer is received.

a. A static renewal toxicity test with the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1001.0). (Note that daily observations for mortality during the chronic toxicity test make it possible to also calculate acute toxicity for the 96-hour exposure period required by the acute toxicity effluent monitoring program.)

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).

2. Test Species Sensitivity Screening.

To determine the most sensitive test species, the Permittee shall conduct two toxicity tests, during two consecutive discharge events, with a vertebrate, an

invertebrate, and a plant. After this screening period, subsequent monitoring shall be conducted using the most sensitive test species. Alternatively, if a sensitive test species has already been determined, or if there is prior knowledge of potential toxicant(s) and a test species is sensitive to such toxicant(s), then monitoring shall be conducted using only that test species. After the screening period, subsequent monitoring shall be conducted using the most sensitive test species.

3. For this monitoring program, the critical chronic instream waste concentration (IWC) is set at 100% effluent. A 100% effluent sample and a control shall be tested. Chronic toxicity test biological endpoint data shall be statistically analyzed using the Test of Significant Toxicity t-test approach specified in Appendix A of *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, DC. EPA 833-R-10-003, 2010).
4. For this monitoring program to evaluate compliance with the chronic toxicity WQBEL based on the chronic toxicity WLA in the Toxicity TMDL, the critical chronic instream waste concentration (IWC) is set at 100% effluent. A 100%, 75%, 50%, 25%, and 12.5% effluent sample and a control shall be tested. Chronic toxicity test biological endpoint data shall be statistically analyzed using appropriate hypothesis testing approaches, specified in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R-02/013, 2002; Table IA, 40 CFR Part 136), to report $TU_c = 100/NOEC$.

J. Quality Assurance.

1. If the effluent test does not meet all test acceptability criteria (TAC) specified in the test methods manuals (*Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA/821/R-02/012, 2002), and/or *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002)).
2. Control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manuals.
3. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).

K. Additional Toxicity Monitoring and Toxicity Identification Evaluation (TIE) for the Test of Significant Toxicity t-Test Approach.

1. If acute and/or chronic toxicity is detected (i.e., reported as "Fail" for the TST hypothesis test) at an effluent monitoring station during a discharge event, then the Permittee shall continue toxicity testing during discharge events at that monitoring station—but not more frequently than weekly—until the nature and cause(s) of the toxicity is defined and/or eliminated. A toxicity test sample is immediately subject to TIE procedures to identify the toxic chemical(s), if:

- a. The acute toxicity test shows a Percent Effect value $\geq 50\%$ at the IWC. A TIE shall be performed to identify the causes of acute toxicity using the same species and test method and, as guidance, U.S. 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).
 - b. The chronic toxicity test shows a Percent Effect value $\geq 50\%$ at the IWC. A TIE shall be performance to identify the causes of chronic toxicity using the same species and test method and, as guidance, U.S. EPA manuals: *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F, 1992); *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).
2. The TIE should be conducted on the test species demonstrating the most sensitive toxicity response at a sampling station. A TIE may be conducted on a different test species demonstrating a toxicity response with the caveat that once the toxicant(s) is identified, the most sensitive test species triggering the TIE shall be further tested to verify that the toxicant has been identified and addressed.
- L. Toxicity Reduction Evaluation (TRE).
1. When a toxicant or class of toxicants is identified, a TRE shall be performed for that toxicant.
 2. The TRE shall include all reasonable steps to identify the source(s) of toxicity and discuss appropriate BMPs/treatment to eliminate the causes of toxicity. No later than 30 days after the source of toxicity and appropriate BMPs/treatment are identified, the Permittee shall submit a TRE Corrective Action Plan to the Regional Water Board Executive Officer for approval. At a minimum, the plan shall include a discussion of the following:
 - a. The potential sources of pollutant(s) causing toxicity.
 - b. Recommended BMPs/treatment to reduce the pollutant(s) causing toxicity.
 - c. Follow-up monitoring to demonstrate that toxicity has been removed.
- M. Toxicity Reporting.
1. Toxicity monitoring results submitted to the Regional Water Board shall be consistent with the requirements identified in Section X of the MRP. The Regional

Water Board shall be notified no later than 30 days from completion of each aspect of the analysis for TIEs/TREs.

2. The SMR required by Section X of the MRP shall include:
 - a. A full laboratory report for each toxicity test prepared according to the appropriate test methods manual chapter on Report Preparation, including:
 - i. The acute toxicity test results reported as the “Percent Effect”, and “Pass” or “Fail” for the TST hypothesis test t-test.
 - ii. The chronic toxicity test results reported as the “Percent Effect”, and “Pass” or “Fail” for the TST hypothesis test t-test.
 - iii. The dates of sample collection and initiation of each toxicity test.
 - iv. Test species with biological endpoint values for each concentration tested.
 - v. Reference toxicant test results.
 - vi. Water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).
 - vii. TRE/TIE testing results.
 - viii. A printout of CETIS (Comprehensive Environmental Toxicity Information System) program results.
 - b. All results for effluent and receiving water parameters monitored concurrently with the toxicity test.
 - c. TIEs (Phases I, II, and III) that have been completed or are being conducted, by monitoring station.
 - d. The development, implementation, and results for each TRE Corrective Action Plan, beginning quarterly following the identification of each pollutant or pollutant class causing toxicity.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

Not Applicable

VII. RECLAMATION MONITORING REQUIREMENTS

Not Applicable

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

A. Monitoring Location RSW-001

1. The Discharger shall monitor the 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 Monitoring Location RSW-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Ammonia, Total (as N)	mg/L	Grab	1/Year ¹	2
Dissolved Oxygen	mg/L	Grab	1/Year ¹	2
<i>Escherichia coli</i> (<i>E. coli</i>)	MPN/100 ml	Grab	1/Year ¹	2
Hardness, Total (as CaCO ₃)	mg/L	Grab	1/Year ¹	2
pH	s.u.	Grab	1/Year ¹	2
Temperature	°F	Grab	1/Year ¹	2
Arsenic, Total Recoverable ⁴	µg/L	Grab	1/Year ¹	2
Barium, Total Recoverable ⁴	µg/L	Grab	1/Year ¹	2
Cadmium, Total Recoverable ⁴	µg/L	Grab	1/Year ¹	2
Copper, Total Recoverable	µg/L	Grab	1/Year ¹	2
Lead, Total Recoverable	µg/L	Grab	1/Year ¹	2
Mercury, Total Recoverable	µg/L	Grab	1/Year ¹	2
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
Remaining Priority Pollutants ⁴	µg/L	Grab	1/Year ¹	2, 3
TCDD Equivalents ⁵	µg/L	Grab	1/Year ¹	2

¹ Monitoring shall be conducted at the same time as the effluent 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. If there is no discharge, the Discharger will indicate under statement of perjury, in the corresponding monitoring report that no effluent was discharged to surface water during the reporting period.

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

³ Pollutants shall be analyzed using the USEPA Method 608 for PCBs (as arochlors). PCBs (sum) are defined as the sum of Aroclor-1016, 1221, 1232, 1242, 1248, 1254, and 1260.

- 4 Priority Pollutants as defined by the CTR, defined in Finding II.J of the Limitations and Discharge Requirements of this Order, and included as Attachment I.
- 5 To determine compliance with effluent limitations or to conduct Reasonable Potential Analysis (RPA), this Order requires the Discharger to calculate and report dioxin-toxicity equivalencies (TEQs) using the following formula, where the toxicity equivalency factors (TEFs) are as listed in the Table below:

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

where:

C_x = concentration of dioxin or furan congener x

TEF_x = TEF for congener x

Toxicity Equivalency Factors

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

IX. OTHER MONITORING REQUIREMENTS

A. Storm Water Monitoring

1. **Rainfall Monitoring.** The Discharger shall measure and record the rainfall on each day of the month. This information shall be included in the monitoring report for that month. If the rainfall monitoring device is out of service, the Discharger may include local rainfall data.
2. **Visual Observation.** The Discharger shall make visual observations of all storm water discharge locations during at least one storm event per month that produces a significant storm water discharge to observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity, and odor. A “significant storm water discharge” is a continuous discharge of storm water for a minimum of one hour, or the intermittent discharge of storm water for a minimum of 3 hours in a 12-hour period.

B. Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices Plan (BMPP)

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

Annually the Discharger shall report the status of the implementation and the effectiveness of the SWPPP and BMPP Status required under Special Provision VI.C.3 of this Order. The SWPPP and BMPP shall be reviewed at a minimum once per year and updated as needed to ensure all actual or potential sources of pollutants in wastewater and storm water discharged from the facility are addressed. All changes or revisions to the SWPPP and BMPP shall be submitted within 30 days of revision.

