# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

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# ORDER NO. R4-2007-0060 NPDES NO. CA0059315

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

Table 1. Discharger Information

Discharger	CEMEX Construction Materials, L.P.		
Name of Facility	Moorpark Facility		
Facility Address	9035 Roseland Avenue		
	Moorpark, California 93020		
	Los Angeles County		
The U.S. Environme	ntal Protection Agency (USEPA) and the Regional Water Quality Control Board		

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 the CEMEX Construction Materials, L.P. 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 and truck wash water	34°, 20′, 05.62 " N	118°, 52 ', 42.23 " W	Happy Camp Canyon

# Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	December 6, 2007
This Order shall become effective on:	January 6, 2008
This Order shall expire on:	November 10, 2012
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

IT IS HEREBY ORDERED, that Order No. R4-2002-0102 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Tracy J. Egoscue, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on December 6, 2007.

Tracy J. Ègoscue, Executive Officer

Order

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# I. FACILITY INFORMATION

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

Table 4. Facility Information

Discharger	CEMEX Construction Materials, L.P.	
Name of Facility	Moorpark Facility	
	9035 Roseland Avenue	
Facility Address	Moorpark, California 93020	
	Los Angeles County	
Facility Contact, Title, and Phone	Jorge Lanza, Plant Manager, (805) 529-1535	
Mailing Address	P.O. Box 1030, Moorpark, California 93021	
Type of Facility	Sand and gravel mining and processing	
Facility Permitted Flow	120,000 gallons per day or more (based on the severity of storm)	

# **II. FINDINGS**

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

A. Background. CEMEX Construction Materials, L.P. (hereinafter Discharger) is currently discharging pursuant to Order No. R4-2002-0102 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0059315. The Discharger submitted a Report of Waste Discharge, dated October 9, 2006, and applied for a NPDES permit renewal to discharge intermittently 120,000 gallons per day or more (based on severity of storm) of treated wastewater consisting of storm water runoff, external rinse water from concrete trucks, and wet down of aggregate trucks from the Moorpark facility, hereinafter Facility.

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

- B. Facility Description. The Discharger owns and operates the Moorpark Facility, a 1400-acre sand and gravel mining and processing facility. The Moorpark Facility is located at 9035 Roseland Avenue, Moorpark, California. Operations at the site include: sand and gravel mining, rock processing (crushing and screening), chemical storage, concrete mixing, vehicle fueling, and vehicle maintenance. Wastewater consisting of storm water runoff, external rinse water from concrete trucks, and wet down of aggregate trucks is stored in eight settling or debris basins placed in series. The total design capacity of the basins is approximately 7.1 million gallons. The debris basins are designed to settle solids and water is allowed to percolate into the ground and/or be pumped back into recycle ponds for reuse. Water in these debris basins may also be pumped to the guarry for additional on-site containment during heavy rain events. Ready-mix concrete operations are typically suspended during heavy rainfall. During an emergency situation, resulting from large storm events, when the storm water runoff exceeds the storage capacity of the Facility's debris basins and quarry, 120,000 gallons per day (gpd) or more (based on the severity of storm) of wastewater will be discharged to Happy Camp Canyon, a tributary to Arroyo Simi and Calleguas Creek, a water of the United States, through Discharge Point 001 (Latitude 34°, 20´, 05.62" North, Longitude 118°, 52´, 42.23" West) located at the last debris basin (Number 8). In the last five years there were two discharges from the Facility to Happy Camp Canyon.
- C. Legal Authorities. This Order is issued pursuant to section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as 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 through special studies. 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 I 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 the CEQA, Public Resources Code sections 21100 – 21177.
- F. **Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations<sup>1</sup>, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet.
- G. Water Quality-based Effluent Limitations. Section 301 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) 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 section 122.44(d)(1)(vi).

H. 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 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 Basin Plan at 2-4 states that the beneficial uses of any specifically identified water body generally apply to its tributary streams. The Basin Plan does not specifically identify beneficial uses for Happy Camp Canyon, but does identify present and potential uses for Arroyo Simi, to which Happy Camp Canyon, is tributary. The Arroyo Simi is tributary to the Calleguas Creek. The beneficial uses of the Arroyo Simi and other tributaries of the Calleguas Creek are:

Arroyo Simi – Hydrologic Unit 403.62

Existing: wildlife habitat, rare, threatened, or endangered species habitat,

Intermittent: industrial process supply, groundwater recharge, freshwater replenishment,

contact and non-contact water recreation, warm freshwater habitat.