C. Chemical Use Report

1. The Discharger shall submit to the Regional Water Board, together with the first monitoring report required by this permit, an updated list of all chemicals and proprietary additives which could affect the waste discharge, including quantities of each.
2. The Discharger shall report annually, in the first quarter SMR, a summary of the quantities of all chemicals, listed by both trade and chemical names, which are used at the facility and which are discharged or have the potential to be discharged.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the report shall so state.
3. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.
4. The Discharger shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.
5. The Discharger shall report the results of toxicity testing, TRE and TIE as required in the Attachment E, Monitoring and Reporting, Section V.F.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board’s California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit SMRs as searchable PDF documents. SMR documents that are less than 10 megabytes (MB) should be emailed to losangeles@waterboards.ca.gov. Documents that are 10 MB or larger should be transferred to a disk and mailed to the address listed in section X.B.8.c of this MRP. Additional information regarding electronic submittal of documents is specified on the Regional Water Board website (<http://www.waterboards.ca.gov/losangeles/resources/Paperless/>). The CIWQS Web site will provide additional directions for SMR submittal in the event there will be 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 USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
1/Day	Permit effective date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	May 1 August 1 November 1 February 1
1/Discharge Event	Permit effective date	1 st day of calendar month through last day of calendar month	May 1 August 1 November 1 February 1
1/Year	January 1 following (or on) permit effective date	January 1 through December 31	February 1

4. Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in Part 136.
5. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the Reporting Limit (RL), but greater than or equal to the laboratory's MDL, shall be reported as DNQ. The estimated chemical concentration of the sample shall also be reported.

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

- c. Sample results less than the laboratory's MDL shall be reported as ND.
 - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
6. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.
7. Multiple Sample Data. When determining compliance with an Average Monthly Effluent Limitation (AMEL) or Maximum Daily Effluent Limitation (MDEL) for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
- a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
 - b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

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

C. 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 SWPPP
 - c.** Updated BMPP

ATTACHMENT F – FACT SHEET

Table of Contents

I.	Permit Information	F-3
II.	Facility Description	F-4
	A. Description of Wastewater and Biosolids Treatment or Controls	F-4
	B. Discharge Points and Receiving Waters.....	F-5
	C. Compliance Summary.....	F-5
	D. Planned Changes	F-6
III.	Applicable Plans, Policies, and Regulations.....	F-6
	A. Legal Authorities	F-6
	B. California Environmental Quality Act (CEQA)	F-6
	C. State and Federal Regulations, Policies, and Plans	F-6
	D. Impaired Water Bodies on CWA 303(d) List	F-8
IV.	Rationale For Effluent Limitations and Discharge Specifications.....	F-11
	A. Discharge Prohibitions.....	F-12
	B. Technology-Based Effluent Limitations.....	F-12
	1. Scope and Authority.....	F-12
	2. Applicable Technology-Based Effluent Limitations	F-13
	C. Water Quality-Based Effluent Limitations (WQBELs).....	F-14
	1. Scope and Authority.....	F-14
	2. Applicable Beneficial Uses and Water Quality Criteria and Objectives.....	F-14
	3. Determining the Need for WQBELs	F-15
	4. WQBEL Calculations	F-15
	5. WQBELs Based on Basin Plan Objectives	F-20
	6. WQBELs Based on TMDLs	F-22
	7. Whole Effluent Toxicity	F-24
	8. Final WQBELs	F-26
	D. Final Effluent Limitations.....	F-27
	1. Satisfaction of Anti-Backsliding Requirements.....	F-28
	2. Satisfaction of Antidegradation Policy.....	F-29
	3. Mass-based Effluent Limitations	F-30
	4. Stringency of Requirements for Individual Pollutants.....	F-30
	E. Interim Effluent Limitations.....	F-33
	F. Land Discharge Specifications.....	F-33
	G. Reclamation Specifications.....	F-33
V.	Rationale for Receiving Water Limitations	F-33
	A. Surface Water	F-33
	B. Groundwater	F-33
VI.	Rationale for Monitoring and Reporting Requirements.....	F-33
	A. Influent Monitoring	F-34
	B. Effluent Monitoring.....	F-34
	C. Whole Effluent Toxicity Testing Requirements	F-34
	D. Receiving Water Monitoring.....	F-35
	1. Surface Water.....	F-35
	2. Groundwater	F-35

- E. Storm Water Monitoring Requirements..... F-35
- VII. Rationale for Provisions..... F-35
 - A. Standard Provisions..... F-35
 - B. Special Provisions..... F-36
 - 1. Reopener Provisions..... F-36
 - 2. Special Studies and Additional Monitoring Requirements..... F-36
 - 3. Best Management Practices and Storm Water Pollution Prevention Plan F-36
 - 4. Construction, Operation, and Maintenance Specifications..... F-36
 - 5. Special Provisions for Municipal Facilities (POTWs Only) F-36
 - 6. Other Special Provisions..... F-36
 - 7. Compliance Schedules F-36
- VIII. Public Participation F-36
 - A. Notification of Interested Parties F-37
 - B. Written Comments F-37
 - C. Public Hearing F-37
 - D. Nature of Hearing..... F-37
 - E. Parties to the Hearing F-38
 - F. Public Comments and Submittal of Evidence F-38
 - G. Hearing Procedure..... F-38
 - H. Waste Discharge Requirements Petitions..... F-39
 - I. Information and Copying..... F-39
 - J. Register of Interested Persons F-39
 - K. Additional Information F-39

List of Tables

- Table F-1. Facility Information F-3
- Table F-2. Basin Plan Beneficial Uses F-7
- Table F-3. Basin Plan Ground Water Beneficial Uses F-7
- Table F-4. Summary of Technology-based Effluent Limitations for Discharge Point No. 001
 F-13
- Table F-5. Applicable Basin Plan Numeric Water Quality Objectives..... F-20
- Table F-6. Salts TMDL Final WLAs F-22
- Table F-7. Toxics TMDL WLAs F-23
- Table F-8. Toxicity TMDL WLAs..... F-24
- Table F-9. Summary of Final WQBELs for Discharge Point No. 001 F-26
- Table F-10. Summary of Final Effluent Limitations for Discharge Point No. 001 F-30

ATTACHMENT F – FACT SHEET

As described in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	4A562022001
Discharger	CEMEX Construction Materials Pacific, LLC
Name of Facility	Moorpark Facility
Facility Address	9035 Roseland Avenue
	Moorpark, California 93021
	Ventura County
Facility Contact, Title and Phone	Christine Jones, Environmental Manager, (909) 974-5471
Authorized Person to Sign and Submit Reports	Thomas C. Powell, Vice President, Aggregate Resources, (909) 974-5471
Mailing Address	3990 E. Concoors Street, Suite 200, Ontario, CA, 91764
Billing Address	Same as Mailing Address
Type of Facility	Industrial (sand and gravel mining and processing)
Major or Minor Facility	Minor
Threat to Water Quality	3
Complexity	C
Pretreatment Program	Not Applicable
Reclamation Requirements	Not Applicable
Facility Permitted Flow	0.120 million gallons per day
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) located at 9035 Roseland Avenue, Moorpark, CA.

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

- B.** The Facility discharges wastewater to an unnamed tributary to the Happy Camp Wash, a water of the United States, and is currently regulated by Order No. R4-2007-0060 which was adopted on December 6, 2007 and expired on November 10, 2012. The terms and conditions of the current Order (R4-2007-0060) have been continued as per 40 CFR section 122.6, which stipulates that if the Discharger submits a timely report of waste discharge (ROWD) and the permit is not renewed prior to the expiration date, the permit may be administratively extended. The current Order remains in effect until new Waste Discharge Requirements (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order.
- C.** The Discharger filed a ROWD and submitted an application for renewal of its WDRs and NPDES permit on July 18, 2012. A site visit was conducted on July 26, 2012, to review current site conditions and operations.

II. FACILITY DESCRIPTION

The Discharger is the owner and operator of a 1,400-acre sand and gravel mining and processing facility located at 9035 Roseland Avenue, Moorpark, California, which has been active since the early 1970s. Operations at the site include: sand and gravel mining, rock processing (crushing 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 sand, and dry plaster sand.

A. Description of Wastewater and Biosolids Treatment or Controls

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 basins, 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 extreme storm events.

Non-discharging 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 runoff resulting from washing of aggregate product to remove fines. The aggregate washwater runoff flows to the earthen primary and secondary settling pond for solids removal through settling. Water from the settling ponds infiltrates, evaporates, or is recycled back to the aggregate washing process. Discharges to the ground via infiltration within the settling ponds are regulated under separate Waste Discharge Requirements contained in Order No, R4-2008-0207 and are not included in this NPDES permit.

The non-discharging process waters from the Ready-Mix Plant are 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.

The discharge regulated under this Order consists of rainfall runoff from the eastern portion of the site, including roadways, equipment storage areas, and the recycled asphalt processing area. These areas drain to the eight Debris Basins. The Debris Basins are 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 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. Under extreme precipitation, water from Debris Basin No. 5 may overflow into Debris Basins 6-8. 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. The Facility has not discharged from Debris Basin 8 to the receiving water since 2005.