Arroyo Las Posas - Hydrologic Unit 403.62

<sup>&</sup>lt;sup>1</sup> All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

Existing: groundwater recharge, freshwater replenishment, contact and non-contact water

recreation, warm freshwater habitat, wildlife habitat,

Potential: industrial process supply, industrial service supply, agricultural supply, and cold

freshwater habitat.

Calleguas Creek - Hydrologic Unit 403.12

Existing: industrial service supply, industrial process supply, agricultural supply,

groundwater recharge, contact and non-contact water recreation, warm freshwater

habitat, and wildlife habitat.

Calleguas Creek - Hydrologic Unit 403.11

Existing: agricultural supply, groundwater recharge, freshwater replenishment; contact and

non-contact water recreation, warm freshwater habitat, cold freshwater habitat, wildlife habitat, rare, threatened or endangered species, and wetland habitat.

Calleguas Creek Estuary – Hydrologic Unit 403.11

Existing: noncontact water recreation, commercial and sport fishing, estuarine habitat,

wildlife habitat, rare, threatened or endangered species, migration of aquatic organisms, spawning, reproduction, and/or early development, and wetland

habitat,

Potential: navigation and water contact recreation.

Mugu Lagoon – Hydrologic Unit 403.11

Existing: navigation, non-contact water recreation, commercial and sport fishing, estuarine

habitat, marine habitat, preservation of biological habitats, wildlife habitat, rare, threatened or endangered species, migration of aquatic organisms, spawning, reproduction, and/or early development, shellfish harvesting, and wetland habitat,

Potential: water contact recreation.

All of the reaches of Calleguas Creek, except the estuary, also include conditional municipal and domestic supply designations as an intermittent or potential beneficial use in the Basin Plan.

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

Ammonia Basin Plan Amendment. The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Table 3-1 through Table 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Water Board with the adoption of Resolution No. 2002-011, Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Life. The amendment reflects the revised water quality criteria developed by USEPA in the "1999 Update of Ambient Water Quality Criteria for Ammonia," December 1999. The 1999 Update contains USEPA's most recent freshwater aquatic life criteria for ammonia and supersedes all previous freshwater aquatic life criteria for ammonia Basin Plan amendment was approved by the State Water Board, the Office of Administrative Law, and USEPA on

April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with USEPA's 1999 ammonia criteria update.

No limitation for ammonia included in this Order because there is insufficient monitoring data to conduct reasonable potential analysis (RPA). The Order includes requirements for monitoring of ammonia for both effluent and receiving waters.

- I. National Toxics Rule (NTR) and California Toxics Rule (CTR). USEPA adopted the NTR on December 22, 1992, and later was 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.
- J. State Implementation Policy. On March 2, 2000, 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 establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. 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. Requirements of this Order implement the SIP.
- K. Compliance Schedules and Interim Requirements. Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds one year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Water Quality Control Plan Los Angeles Region, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does include compliance schedules and interim effluent limitations. A detailed discussion of the basis for the compliance schedule and interim effluent limitation and/or discharge specifications is included in the Fact Sheet (Attachment F).

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

1. The Regional 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 Board's many diverse programs, particularly TMDLs, to better assess cumulative impacts of pollutants from all point and nonpoint sources. A TMDL is a tool for implementing water quality standards and is based on the

relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a waterbody to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the environmental 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.

The receiving water for the wastewater is Happy Camp Canyon, which is a tributary to the Arroyo Simi, a tributary of the Calleguas Creek. The Calleguas Creek Watershed extends from the Santa Monica Mountains and the Simi Hills in the south, to the Santa Susana Mountains, South Mountain, and Oak Ridge in the north. Land uses vary throughout the watershed. Urban developments are generally restricted to the city limits of Simi Valley, Moorpark, Thousand Oaks, and Camarillo. Agricultural activities are spread out along valleys and on the Oxnard Plain.

Watewater exits the site and travels down an unnamed tributary to Happy Camp Canyon towards the Arroyo Simi. Most of the land use around the facility is open area. Overall the Calleguas Creek Watershed is considered an impaired watershed. It appears that the sources of many of the pollutants in the watershed are agricultural activities, runoff from open space, runoff from industrial areas and publicly owned treatment works (POTWs). Approximately fifty percent of the watershed is still open space, although there is a severe lack of benthic and riparian habitat present. The runoff, when it is sufficient to reach the Arroyo Simi, enters it in Reach 1 – Hydrological Unit 403.62. The stressors listed in the 1998 State Board's California 303(d) list for this reach are ammonia, boron, chloride, sulfates and total dissolved solids. Elevated levels of chromium, nickel, selenium, silver and zinc were also reported in tissue samples.