B. Discharge Points and Receiving Waters

During extreme storm events, storm water that has accumulated in Debris Basin 8 may be discharged to the receiving water in order to prevent flooding. The settled storm water is released through Discharge Point No. 001 (Latitude: 34°, 20', 05.1" North; Longitude: 118°, 52', 41.7" West) into an unnamed tributary, which flows approximately 0.5 miles to Happy Camp Wash, a water of the United States. In order to verify the location reported in the ROWD, the coordinates of the discharge point were measured using global positioning satellite equipment during the site visit on July 26, 2012. After comparing the results with the ROWD, it was determined that the site visit coordinates were more accurate. Happy Camp Wash is a tributary to Arroyo Simi which flows to Arroyo Las Posas and thence Calleguas Creek Reach 7. Happy Camp Wash is part of the Calleguas Creek Watershed Area.

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

C. Compliance Summary

During the term of Order No. R4-2007-0060, no discharges occurred. Therefore, there were no violations of effluent limitations.

Order No. R4-2007-0060 contains Special Provision V.C.5.a that required the Discharger to submit, within one year of the effective date of the Order, a Copper Compliance Plan identifying measures to reduce the concentrations of copper in the discharge. Special Provision V.C.5.b required the Discharger to develop a Pollutant

Minimization Plan for copper, to be submitted with the annual report. The Discharger submitted the Copper Compliance Plan on January 1, 2009, and the annual report containing the Pollutant Minimization Plan on March 7, 2009. Within these documents, the Discharger outlined a control strategy of eliminating process waters from the discharge and providing storage capacity to prevent discharges from most storm events. The actions included in the plans have been implemented.

D. Planned Changes

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

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

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

B. California Environmental Quality Act (CEQA)

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

C. State and Federal Regulations, Policies, and Plans

1. Water Quality Control Plans. The Regional Water Board adopted a Water Quality Control Plan Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 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 receiving water is an unnamed tributary to the Happy Camp Wash, which is a tributary to the Arroyo Simi. The beneficial uses of Arroyo Simi are applicable to the unnamed tributary and to the Happy Camp Wash as follows:

Table F-2. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Unnamed Tributary to Happy Camp Wash, a Tributary to Arroyo Simi (Happy Camp Canyon to Hitch Road)	<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)¹.</p>

¹. Designated under SB 88-63 and RB 89-03. Some designations may be considered for exemption at a later date.

Table F-3. Basin Plan Ground Water Beneficial Uses

Discharge Point	Basin	Beneficial Use(s)
001	Las Posas Valley, North Las Posas Area	<u>Existing</u> : Municipal and domestic supply, industrial service supply (IND), industrial process supply (PROC), and agricultural supply (AGR).

Requirements of this Order implement the Basin Plan.

Title 22 of the California Code of Regulations. The California Department of Public Health established primary and secondary maximum contaminant levels (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 used as the basis for effluent limitations in WDRs and NPDES permits to protect the groundwater recharge beneficial use when that receiving groundwater is designated 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-based MCLs were used as a basis for effluent limitations.

- National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May

18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

- 3. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- 4. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 CFR 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- 5. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of Section 131.12 and State Water Board Resolution No. 68-16.
- 6. Anti-Backsliding Requirements.** Section 402(o) of the CWA and federal regulations at 40 CFR Section 122.44(l) prohibit backsliding from certain effluent limitations 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.

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

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based

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

The USEPA approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. Certain receiving waters in the Los Angeles watershed do not fully support beneficial uses and therefore have been classified as impaired on the 2010 303(d) list and have been scheduled for TMDL development.

The Facility discharges to an unnamed tributary to the Happy Camp Wash. The 2010 State Water Board California 303(d) List does not include the classification of the unnamed tributary or Happy Camp Wash; however, it does include classification of Calleguas Creek Reach 7, which includes Arroyo Simi. The pollutants/stressors of concern for the Calleguas Creek Reach 7 include ammonia, boron, chloride, indicator bacteria, chlorpyrifos, diazinon, organophosphorus pesticides, sedimentation/siltation, sulfates, total dissolved solids (TDS), toxicity, and trash.

The following are summaries of the TMDLs applicable to the receiving water:

- 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, Office of Administrative Law (OAL) on November 6, 2008, and USEPA on December 2, 2008. As defined within the Salts TMDL, "Other NPDES Dischargers" 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 Discharger is considered an "Other NPDES Discharger" by the TMDL. The Salts TMDL assigns dry-weather WLAs applicable to "Other NPDES Dischargers", for boron, chloride, sulfates, 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 (Resolution No. 2009-0052). OAL and USEPA approved the TMDL on October 5, 2009, and October 15, 2009, respectively. The TMDL became effective on October 15, 2009. The source analysis identifies POTWs and agricultural runoff as the primary sources of nitrogen in the watershed and does not establish WLAs applicable to all other point source dischargers, including this Discharger.
- 3. Revolon Slough and Beardsley Wash Trash TMDL (Trash TMDL).** The Trash TMDL was approved through Resolution No. R4-2007-007. Although, a subwatershed in the Calleguas Creek watershed, Revolon Slough and Calleguas

Creek run parallel to one another, until reaching the Mugu Lagoon. Calleguas Creek and the Arroyo Simi are not tributary to Revolon Slough and Beardsley Channel and are not subject to the Trash TMDL.

- 4. TMDL for Metals and Selenium in 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. The State Water Board, OAL, and USEPA approved the Metals TMDL on October 25, 2006, February 6, 2007, and March 26, 2007, respectively. The Metals TMDL became effective on March 26, 2007. Discharges from the Facility to the unnamed tributary to the Happy Camp Wash (Discharge Point No. 001) ultimately enter Calleguas Creek in Reach 7, which was identified as Arroyo Simi Reaches 1 and 2 in the 1998 303(d) List. The Metals TMDL includes final WLAs applicable to the Discharger for wet-weather total recoverable copper and nickel. The Metals TMDL further assigns a concentration-based WLA for mercury that applies to the Discharger during both wet and dry weather. This Order includes wet-weather effluent limitations for total recoverable copper and nickel based on the TMDL. Since the TMDL does not include dry-weather WLAs for these metals, effluent limits for copper and nickel in the discharge during dry weather have been developed based on CTR criteria and current Regional Water Board permitting procedures. This Order includes effluent limitations for mercury, applicable during both wet and dry weather, based on the TMDL.
- 5. 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 USEPA 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 "Other NPDES Permittee". 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.

- 6. TMDLs for Organochlorine (OC) Pesticides, Polychlorinated Biphenyls (PCBs), and Siltation in Calleguas Creek, its Tributaries, and Mugu Lagoon (Toxics TMDL).** The Regional Water Board approved a 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 (Resolution No. 2005-0068). OAL and USEPA approvals followed on January 20, 2006, and March 14, 2006, respectively. The Toxics TMDL became effective on March 24, 2006.

The Toxics 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 "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 assumption and requirements of all waste load allocations (WLAs) established in the applicable Calleguas Creek Watershed TMDLs.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

Potential sources of storm water runoff pollution at the Facility include solids from aggregate operations, oil and grease from equipment operation 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 the existing Order for which limitations and/or monitoring requirements were included. These pollutants included pH, temperature, ammonia, acute toxicity, 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.

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 are based on the requirements of the Basin Plan, State Water Board's plans and policies, the Water Code, and previous permit provisions, and 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 USEPA permit regulations at Section 122.44, Title 40 of the Code of Federal Regulations (CFR), require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with Part 125, Section 125.3.

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

- a.** Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- b.** Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- c.** Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- d.** New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and section 125.3 of the Code of Federal Regulations authorize the use of

BPJ to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in section 125.3.

2. Applicable Technology-Based Effluent Limitations

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 storm water runoff, and therefore do not apply to the discharge.

The technology-based requirements in the Order are based on case-by-case numeric limitations using BPJ. The technology-based effluent limitations are carried over from the existing Order for BOD, TSS, oil and grease, settleable solids, and turbidity, in accordance with 40 CFR section 125.3. These BPJ limitations were expressed as average monthly effluent limitations and daily maximum limitations. Since, issuance of Order No. R4-2007-0060, process water has been excluded from the discharge and storm water discharges are expected to be infrequent and of short duration. Because of these changes, the average monthly limitations are no longer applicable to the discharge and are discontinued within this Order. Maximum daily effluent limitations included in Order No. R4-2007-0060 are consistent with those established for similar facilities within the Los Angeles Region and continue to be appropriate for this Facility. Therefore, they are included in this Order.

Table F-4. Summary of Technology-based Effluent Limitations for Discharge Point No. 001

Parameter	Units	Maximum Daily
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L	30
	lbs/day ¹	30
Total Suspended Solids (TSS)	mg/L	75
	lbs/day ¹	75
Oil and Grease	mg/L	15
	lbs/day ¹	15
Settleable Solids	mL/L	0.3
Turbidity	NTU	75

¹. The mass limitations are based on a maximum flow of 0.120 MGD and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that 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) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in Section 122.44(d)(1)(vi).