In the 2002 State Board 303(d) list, Reach 1 of Arroyo Simi is grouped with Reach 2 and has been renamed Calleguas Creek Reach 7. The listed stressors for Calleguas Creek Reach 7 included fecal coliform, organophosphorus pesticides and sedimentation/siltation in addition to those listed in the 1998 303(d) list. The 2002 303(d) list does not include the metals reported with elevated tissue samples in the 1998 303(d) list. These metals were also not included in the 2006 303(d) list.

2. The Regional Board approved the Basin Plan amendment to incorporate the TMDL for toxicity, chlorpyrifos, and diazinon in the Calleguas Creek, its tributaries and Mugu Lagoon (Resolution No. R4-2005-009) on July 7, 2005. The TMDL addresses impairment to water quality due to elevated levels of chlorpyrifos, diazinon, other pesticides and/or other toxicants. The amendment includes numeric targets, WLAs, and load allocations for Toxicity Unit Chronic, chlorpyrifos, and diazinon. It also includes a compliance schedule of two years from the effective date of the TMDL to meet the final WLAs and ten years to meet the LAs applied to nonpoint sources.

The State Board approved the TMDL on September 22, 2005 (Resolution No. 2005-0067). OAL and EPA approvals were effective on November 27, 2005, and March 14, 2006, respectively. The TMDL became effective on March 24, 2006. A waste load allocation of 1.0 TUc is allocated to the major point sources (POTWs) and minor point sources discharging to the Calleguas Creek Watershed. Interim and final waste load allocations and were also established for chlorpyrifos and diazinon. The implementation schedule specifies that the interim limits for chlorpyrifos and diazinon in storm water NPDES permits be in

stream limits. The appropriate waste load allocations are translated into permit limits and included in this Order.

3. Resolution No. R4-2005-0010, a TMDL for organochlorine (OC) pesticides, polychlorinated biphenyl (PCBs) and siltation in Calleguas Creek, its tributaries, and Mugu Lagoon, was also approved by the Regional Board on July 7, 2005. The 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. The TMDL establishes water column targets, fish tissue targets, and sediment targets to ensure the protection of beneficial uses. The TMDL establishes a twenty-year plan for reducing OC pesticides, PCBs and siltation loads from point sources and nonpoint sources.

The State Board approved the TMDL on September 22, 2005 (Resolution No. 2005-0068). OAL and EPA approvals are followed on January 20, 2006, and March 14, 2006, respectively. The TMDL was effective on March 24, 2006. The appropriate targets will apply to discharges from Discharge Point 001 which enter Arroyo Simi, a tributary of Calleguas Creek.

The TMDL includes waste load allocations for OC pesticides and PCBs in sediment in Calleguas Creek and its tributaries. The waste load allocations have been translated directly into ambient contaminant concentrations in the sediment of Arroyo Simi. Those ambient contaminant concentrations will be compared directly to sediment concentrations measured in the samples collected to determine compliance with the interim waste load allocations stipulated. The interim waste load allocations are effective throughout the tenure of this permit.

The waste load allocations in the water column are translated into effluent limitations utilizing the steady state model from the SIP. The calculated effluent limits are included as receiving water effluent limits. Since the discharge is mainly storm water and it is near the top of the watershed, the Discharger may utilize the option of sampling the discharge for the OC pesticides and PCBs or sampling the receiving water. The Discharger may also choose to join the Calleguas Creek Watershed TMDL Monitoring Program (CCWTMP) and monitor at an established compliance sampling location in Arroyo Simi.

4. Resolution R4-2006-012, the TMDL for metals and selenium for Calleguas Creek, its tributaries and Mugu Lagoon was adopted by the Los Angeles Regional Board on June 8, 2006. The TMDL establishes numeric targets for dissolved copper, nickel, and zinc, and in total recoverable mercury and selenium. It also includes fish tissue targets for mercury, bird egg targets for mercury and selenium and sediment quality guidelines for copper, nickel, and zinc.

The State Board approved the TMDL on October 25, 2006 (Resolution No. 2006-0078). OAL and EPA approval the TMDL on February 6, 2007 and March 26, 2007 respectively. The TMDL became effective on March 26, 2007. This permit implements the TMDL.