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

The specific procedures for determining reasonable potential for discharges from the Facility, and if necessary for calculating WQBELs, are contained in the USEPA Technical Support Document for Water Quality-Based Toxics Control (TSD) for storm water discharges and in the SIP for non-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 as well. Hence, in this Order the SIP methodology is used to evaluate reasonable potential for storm water discharges through Discharge Point No. 001.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in section II of the Limitations and Discharge Requirements, the Regional Water Board adopted a Basin Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The beneficial uses applicable to the 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 the receiving water. The CTR contains both saltwater and freshwater criteria. Because a distinct

separation generally does not exist between freshwater and saltwater aquatic communities, and in accordance with Section 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time. In this Order, freshwater criteria are used to protect the beneficial uses of the unnamed tributary to the Happy Camp Wash, a water of the United States, in the vicinity of the discharge.

3. Determining the Need for WQBELs

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

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

- 1) Trigger 1 – If the $MEC \geq C$, a limit is needed.
- 2) Trigger 2 – If the background concentration (B) > C and the pollutant is detected in the effluent, a limit is needed.
- 3) Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

There were no discharges from the Facility during the term of Order No. R4-2007-0060, beginning on October 6, 2007. As a result, no facility-specific RPA was performed.

4. WQBEL Calculations

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

- i. If applicable and available, use of the WLA established as part of a TMDL.
 - ii. Use of a steady-state model to derive 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 October 7, 2007, no RPA was performed and no new WQBELs were calculated based on the RPA.
 - c. Effluent limitations for boron, chloride, sulfate, and TDS are based on concentration-based WLAs established in the Salts TMDL.
 - d. Effluent limitations for copper (wet-weather), nickel (wet-weather), and mercury are calculated based on concentration-based WLAs established in the Metals TMDL.
 - e. Effluent limitations for diazinon, chlorpyrifos, and chronic toxicity are calculated based on concentration-based WLAs established in the Toxicity TMDL.
 - f. Effluent limitations for organochlorine pesticides and PCBs are based on concentration-based WLAs established in the OC, PCBs, and Siltation TMDL.
 - g. WQBELs Calculation Example

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

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

Calculation of aquatic life AMEL and MDEL:

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

$$\begin{aligned} \text{ECA} &= C + D(C-B) \text{ when } C > B, \text{ and} \\ \text{ECA} &= C \quad \text{when } C \leq B, \end{aligned}$$

- 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

As discussed above, for this Order, dilution was not allowed; therefore:

$$ECA = C$$

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

For chlorpyrifos, the applicable water quality criteria are:

$$WLA_{acute} = 0.025 \mu\text{g/L}$$

$$WLA_{chronic} = 0.014 \mu\text{g/L}$$

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

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

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

$$LTA_{acute} = ECA_{acute} \times \text{Multiplier}_{acute 99}$$

$$LTA_{chronic} = ECA_{chronic} \times \text{Multiplier}_{chronic 99}$$

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

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

No. of Samples	CV	ECA Multiplier _{acute}	ECA Multiplier _{chronic}
0	0.60	0.321	0.527

For chlorpyrifos,

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

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

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

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

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

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

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

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

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

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

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.

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

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

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

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

No. of Samples Per Month	CV	Multiplier _{MDEL 99}	Multiplier _{AMEL 95}
4	0.6	3.11	1.55

Chlorpyrifos

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

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

Total Recoverable Copper

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

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

Step 5: For the ECA based on human health, set the AMEL equal to the ECA_{human health}. Where a TMDL establishes the WLA, the ECA is set equal to the WLA.

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

For total recoverable mercury, the Metals TMDL provides a WLA that is based on the CTR human health criterion for the consumption of organisms.

$$\text{AMEL}_{\text{human health}} = 0.051 \mu\text{g/L}$$

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

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

For total recoverable mercury, the following data were used to develop the MDEL_{human health}:

No. of Samples Per Month	CV	Multiplier _{MDEL 99}	Multiplier _{AMEL 95}	Ratio
4	0.6	3.11	1.55	2.0

For total recoverable mercury:

$$\text{MDEL}_{\text{human health}} = 0.051 \mu\text{g/L} \times 2.0 = 0.10 \mu\text{g/L}$$

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

Since there are no CTR aquatic life criteria for mercury, no comparison can be made and effluent limitations based on human health criteria are established.

Since the discharge is composed of storm water and discharges are infrequent and of short duration, only the calculated MDELs are applied in this Order for metals, chlorpyrifos, and diazinon. For pollutants addressed by the Toxics TMDL, only MDELs are included since the discharge is composed entirely of storm water and discharges from the facility occur infrequently.

5. WQBELs Based on Basin Plan Objectives

The Basin Plan Objectives applicable to the Discharger are identified in Table F-5. These objectives were evaluated with respect to historic effluent monitoring data and Facility operations.

Table F-5. Applicable Basin Plan Numeric Water Quality Objectives

Constituent	Units	Water Quality Objectives
pH	s.u.	The pH of inland surface waters must be between 6.5 and 8.5 at all times and ambient pH shall not be changed more than 0.5 units from natural conditions.
Ammonia	mg un-ionized NH ₃ /L	<p><u>1-hour avg. concentration (mg/L)</u> $= 0.275 / (1 + 10^{7.204 - \text{pH}}) + 39.4 / (1 + 10^{\text{pH} - 7.204})$</p> <p><u>30-day avg. concentration (mg/L)</u> $= [0.0577 / (1 + 10^{7.688 - \text{pH}}) + 2.487 / (1 + 10^{\text{pH} - 7.688})]$ x MIN [2.85, $1.45 \times 10^{0.028 \times (25 - T)}$]</p> <p><u>4-hr avg. concentration (mg/L)</u> = 2.5 x 30-day average</p>
Bacteria	MPN/100ml	<p><i>Freshwaters Designated for Water Contact Recreation (REC-1)</i></p> <p><u>Geometric Means Limits</u> <i>Escherichia coli (E. Coli)</i> density shall not exceed 126/100 ml.</p> <p><u>Single Sample Limits</u> <i>E. Coli</i> density shall not exceed 235/100 ml</p>
Dissolved Oxygen	mg/L	For all waters, the mean annual dissolved oxygen concentration shall be greater than 7 mg/L, and no single determination shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations.

Constituent	Units	Water Quality Objectives
Nitrite Plus Nitrate (as N)	mg/L	10
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 effluent and receiving water limitations for pH to ensure compliance with Basin Plan Objectives for pH.
- b. **Ammonia.** No effluent or receiving water data were available to evaluate the discharge with respect to ammonia concentrations in the receiving water. This Order requires effluent and receiving water monitoring to ensure compliance with Basin Plan Objectives for ammonia.
- c. **Bacteria.** The discharge is not expected to be a significant source of bacteria, therefore, effluent monitoring is required, in lieu of effluent limitations.
- d. **Dissolved Oxygen.** The receiving water limitation is protective of the Basin Plan Objective for dissolved oxygen.
- e. **Nitrite Plus Nitrate (as N).** Effluent limitations for nitrite plus nitrate nitrogen from Order No. R4-2007-0060 are carried over to this Order and are protective of Basin Plan Objectives.
- f. **Turbidity.** The Basin Plan requirements for turbidity are as follows:
 - i. Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%.
 - ii. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.

The BPJ effluent limitations for turbidity are determined to be protective of the Basin Plan objectives (see section IV.b.2).
- g. **Temperature.** The effluent limitations for temperature contained in Order No. R4-2007-0060 were developed based on the Basin Plan and a white paper entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*. The discharge is composed of storm water during extreme wet weather and is not expected to be a source of increased temperature to the receiving water. The effluent limitations for temperature

contained in Order No. R4-2007-0060 are carried over to this Order to avoid backsliding.

6. WQBELs Based on TMDLs

- a. **Salts TMDL.** Within the Salts TMDL, the Discharger is categorized as an “Other NPDES Permitted Discharger” and is assigned WLAs as indicated in Table F-6. The TMDL specifies that interim limitations would be calculated on a case-by-case basis and applied as a monthly average. According to the State’s compliance schedule policy (Resolution No. 2008-0025), in order to receive interim effluent limits in the permit, the Discharger must submit a request that demonstrates an inability to meet the final WQBELs based on final WLAs and the Discharger must propose a schedule outlining steps towards meeting the final WQBELs. The Discharger has not submitted such a request. Furthermore, effluent concentrations of boron, chloride, sulfate, and TDS that are presented in Table F-2 of Order No. R4-2007-0060 are below the effluent limits based on the final WLAs, indicating the Facility’s discharge will be able to meet final WLAs. The final WLAs are equal to the existing effluent limitations contained in Order No. R4-2007-0060 and are therefore carried over to this Order. The TMDL implementation plan specifies that the proposed permit limits will be applied as end-of-pipe concentration-based effluent limits, and compliance will be determined through monitoring of the final effluent discharge.