Discharges from the Cemex Facility (Discharge Point 001) enter Calleguas Creek in Reach 7, which was Arroyo Simi Reaches 1 and 2 in the 1998 303(d) List. Dry weather discharges from this area do not reach Calleguas Creek and Mugu Lagoon. Therefore, no dry weather waste load allocations are established for the constituents in the water column. The final waste load allocation developed for mercury was 0.051  $\mu g/L$ .

Final waste load allocations for wet daily maximum concentrations of nickel is stipulated as 958  $\mu$ g/L, respectively. The daily maximum limit for copper is included in the permit. The TMDL-based daily maximum for nickel, 958  $\mu$ g/L, was developed to protect aquatic life in the lower Calleguas Creek and Mugu Lagoon and it is greater than the Title 22-based MCL limit of 100  $\mu$ g/L. Since the groundwater basin beneath the Arroyo Simi has municipal and domestic supply as an existing beneficial use, and Arroyo Simi has groundwater recharge as an intermittent beneficial use, the effluent limitation implemented must be protective of both groundwater recharge and the downstream aquatic life beneficial uses. Therefore, the 100  $\mu$ g/L effluent limitation, which is protective of the beneficial uses of Arroyo Simi and the groundwater basin beneath it, has been implemented for nickel.

- M. 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 C.F.R. § 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.
- N. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based and water quality-based effluent limitations (WQBELs) for individual pollutants. The technology-based effluent limitations consist of restrictions on total suspended solids (TSS), turbidity, biochemical oxygen demand (BOD), oil and grease, and settleable solids. Restrictions on TSS, turbidity, BOD, oil and grease, and settleable solids are discussed in section IV.B in the 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.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. 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. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

O. Antidegradation Policy. Section 131.12 requires that 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.

- P. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(I) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.
- 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 authorize 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. **Provisions and Requirements of Implementing State Law.** The provisions and requirements in subsections IV.B, IV.C, V.B, and VI.C of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- T. 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.
- U. 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.

# **III. DISCHARGE PROHIBITIONS**

- A. Wastes discharged shall be 120,000 gallons per day (gpd) or more (based on the severity of storm) and limited to storm water, external truck rinse water, and aggregate truck wetdown water as described in the findings. The discharge of wastes from accidental spills or other sources is prohibited.
- B. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, Happy Camp Canyon, or other waters of the State, are prohibited.
- C. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by Section 13050 of the Water Code.
- D. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- E. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal CWA, and amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.
- F. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.
- G. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

# IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

- A. Effluent Limitations Discharge Point 001
  - 1. Final Effluent Limitations Discharge Point 001
    - a. The discharge of storm water and truck wash water shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the attached MRP (Attachment E):

**Table 5. Effluent Limitations** 

		Effluent Limitations				
Parameter	Units	Average Monthly	Maximum Daily	Instantaneou s Minimum	Instantaneous Maximum	
BOD <sub>5</sub> 20°C	mg/L	20	30			
рН	s.u.			6.5	8.5	
Oil and grease	mg/L	10	15			
Total Suspended Solids	mg/L	50	75			
Arsenic, Total Recoverable	μg/L	50				
Cadmium, Total Recoverable	μg/L		5			
Copper, Total Recoverable	μg/L	11	22			
Lead, Total Recoverable	μg/L	4.8	9.5			
Selenium, Total Recoverable	μg/L	4.1	8.2			
Nickel, Total Recoverable	μg/L		100 1,2			
Mercury, Total Recoverable	μg/L		0.5 1			
Barium	μg/L	1,000				
Boron	mg/L		1.0			
Chloride	mg/L		150			
Nitrate-N + Nitrite-N	mg/L		10			
Settleable Solids	mg/L	0.1	0.3			
Sulfates	mg/L		250			
Temperature	ºF				86	
Total Dissolved Solids	ml/L		850			
Turbidity	NTU	50	75			

Effluent limit based on the TMDL for Metals and Selenium in Calleguas Creek, its Tributaries and Mugu Lagoon.

Effluent limit is based on Title 22 and is included for the protection of groundwater. The TMDL for Metals and Selenium in Calleguas Creek, its Tributaries and Mugu Lagoon provided waste load allocations for nickel that were developed to protect aquatic life in Mugu Lagoon and lower Calleguas Creek. The TMDL based waste load allocation of 958 µg/L for nickel is not protective of the intermittent beneficial use of the Arroyo Simi of groundwater recharge and the existing beneficial use of municipal and domestic supply for the groundwater basin beneath. The Title 22 based MCL of 100 µg/L is protective of those beneficial uses.