Table F-6. Salts TMDL Final WLAs

Constituent	Units	WLA
Chloride	mg/L	150
TDS	mg/L	850
Sulfate	mg/L	250
Boron	mg/L	1.0

The Salts TMDL also requires water conservation measures to be implemented within 3 years of the effective date of the TMDL. The Facility recycles process water and only discharges storm water, therefore, this Order does not include requirements for water conservation.

- b. **Metals TMDL:** Within the scope of the Metals TMDL, the Discharger is categorized as an “Other NPDES Discharger”. As such, the TMDL provides final wet-weather WLAs for copper and nickel. These WLAs are translated to effluent limitations using calculation procedures based on the TSD and SIP (see sections IV.C.1 and IV.C.4). The resulting, wet-weather effluent limitations are 31 µg/L for total recoverable copper and 957 µg/L for total recoverable nickel. WQBELs based on the wet-weather WLAs apply to days when flows in the stream exceed the 86th percentile flow rate for each reach. Within Reach 7 of Calleguas Creek Watershed, Ventura County Watershed Protection District operates flow gauge station No. 803 within Arroyo Simi at Madera Road. Streamflow data were obtained for station 803 from October 1, 1993 through December 31, 2004, the same time period as was used for the Metals TMDL development. The 86th

percentile flow of this dataset is 10 cubic feet per second (cfs) and will be used within this Order to distinguish wet versus dry-weather. To determine which limits apply on a given day, the Discharger may obtain real-time flow data from this station through the website link:

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

or by contacting Ventura County Watershed Protection District at (805)-654-2001.

In addition to copper and nickel, the Metals TMDL includes a WLA for mercury (applicable to both dry and wet-weather) of 0.051 µg/L. Using TSD/SIP procedures, this WLA translates to an MDEL of 0.10 µg/L.

- c. **Toxics TMDL.** Total Maximum Daily Loads for Organochlorine Pesticides, PCBs and Siltation in Calleguas Creek, Its Tributaries, and Mugu Lagoon (Toxics TMDL). Within the scope of the Toxics TMDL, the Discharger is categorized as a “Minor Point Source”. The Toxics TMDL provides water column WLAs listed in Table F-7, to “minor point sources” as monthly average and daily maximums. The WLAs were established using CTR criteria and statistical procedures contained in the TSD/SIP, which is standard methodology for calculating effluent limitations protective of receiving water objectives. The use of this methodology implies that WLAs are applied directly to the discharge as WQBELs. Within Order No. R4-2007-0060, effluent limitations are the result of multipliers applied a second time to monthly average WLAs which already include multipliers. In addition, Order No. R4-2007-0060 assigns the calculated limitations as receiving water limitations, rather than effluent limitations. In order to be consistent with the assumptions of the TMDL, this Order incorporates the TMDL’s daily maximum WLAs directly as daily maximum effluent limitations. Because the discharge is intermittent and of short duration, monthly average effluent limitations are not included in this Order.

Table F-7. Toxics TMDL WLAs

Constituent	Units	WLAs	
		AMEL	MDEL
Chlordane	µg/L	0.00059	0.0012
4,4-DDD	µg/L	0.00084	0.0017
4,4-DDE	µg/L	0.00059	0.0012
4,4-DDT	µg/L	0.00059	0.0012
Dieldrin	µg/L	0.00014	0.00028
PCBs	µg/L	0.00017	0.00034
Toxaphene	µg/L	0.00016	0.00033

d. Toxicity TMDL. As per the description on pg. 5 of the Toxicity TMDL, the Discharger is categorized as a “Minor Point Source”. The Toxicity TMDL provided interim and final WLAs that expired 2 years after the effective date of the TMDL (March 23, 2008). The Final WLAs provided in the Toxicity TMDL are listed in Table F-8.

Table F-8. Toxicity TMDL WLAs

Constituent	Units	WLAs	
		Acute, 1-Hour Average	Chronic, 4-Day Average
Chlorpyrifos	µg/L	0.025 ¹	0.014
Diazinon	µg/L	0.10	0.10
Toxicity	TU _{a, c}	--	1.0

¹. Note that SIP multipliers are applied to the WLA result in an MDEL that is slightly different than this WLA.

For this Order, TSD/SIP multipliers are applied to the chlorpyrifos and diazinon WLAs to calculate effluent limitations. Because the discharge is entirely storm water, only the MDELs will be applied. The newly calculated chlorpyrifos MDEL is slightly different than the MDEL in Order No. R4-2007-0060 due to rounding. The newly calculated diazinon MDEL is more stringent because the MDEL in Order No. R4-2007-0060 was based on an interim chronic WLA value of 0.556 µg/L which was applicable for MS4 permittees. Cemex is not an MS4 permittee. The effluent limitation in this Order is recalculated based on the final WLA as it applies to the discharge. In addition, chlorpyrifos and diazinon WLAs were applied as receiving water limitations in Order No. R4-2007-0060. The Toxicity TMDL Implementation Plan does not specify how WLAs for chlorpyrifos and diazinon are implemented in permits for “minor point sources”; however, USEPA guidance for standard permitting procedures involve calculating effluent limitations using statistical multipliers with water quality criteria. Hence, this Order translates the WLA into a daily maximum effluent limit. The Toxicity TMDL Implementation Plan (pg. 7) specifies that the chronic toxicity WLA be implemented as a “trigger” in permits, according to USEPA procedures and existing regional policy. Consequently, the WLA is implemented as the chronic toxicity WQBEL, consistent with NPDES regulations for WQBELs at 40 CFR 122.44(d)(1)(vii)(B) and statutory anti-backsliding requirements at CWA section 402(o). This chronic toxicity limit is included in this Order.

7. Whole Effluent Toxicity

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative “no toxics in toxic amounts” criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and

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

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses by aquatic organisms. Detrimental response includes, but is not limited to, decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. This existing Order contains acute toxicity limitations and monitoring requirements in accordance with the Basin Plan, in which the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Consistent with Basin Plan requirements, this Order includes the acute toxicity limitations and monitoring requirements as per Order No. R4-2007-0060.

As discussed in IV.C.6, this Order carries over the chronic toxicity WQBEL from Order No. R4-2007-0060 to implement the requirements of the Toxicity TMDL.

8. Final QBELs

Table F-9. Summary of Final QBELs for Discharge Point No. 001

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	s.u.	--	--	6.5	8.5
Acute Toxicity	% Survival and "Pass" or "Fail"	1			
Chronic Toxicity	TUc and "Pass" or "Fail"	4			
Barium	µg/L	--	1,000	--	--
Boron	mg/L	--	1.0	--	--
Chloride	mg/L	--	150	--	--
Chlorpyrifos	µg/L	--	0.023	--	--
Diazinon	µg/L	--	0.10	--	--
Nitrite Plus Nitrate (as N)	mg/L	--	10	--	--
Sulfates	mg/L	--	250	--	--
Total Dissolved Solids (TDS)	mg/L	--	850	--	--
Temperature	°F	--	--	--	86
Arsenic, Total Recoverable	µg/L	--	10	--	--
Cadmium, Total Recoverable	µg/L	--	5	--	--
Copper, Total Recoverable ²	µg/L	--	22	--	--
Copper, Total Recoverable (Wet-weather) ³	µg/L	--	31	--	--
Lead, Total Recoverable	µg/L	--	9.5	--	--
Mercury, Total Recoverable	µg/L	--	0.10	--	--
Nickel, Total Recoverable ²	µg/L	--	100	--	--
Nickel, Total Recoverable (Wet-weather) ³	µg/L	--	957	--	--
Selenium, Total Recoverable	µg/L	--	8.2	--	--
Chlordane	µg/L	--	0.0012	--	--
4,4-DDD	µg/L	--	0.0017	--	--
4,4-DDE	µg/L	--	0.0012	--	--

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
4,4-DDT	µg/L	--	0.0012	--	--
Dieldrin	µg/L	--	0.00028	--	--
PCBs	µg/L	--	0.00034	--	--
Toxaphene	µg/L	--	0.00033	--	--

- 1 The acute toxicity of the effluent shall be such that:
 - i. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay test shall be at least 90%, and
 - ii. No single test shall produce less than 70% survival. Compliance with the toxicity objectives will be determined by the method described in section V of the MRP (Attachment E).
 The results shall be expressed as “Pass” or “Fail” for TST t-test.
- 2 Effluent limitations apply except during wet-weather.
- 3 Within this Order, wet-weather effluent limitations apply when the flow at ASMC1 gauge (Arroyo Simi at Madera Rd.) equals 10 cfs or higher.
- 4 The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:
 $TUc = 100/NOEC$
 The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.
 The chronic toxicity of 100% effluent shall not exceed 1.0 TUc in a critical life stage test.
 The results shall be expressed as “Pass” or “Fail” for TST t-test.