: ~i

- b. Toxicity limitations for discharges from Discharge Point 001:
  - (a). Acute Toxicity Limitation and Requirements
    - i. 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 tests shall be at least 90%, and (ii) no single test producing less than 70 % survival.
    - iii. If either of the above requirements (Section IV.A.b. (a).i) is not met, the Discharger shall conduct six additional tests over a six-week period. The discharger shall ensure that they receive results of a failing acute toxicity test within 24 hours of the close of the test and the additional tests shall begin within 3 business days of the receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the discharger may resume regular testing. However, if the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.
    - iii. If the initial test and any of the additional six acute toxicity bioassay test result in less than 70% survival, including the initial test, the Discharger shall immediately begin a TIE.
    - iv. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program No. 6658.
  - (b). Chronic Toxicity Limitation and Requirements:
    - i. This Order includes a chronic testing toxicity trigger defined as an exceedance of  $1.0~{\rm TU_c}$  in a critical life stage test for 100% effluent. (The monthly median for chronic toxicity of 100% effluent shall not exceed 1.0  ${\rm TU_c}$  in a critical life stage test.)
    - ii If the chronic toxicity of the effluent exceeds 1.0 TU<sub>c</sub>, the Discharger shall immediately implement an accelerated chronic toxicity testing according to MRP No. 6658, Section IV.D. If the results of two of the six accelerated tests exceed 1.0 TU<sub>c</sub>, the Discharger shall initiate a TIE and implement the <u>Initial Investigation</u> TRE Workplan. (see MRP No. 6658, Section V.E.).
    - 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:

$$TU_c = \frac{100}{NOEC}$$

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.

# 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 Attachment C-2. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:
- 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).

# 2. Interim Effluent Limitations

During the period beginning December 1, 2007, and ending on May 17, 2010, the discharge of storm water and truck wash water shall maintain compliance with the following limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the attached MRP (Attachment E). These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for the same parameters during the time period indicated in this provision.

Table 6. Interim Effluent Limitations

Parameter	Units	Effluent Limitations
Parameter	Offics	Maximum Daily
Copper	μg/L	110

#### B. Receiving Water Limitations

 The discharge shall not cause the concentration of constituents in the receiving water in the vicinity of the discharges, from Discharge Point 001 to exceed the following limits:

**Table 7. Receiving Water Limitations** 

Constituents	Units	<u>Discharge</u> Monthly Average	Limitations Daily Maximum
Chlorpyrifos	μg/L		0.021
Diazinon	μg/L		0.16 <sup>1</sup>
Chlordane	μg/L		0.001
4,4-DDD	μg/L		0.0014
4,4-DDE	μg/L		0.001
4,4-DDT	μg/L		0.001
Dieldrin	μg/L		0.0002
PCBs	μg/L		0.0003
Toxaphene	μg/L		0.0003

Limit effective March 24, 2008. The TMDL specifies interim limits which are effective from March 24, 2006, through March 23, 2008.

#### 2. Interim Receiving Water Limitations

<u>Interim receiving water limitations</u> effective from the effective date of the permit through March 23, 2008 for discharges from Discharge Point 001. The final effluent limitations in Section IV.B.1. above for these constituents are effective from March 24, 2008 through the term of the permit.

**Table 8. Interim Receiving Water Limitations** 

		<u>DischargeL</u> i	<u>DischargeLimitations</u>		
Constituents	<u>Units</u>	Monthly Average	Daily Maximum		
Chlorpyrifos	μg/L		0.74		
Diazinon	μg/L		0.91		

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

- e. There shall be no discharge of floating solids, visible foam in other than trace amounts, or oily wastes that produce a sheen on the surface of the receiving water.
- f. 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.
- g. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
- h. 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.
- i. Accumulation of bottom deposits or aquatic growths.
- Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
- k. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
- 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.
- m. Alteration of turbidity, or apparent color beyond present natural background levels.
- n. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.
- Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.
- Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
- q. Create nuisance, or adversely effect beneficial uses of the receiving water.
- r. Violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water Board. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

# C. Final Ambient WLAs for Pollutants in Sediment for Wastewater Dischargers

# 1. Final Ambient WLAs

The following are the final ambient WLAs. They are measured as in-stream annual averages at the base of each subwatershed where the discharges are located.