D. Final Effluent Limitations

Maximum daily effluent limitations for all constituents are being carried over from the previous Order No. R4-2007-0060. Average monthly effluent limitations for BOD, oil and grease, TSS, copper, lead, selenium, settleable solids, and turbidity have been discontinued for this Order because the discharge no longer contains non-storm water contributions. This constitutes a material change in the discharge. The discharge events of storm water only occur infrequently and are of short duration, therefore, average monthly effluent limitations are no longer appropriate and maximum daily effluent limitations are appropriate for protection of water quality objectives. Furthermore, Order No. R4-2007-0060 contained single value limitations for arsenic and barium, expressed as monthly average effluent limitations. The effluent limitations for these pollutants, which were originally based on MCLs, are expressed as daily maximum limitations within this Order.

Order No. R4-2007-0060 contained an average monthly effluent limitation for arsenic equal to 50 µg/L, based on the California primary MCL at the time of permit issuance. On November 28, 2008, California adopted a new primary MCL for arsenic equal to 10 µg/L. This Order includes a new, more stringent effluent limitation for arsenic equal to 10 µg/L to reflect the current Title 22 MCL. This Order includes new wet-weather effluent limitations for copper and nickel, and a new effluent limit for mercury, based on the Metals TMDL, as described in section IV.D.6.

This Order contains new effluent limitations for chlorpyrifos and diazinon based on the Toxicity TMDL, as described in the Fact Sheet section IV.C.6. Order No. R4-2007-0060 implemented the WLAs for “permitted storm water discharges” as receiving water

limitations. At this time, the discharge is more appropriately categorized within the TMDL as a “minor point source discharge”, for which WLAs are applied to the effluent. As WQBELs. See section IV.C.5 for additional details.

Within Order No. R4-2007-0060, the Toxics TMDL water column WLAs for chlordane, 4,4-DDD, 4,4-DDE, 4,4-DDT, dieldrin, PCBs, and toxaphene were translated into receiving water limits, based on the assumption that the discharger was included in the category of “storm water discharges”. At this time, the discharge is more appropriately categorized within the TMDL as a “minor point source discharge”, for which WLAs are applied to the effluent as WQBELs.

As required by 40 CFR 122.45(f)(1), this Order contains new mass-based effluent limitations corresponding to concentration-based effluent limitations (see section IV., third paragraph).

1. Satisfaction of Anti-Backsliding Requirements

Sections 402(o) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of, wet-weather copper and nickel, and the removal of average monthly effluent limitations for BOD, oil and grease, TSS, copper, lead, selenium, barium, settleable solids, and turbidity.

CWA section 402(o)(1) allows for relaxation of effluent limitations if the relaxation is consistent with the provisions of CWA section 303(d)(4) or if one of the exceptions in CWA section 402(o)(2) is met. In accordance with 402(o)(2)(A), less stringent limitations are allowed when there have been material and substantial alterations or additions to the permitted facility which justify less stringent effluent limitations. As described in the Fact Sheet to Order No. R4-2007-0060 the discharge previously included external rinse water from concrete trucks, and wet down of aggregate trucks, in addition to storm water. In a letter to the Regional Water Board dated May 12, 2012, the discharger stated that these process waters were eliminated from the discharge from Debris Basin 8. Since the discharge now consists entirely of storm water it is expected to be infrequent and of short duration. As such, maximum daily effluent limitations only are appropriate and sufficient to protect the beneficial uses and comply with applicable water quality standards. The updated treatment configuration constitutes material and substantial alterations and additions to the facility, therefore, removal of average monthly effluent limitations is an allowable exception to anti-backsliding.

CWA section 303(d)(4)(A) allows for the relaxation of an effluent limitation based on a TMDL or other waste load allocation in waters not attaining a state (or tribe) water quality criterion, if the cumulative effect of all revised effluent limitations would assure attainment of the state's criterion. The Metals TMDL is incorporated into the Basin Plan as a means to achieve water quality standards within the receiving water. The less stringent effluent limitations in this Order for copper (wet-weather), nickel

(wet-weather), and mercury (wet and dry weather) have been developed as specified in the TMDL and are sufficient to result in protection of the beneficial uses and compliance with applicable water quality standards once the TMDL is achieved. The TMDL considered all sources of these constituents and assigned the waste load allocations and the load allocations taking into account the cumulative effect of the specific constituents subject to the TMDL to assure protection of the beneficial uses and compliance with the water quality standards. The revised effluent limitations implement the TMDL.

2. Satisfaction of Antidegradation Policy

Section 131.12 requires that the state water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

As described in the Fact Sheet section IV.D.1, this Order discontinues average monthly effluent limitations for BOD, oil and grease, TSS, arsenic, copper, lead, selenium, barium, settleable solids, and turbidity. This Order contains daily maximum effluent limitations for these constituents that are protective of water quality objectives. The discharge is not expected to result in a significant increase in pollutant loading because the discharge only occurs during extreme storm events, is intermittent, and of short duration. Furthermore, the Discharger modified the system to exclude process waters from commingling with storm water, while still providing retention for a 100-year, 24-hour storm event. As such, the daily maximum effluent limitations will not result in an increase in pollutant loadings or a reduction in treatment and are therefore consistent with antidegradation requirements.

Although new wet-weather numeric effluent limitations for copper and nickel are less stringent than effluent limitations in Order No. R4-2007-0060, they will not result in changes in production or a reduction in treatment level. As these limitations stem from the Metals TMDL, compliance with them will result in achievement of water quality objectives within the receiving water.

The permitted discharge is consistent with the antidegradation provision of Section 131.12 and State Water Board Resolution No. 68-16. The final limitations in this Order are in compliance with antidegradation requirements because these limits hold the Discharger to performance levels that will not cause or contribute to water quality impairment or water quality degradation that could result from an increase in permitted design flow or a reduction in the level of treatment. Further, compliance with these requirements will result in the use of best practicable treatment or control of the discharge.

3. Mass-based Effluent Limitations

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

$$\text{Mass (lbs/day)} = \text{flow rate (MGD)} \times 8.34 \times \text{effluent limitation (mg/L)}$$

where: Mass = mass limitation for a pollutant (lbs/day)
 Effluent limitation = concentration limit for a pollutant (mg/L)
 Flow rate = discharge flow rate (MGD)

4. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD, oil and grease, settleable solids, TSS, and turbidity. Restrictions on these parameters are discussed in section IV.B.2 of this Fact Sheet. This Order’s technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. These limitations are not more stringent than required by the CWA.

This Order includes WQBELs for pH, acute toxicity, chronic toxicity, barium, boron, chloride, nitrite plus nitrate nitrogen, sulfates, temperature, TDS, arsenic, cadmium, copper, lead, mercury, nickel, selenium, chlorpyrifos, diazinon, chlordane, 4,4-DDD, 4,4-DDE, 4,4-DDT, dieldrin, PCBs, and toxaphene at Discharge Point No. 001. WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000.

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

Parameter	Units	Effluent Limitations				Basis ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Conventional Pollutants						
pH	s.u.	--	--	6.5	8.5	BP, E
BOD (5-day @ 20 Deg. C)	mg/L	--	30	--	--	BPJ, E
	lbs/day ²	--	30	--	--	
Oil and Grease	mg/L	--	15	--	--	BPJ, E
	lbs/day ²	--	15	--	--	
TSS	mg/L	--	75	--	--	BPJ, E
	lbs/day ²	--	75	--	--	

Parameter	Units	Effluent Limitations				Basis ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Non-conventional Pollutants						
Acute Toxicity	% Survival and "Pass" or "Fail"	3				BP, E
Chronic Toxicity	TUc and "Pass" or "Fail"	7				BP, TMDL, E
Barium	µg/L	--	1,000	--	--	MCL
	lbs/day ²	--	1.0	--	--	
Boron	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
	lbs/day ²	--	0.000023	--	--	
Diazinon	µg/L	--	0.10	--	--	TMDL
	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, E
TDS	mg/L	--	850	--	--	BP, TMDL, E
	lbs/day ²	--	850	--	--	
Turbidity	NTU	--	75	--	--	BPJ, E
Priority Pollutants						
Arsenic, Total Recoverable	µg/L		10	--	--	MCL ⁴
	lbs/day ²		0.010	--	--	
Cadmium, Total Recoverable	µg/L	--	5	--	--	MCL, E
	lbs/day ²	--	0.005	--	--	
Copper, Total Recoverable (Dry-weather) ⁵	µg/L	--	22	--	--	CTR, SIP, E
	lbs/day ²	--	0.022	--	--	
Copper, Total Recoverable (Wet-weather) ⁶	µg/L	--	31	--	--	TMDL
	lbs/day ²	--	0.031	--	--	