The final WLAs must be achieved and become sediment limits after the sampling indicates that the Discharger is able to comply with the final WLAs or at the end of the 20-year compliance schedule specified in the TMDL (March 24, 2026), whichever occurs first. In either event, the permit will be reopened at that time to include appropriate sediment limits.

Table 9. Final Ambient WLAs for Pollutants in Sediment

		Discharge	Limitations
<u>Constituents</u>	<u>Units</u>	<b>Monthly Average</b>	<b>Daily Maximum</b>
Chlordane	μg/g		0.0033
4,4-DDD	μg/g		0.002
4,4-DDE	μg/g		0.0014
4,4-DDT	μg/g		0.0003
Dieldrin	μg/g		0.0002
PCBs	μg/g		0.12
Toxaphene	μg/g		0.0006

#### 2. Interim Ambient WLAs for Pollutants in Sediment for Storm Water Dischargers

The following sediment interim WLAs are effective as sediment limitations from January 6, 2007, through November 10, 2012 (approximately five years from the effective date of this permit).

Table 10. Interim Ambient WLAs for Pollutants in Sediment

Constituents	<u>Units</u>	<u>Discharge</u> Monthly Average	Limitations Daily Maximum
Chlordane	μg/g		0.0033
4,4-DDD	μg/g		0.014
4,4-DDE	μg/g		0.17
4,4-DDT	μg/g		0.025
Dieldrin	μg/g		0.0011
PCBs	μg/g		25.7
Toxaphene	μg/g		0.23

The implementation schedule for the TMDL (Resolution No. R4-2005-0010) provides for interim sediment limitations through March 24, 2026 (twenty years from the effective date of the Basin Plan Amendment).

# D. Groundwater Limitations [Not applicable]

E. Land Discharge Specifications – Discharge Point 001 [Not applicable] F. Reclamation Specifications – Discharge Point 001 [Not applicable]

#### V. PROVISIONS

#### A. Standard Provisions

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

- After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
  - (1) Violation of any term or condition contained in this Order;
  - (2) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
  - (3) 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.
- I. 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 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:
  - (1) Name and general composition of the chemical,
  - (2) Frequency of use,
  - (3) Quantities to be used,
  - (4) Proposed discharge concentrations, and
  - (5) USEPA registration number, if applicable.

#### B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order. If there is any conflict between provisions stated in the MRP and the Regional Water Board Standard Provisions, those provisions stated in the MRP shall prevail.

#### C. Special Provisions

#### 1. Reopener Provisions

- a. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.
- b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.
- c. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new 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 Happy Camp Canyon.
- e. This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for dilution credits or a mixing zone, as may be appropriate.

- 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 Toxicity Reduction Evaluation (TRE) workplan (1-2 pages) within 120 days of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected, and should include at a minimum:
    - A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency:
    - 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;
    - 3) 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. Best Management Practices and Pollution Prevention

The Discharger shall submit, within 180 days of the effective date of this Order:

a. An updated Storm Water Pollution Prevention Plan (SWPPP) that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The SWPPP shall be developed in accordance with the requirements in Attachment G. The SWPPP shall contain a Best Management Practice Plan (BMPP) that entail site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material from being discharged to waters of the State. The updated BMPP shall be consistent with the general guidance contained in the USEPA Guidance Manual for Developing Best Management Practices (BMPs) (EPA 833-B-93-004). 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 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 (e.g., chemical storage areas); describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material; and address the feasibility of containment and/or treatment of the storm water.

b. An updated Spill Contingency Plan that shall be site-specific and shall cover all areas of the facility including the tank farms.

The Discharger shall implement the SWPPP and Spill Contingency Plan within 10 days of the approval by the Executive Officer. The plans shall be reviewed annually and at the same time. Updated information shall be submitted within 30 days of revision.