Parameter	Units	Effluent Limitations				Basis ¹
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Lead, Total Recoverable	µg/L	--	9.5	--	--	CTR, SIP, E
	lbs/day ²		0.0095	--	--	
Mercury, Total Recoverable	µg/L	--	0.10	--	--	TMDL
	lbs/day ²	--	0.00010	--	--	
Nickel, Total Recoverable (Dry-weather) ⁵	µg/L	--	100	--	--	MCL, E
	lbs/day ²	--	0.10	--	--	
Nickel, Total Recoverable (Wet-weather) ⁶	µg/L	--	957	--	--	TMDL
	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
	lbs/day ²	--	1.2E-6	--	--	
4,4-DDD	µg/L	--	0.0017	--	--	TMDL
	lbs/day ²	--	1.7E-6	--	--	
4,4-DDE	µg/L	--	0.0012	--	--	TMDL
	lbs/day ²	--	1.2E-6	--	--	
4,4-DDT	µg/L	--	0.0012	--	--	TMDL
	lbs/day ²	--	1.2E-6	--	--	
Dieldrin	µg/L	--	0.00028	--	--	TMDL
	lbs/day ²	-	2.8E-7	--	--	
PCBs	µg/L	--	0.00034	--	--	TMDL
	lbs/day ²	--	3.4E-7	--	--	
Toxaphene	µg/L	--	0.00033	--	--	TMDL
	lbs/day ²	--	3.3E-7	--	--	

1. BP = Basin Plan; TP = Thermal Plan; E = Existing Order; BPJ = Best Professional Judgment; CTR = California Toxic Rule; MCL = Maximum Contaminant Level; SIP = State Implementation Policy; TMDL= Total Maximum Daily Load; and WP = White Paper.
2. The mass limitations are based on a maximum flow of 0.120 MGD and are calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. If the flow exceeds 0.120 MGD, the mass limitations must be calculated using the actual flow.
3. The acute toxicity of the effluent shall be such that:
 - i. The average survival in the undiluted effluent for any three (3) consecutive ii.96-hour static or continuous flow bioassay test shall be at least 90%, and
 - ii. No single test shall produce less than 70% survival.
4. California MCL, revised as of November 28, 2008.
5. Effluent limitations apply except when the flow at ASMC1 gauge (Arroyo Simi at Madera Rd.) equals 10 cubic feet per second (cfs) or greater.
6. .Within this Order, wet-weather effluent limitations apply when the flow at ASMC1 gauge (Arroyo Simi at Madera Rd.) equals 10 cfs or greater.
7. The chronic toxicity of the effluent shall be expressed and reported in toxic units,where:

$$TUc = 100/NOEC$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.
The chronic toxicity of 100% effluent shall not exceed 1.0 TUc in a critical life stage test.

E. Interim Effluent Limitations

Not Applicable

F. Land Discharge Specifications

Not Applicable

G. Reclamation Specifications

Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

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

The existing Order contained interim and final receiving water limitations for chlorpyrifos and diazinon, based on the Toxicity TMDL. The interim limits expired on March 24, 2008. The Discharger is considered an “Other NPDES Discharger”, and as such, the TMDL does not specify chlordane and diazinon WLAs are to be translated into receiving water limits. Receiving water limitations for chlordane and diazinon are not included in this Order.

Similarly, based on the Toxics TMDL, Order No. R4-2007-0060 included receiving water column and sediment limitations for chlordane, 4,4-DDD, 4,4-DDE, and 4,4-DDT, dieldrin, PCB, and toxaphene. Receiving water limitations for these parameters are not included in this Order.

B. Groundwater

Not Applicable

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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

state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Facility.

A. Influent Monitoring

Not Applicable

B. Effluent Monitoring

Monitoring for pollutants expected to be present in the discharge will be required as established in the MRP (Attachment E). The monitoring requirements from Order No. R4-2007-0060 are carried over to this Order, with the exception of conductivity. The Discharger is monitoring for TDS, which provides information on salts, similar to conductivity measurement. To avoid analytical redundancy, the monitoring requirement for conductivity is discontinued in this Order.

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

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth. This Order includes limitations for acute and chronic toxicity and therefore, monitoring requirements are included in the MRP to determine compliance with the effluent limitations established in Limitations and Discharge Requirements, Effluent Limitations, section IV.A.

Order No. R4-2007-0060 contained a chronic toxicity limitation and monitoring trigger of 1 TU_c. Based on implementation procedures contained in the Toxicity TMDL and NPDES regulations at 40 CFR 122.44(d)(1)(vii)(B), this Order carries over the chronic toxicity effluent limitation and monitoring trigger. The Toxicity TMDL includes a WLA of 1 TU_c for minor point sources, upon which the chronic toxicity WQBEL is based, and specifies implementation as follows:

“The toxicity WLAs will be implemented in accordance with US EPA, State Board and Regional Board resolutions, guidance and policy at the time of permit issuance or renewal. Currently, these WLAs would be implemented as a trigger for initiation of the TRE/TIE process as outlined in USEPA’s *“Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program”* (2000) and current NPDES permits held by dischargers to the CCW.”

The SIP procedures for implementation of the narrative chronic toxicity objective are currently being revised and it is anticipated that these procedures will provide relevant permitting guidance for this Facility. Within this Order, the chronic toxicity WQBEL of 1 TUc is necessary to implement the chronic toxicity WLA in the Toxicity TMDL and is protective of the Basin Plan narrative objective for toxicity. Furthermore, required TIE/TRE procedures are consistent with the referenced TMDL implementation procedures.

D. Receiving Water Monitoring

1. Surface Water

According to the SIP, the Discharger is required to monitor the upstream receiving water for the CTR priority pollutants, to determine reasonable potential. 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, this Order requires the Discharger to monitor the Happy Camp Wash at RSW-001, upstream of the confluence with the unnamed tributary that contains the discharge from the Facility.

In addition, the Discharger must monitor temperature and pH to determine instream ammonia objectives that apply to the receiving water and hardness to evaluate instream metals objectives that apply to the receiving water..

2. Groundwater

Not Applicable

E. Storm Water Monitoring Requirements

In order to evaluate the effectiveness of the SWPPP, rainfall monitoring and visual storm water monitoring are required during discharge events.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

B. Special Provisions

1. Reopener Provisions

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

2. Special Studies and Additional Monitoring Requirements

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

3. Best Management Practices and Storm Water Pollution Prevention Plan

The previous Order required the Discharger to develop and implement a SWPPP, including a Best Management Practices Plan (BMPP). This Order will require the Discharger to update and continue to implement a SWPPP. SWPPP requirements are included as Attachment G, based on 40 CFR 122.44(k). The requirement to implement the Spill Contingency Plan in Order No. R4-2007-0060 is not included in this Order. With the exception of the fueling area, the discharger does not store fuels in above ground tanks. The SWPPP plan and the BMPP are sufficient to address pollution prevention at the fueling area.

4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of 40 CFR 122.41(e) and the previous Order.

5. Special Provisions for Municipal Facilities (POTWs Only)

Not Applicable

6. Other Special Provisions

Not Applicable

7. Compliance Schedules

Not Applicable

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of WDRs that will serve as a NPDES permit for CEMEX Construction Materials Pacific, LLC, Moorpark Facility. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative

WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations.

B. Written Comments

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

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on April 8, 2013.

C. Public Hearing

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

Date: **May 2, 2013**
Time: **9:00 a.m.**
Location: **Metropolitan Water District of Southern California Board Room
700 North Alameda Street
Los Angeles, California**

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

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

D. Nature of Hearing

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

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

E. Parties to the Hearing

The following are the parties to this proceeding:

1. The applicant/permittee

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

F. Public Comments and Submittal of Evidence

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to the above address. To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments must be received no later than close of business April 8, 2013. Comments or evidence received after that date will be submitted, ex agenda, to the Board for consideration, but only included in administrative record with express approval of the Chair during the hearing. Additionally, if the Board receives only supportive comments, the permit may be placed on the Board's consent calendar, and approved without an oral testimony.

G. Hearing Procedure

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

Parties or persons with special procedural requests should contact staff. Any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of the California Code of Regulations. Objections to any procedure to be used during this hearing must be submitted in writing not later than close of 15 business days prior to the date of the hearing. Procedural objections will not be entertained at the hearing.

H. Waste Discharge Requirements Petitions

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

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

I. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (213) 576 – 6600.

J. Register of Interested Persons

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

K. Additional Information

Requests for additional information or questions regarding this order should be directed to Mazhar Ali at (213) 576-6652.

ATTACHMENT G – STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

I. Implementation Schedule

A storm water pollution prevention plan (SWPPP) shall be developed and submitted to the Regional Water Board within 90 days following the adoption of this Order. The SWPPP shall be implemented for each facility covered by this Permit within 10 days of approval from the Regional Water Board, or 6-months from the date of the submittal of the SWPPP to the Regional Water Board (whichever comes first).

II. Objectives

The SWPPP has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility; and (b) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. BMPs may include a variety of pollution prevention measures or other low-cost and pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, 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. A facility's SWPPP is a written document that shall contain a compliance activity schedule, a description of industrial activities and pollutant sources, descriptions of BMPs, drawings, maps, and relevant copies or references of parts of other plans. The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Water Board inspectors.

III. Planning and Organization

A. Pollution Prevention Team

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

B. Review Other Requirements and Existing Facility Plans

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

IV. Site Map

The SWPPP shall include a site map. The site map shall be provided on an 8-1/2 x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, facility operators may provide the required information on multiple site maps.

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

<p>PLANNING AND ORGANIZATION</p> <ul style="list-style-type: none">Form Pollution Prevention TeamReview other plans
<p>ASSESSMENT PHASE</p> <ul style="list-style-type: none">Develop a site mapIdentify potential pollutant sourcesInventory of materials and chemicalsList significant spills and leaksIdentify non-storm water dischargesAssess pollutant risks

BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE

- Non-structural BMPs
- Structural BMPs
- Select activity and site-specific BMPs

IMPLEMENTATION PHASE

- Train employees
- Implement BMPs
- Conduct recordkeeping and reporting

EVALUATION / MONITORING

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

The following information shall be included on the site map:

- A.** The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, and ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.
- B.** The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.

- C. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.
- D. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section A.6.a.iv. below have occurred.
- E. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

V. List of Significant Materials

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

VI. Description of Potential Pollutant Sources

- A. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section 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.
 - 3. **Dust and Particulate Generating Activities.** Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be

deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.

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

The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken to ensure spill or leaks do not reoccur. Such list shall be updated as appropriate during the term of this Permit.

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

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

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

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

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

VII. Assessment of Potential Pollutant Sources

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

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

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

VIII. Storm Water Best Management Practices

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Section VI.A.6. 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 90 days of the evaluation. Evaluations shall include the following:

- A.** A review of all visual observation records, inspection records, and sampling and analysis results.
- B.** A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
- C.** A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.
- D.** An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in Section X.D, for implementing SWPPP revisions, (v) any

incidents of non-compliance and the corrective actions taken, and (vi) a certification that the facility operator is in compliance with this Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this General Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions V.D.5 of Attachment D.

X. SWPPP General Requirements

- A.** The SWPPP shall be retained on site and made available upon request of a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.
- B.** The Regional Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this Section. As requested by the Regional Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.
- C.** The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.
- D.** The SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a facility operator determines that the SWPPP is in violation of any requirement(s) of this Permit.
- E.** When any part of the SWPPP is infeasible to implement due to proposed significant structural changes, the facility operator shall submit a report to the Regional Water Board prior to the applicable deadline that (i) describes the portion of the SWPPP that is infeasible to implement by the deadline, (ii) provides justification for a time extension, (iii) provides a schedule for completing and implementing that portion of the SWPPP, and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.
- F.** The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

ATTACHMENT H – STATE WATER BOARD MINIMUM LEVELS

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

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

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

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Benzo (a) Anthracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
Benzo (b) Fluoranthene		10	10	
3-Methyl-Chlorophenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	
Hexachloro-cyclopentadiene	5	5		
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

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

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

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

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

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

Table 2d – PESTICIDES – PCBs*	GC
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

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

Techniques:

GC - Gas Chromatography

GCMS - Gas Chromatography/Mass Spectrometry

HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)

LC - High Pressure Liquid Chromatography

FAA - Flame Atomic Absorption

GFAA - Graphite Furnace Atomic Absorption

HYDRIDE - Gaseous Hydride Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

ICP - Inductively Coupled Plasma

ICPMS - Inductively Coupled Plasma/Mass Spectrometry

SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)

DCP - Direct Current Plasma

COLOR – Colorimetric

ATTACHMENT I – LIST OF PRIORITY POLLUTANTS

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

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
45	2-Chlorophenol	95578	†
46	2,4-Dichlorophenol	120832	†
47	2,4-Dimethylphenol	115679	†
48	2-Methyl-4,6-Dinitrophenol	534521	†
49	2,4-Dinitrophenol	51285	†
50	2-Nitrophenol	88755	†
51	4-Nitrophenol	110027	†
52	3-Methyl-4-Chlorophenol	59507	†
53	Pentachlorophenol	87865	†
54	Phenol	118952	†
55	2,4,6-Trichlorophenol	88062	†
56	Acenaphthene	83329	†
57	Acenaphthylene	208968	†
58	Anthracene	120127	†
59	Benzdine	92875	†
60	Benzo(a)Anthracene	56553	†
61	Benzo(a)Pyrene	50328	†
62	Benzo(b)Fluoranthene	205992	†
63	Benzo(ghi)Perylene	191242	†
64	Benzo(k)Fluoranthene	207089	†
65	Bis(2-Chloroethoxy)Methane	111911	†
66	Bis(2-Chloroethyl)Ether	111444	†
67	Bis(2-Chloroisopropyl)Ether	118601	†
68	Bis(2-Ethylhexyl)Phthalate	117817	†
69	4-Bromophenyl Phenyl Ether	111553	†
70	Butylbenzyl Phthalate	85687	†
71	2-Chloronaphthalene	91587	†
72	4-Chlorophenyl Phenyl Ether	7005723	†
73	Chrysene	218019	†
74	Dibenzo(a,h)Anthracene	53703	†
75	1,2-Dichlorobenzene	95501	†
76	1,3-Dichlorobenzene	541731	†
77	1,4-Dichlorobenzene	116467	†
78	3,3'-Dichlorobenzidine	91941	†
79	Diethyl Phthalate	84662	†
80	Dimethyl Phthalate	131113	†
81	Di-n-Butyl Phthalate	84742	†
82	2,4-Dinitrotoluene	121142	†
83	2,6-Dinitrotoluene	606202	†
84	Di-n-Octyl Phthalate	117840	†
85	1,2-Diphenylhydrazine	122667	†
86	Fluoranthene	206440	†
87	Fluorene	86737	†
88	Hexachlorobenzene	118741	†
89	Hexachlorobutadiene	87863	†
90	Hexachlorocyclopentadiene	77474	†
91	Hexachloroethane	67721	†
92	Indeno(1,2,3-cd)Pyrene	193395	†

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
93	Isophorone	78591	†
94	Naphthalene	91203	†
95	Nitrobenzene	98953	†
96	N-Nitrosodimethylamine	62759	†
97	N-Nitrosodi-n-Propylamine	621647	†
98	N-Nitrosodiphenylamine	86306	†
99	Phenanthrene	85018	†
110	Pyrene	129000	†
111	1,2,4-Trichlorobenzene	120821	†
112	Aldrin	309002	†
113	alpha-BHC	319846	†
114	beta-BHC	319857	†
115	gamma-BHC	58899	†
116	delta-BHC	319868	†
117	Chlordane	57749	†
118	4,4'-DDT	50293	†
119	4,4'-DDE	72559	†
111	4,4'-DDD	72548	†
111	Dieldrin	60571	†
112	alpha-Endosulfan	959988	†
113	beta-Endosulfan	33213659	†
114	Endosulfan Sulfate	1131178	†
115	Endrin	72208	†
116	Endrin Aldehyde	7421934	†
117	Heptachlor	76448	†
118	Heptachlor Epoxide	1124573	†
119	PCB-1116	12674112	†
120	PCB-1221	11114282	†
121	PCB-1232	11141165	†
122	PCB-1242	53469219	†
123	PCB-1248	12672296	†
124	PCB-1254	11197691	†
125	PCB-1260	11196825	†
126	Toxaphene	8001352	†

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

ATTACHMENT J – EFFLUENT LIMITATIONS CALCULATIONS

Metals

Basis	Pollutant	WLA/ECA (µg/L)	LTA	AMEL	MDEL
Acute	Copper (Wet)	31	10.0	15.4	31.0
Human Health	Mercury	0.051	--	0.051	0.103
Acute	Nickel (Wet)	958	307.6	477	957

Pollutant	CV	Acute (wet) Multiplier	AMEL/MDEL Multiplier	AMEL Multiplier	MDEL Multiplier
Copper	0.6	0.32	--	1.55	3.11
Mercury	0.6	0.32	2.01	--	--
Nickel	0.6	0.32	--	1.55	3.11

CHLORPYRIFOS AND DIAZINON

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)			REASONABLE POTENTIAL ANALYSIS (RPA)							
					Freshwater			MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL)	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required
					C acute = CMC tot	C chronic = CCC tot	Lowest C								
101	Chlorpyrifos	ug/L	0.6		0.03	0.01	0.01			N					No detected value of B, Step 7
102	Diazinon	ug/L	0.6		0.10	0.10	0.10000			N					No detected value of B, Step 7

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)			REASONABLE POTENTIAL ANALYSIS (RPA)							
					Freshwater			MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects (Y/N)?	If all data points ND Enter the min detection limit (MDL)	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required
					C acute = CMC tot	C chronic = CCC tot	Lowest C								
101	Chlorpyrifos	ug/L	0.6		0.03	0.01	0.01			N					No detected value of B, Step 7
102	Diazinon	ug/L	0.6		0.10	0.10	0.10000			N					No detected value of B, Step 7

CTR#	Parameters	LIMITS			Recommendation	Comment		
		AMEL aq life	MDEL multiplier 99	MDEL aq life				
		Lowest AMEL	Lowest MDEL					
101	Chlorpyrifos	0.01	3.11	0.0229974	0.01146	0.02300		
102	Diazinon	0.05	3.11	0.1	0.04985	0.10000		

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