#### 4. Spill Reporting Requirements

- a. The Discharger shall develop and maintain a record of all spills, overflows or bypasses of raw or partially treated wastewater from its collection system or treatment plant. This record shall be made available to the Regional Water Board and USEPA upon request. On the first day of February, May, August and November (one month after the end of the fiscal quarter) of each year, the Discharger shall submit to the Regional Water Board a report listing all spills, overflows or bypasses occurring during the previous quarter. The reports shall provide:
  - the date and time of each spill, overflow or bypass;
  - the location of each spill, overflow or bypass;
  - the estimated volume of each spill, overflow or bypass including gross volume, amount recovered and amount not recovered:
  - the cause of each spill, overflow or bypass;
  - whether each spill, overflow or bypass entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances;
  - mitigation measures implemented;
  - corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences; and
  - beneficial uses impacted.
- b. For certain spills, overflows and bypasses of untreated or partially treated wastewater caused by a failure in the collection or treatment system, the Discharger shall make reports and conduct monitoring as required below:
  - i. For any spills or overflows of any volume discharged where they are, or will probably be, discharged to waters of the State, the Discharger shall immediately notify the local health agency in accordance with California Health and Safety Code section 5411.5, and if feasible the appropriate Regional Water Board staff within 2 hours of the spill reaching receiving water.
  - ii. For spills, overflows or bypasses of any volume that flowed to receiving waters or entered a shallow ground water aquifer or has public exposure, the Discharger shall report such spills to the Regional Water Board, by telephone or electronically as soon as possible but not later than 24 hours of knowledge of the incident. The following information shall be included in the report, if known at that time: location; date and time of spill; volume and nature of the spill; cause(s) of the spill; mitigation measures implemented; and corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.
  - iii. For any spills or overflows of 1000 gallons or more discharged where they are, or probably will be discharged to waters of the State, the Discharger shall immediately notify the State Office of Emergency Services pursuant to Water Code section 13271.
  - iv. For spills, overflows or bypasses of any volume that reach receiving waters, the Discharger shall obtain and analyze sufficient grab samples for relevant pollutants of

concern that have discharge limits, upstream and downstream, or upcoast and/or downcoast, of the point of entry of the spill (if feasible, accessible and safe) in order to define the geographical extent of impact of the spill. The first set of samples shall be collected as soon as possible if feasible, accessible and safe. This monitoring shall be at least on a daily basis from time the spill is known until the results of two consecutive sets of pollutants monitoring indicate the return to the background level or cessation of monitoring is authorized by any of the following Regulatory Agencies; County Department of Health Services, Department of Fish and Game, or Regional Water Board.

- v. For spills, overflows or bypasses of any volume that reach receiving waters or have the potential to enter a shallow ground water aquifer, and all spills, overflows and bypasses of 1,000 gallons or more, the Discharger shall analyze a grab sample of the spill or overflow for relevant pollutants of concern depending on the area and nature of spills or overflows if feasible, accessible and safe.
- vi. The Regional Water Board notification shall be followed by a written preliminary report five working days after verbal notification of the incident. Within 30 days after submitting preliminary report, the Discharger shall submit the final written report to this Regional Water Board. The written report shall document the information required in subparagraphs (b) and (d) above, monitoring results and any other information required in Provision V.E.1 of the Standard Provisions (Attachment D). An extension for submittal of the final written report can be granted by the Executive Officer for just cause. Submission of information required pursuant to California Water Code Section 13193 or pursuant to a Statewide General Waste Discharge Requirements for Wastewater Collection System Agencies shall satisfy this requirement.

# 5. Compliance Schedules

- a. Compliance Plan.
  - The interim limitations stipulated in section IV.A.2 of this Order for copper shall be in effect until May 17, 2010. Thereafter, the Discharger shall comply with the limitations specified for copper in section IV.A.1.a of this Order.
  - ii. The Discharger shall develop and submit, within one year of the effective date of this Order a compliance plan that will identify the measures that will be taken to reduce the concentrations of copper in their discharge. This plan must evaluate options to achieve compliance with the final effluent limitations for copper within the deadline specified above.
  - ii. The Discharger shall submit annual reports to describe the progress of studies and or actions undertaken to reduce copper in the effluent, and to achieve compliance with the limitations in this Order by the deadline specified above. The Regional Water Board shall receive the first annual progress report at the same time the annual summary report is due, as required in section X.D of the MRP (Attachment E).

# b. Pollutant Minimization Plan (PMP).

The Discharger shall develop a PMP to maintain effluent concentrations of copper at or below the effluent limitations specified in Final Effluent Limitations section IV.A.1.a of this Order. The PMP shall include the following:

- i. Annual review and quarterly monitoring of the potential sources of copper;
- ii. Submittal of a control strategy designed to proceed toward the goal of maintaining effluent concentrations at or below the effluent limitation;
- Implementation of appropriate cost-effective control measures consistent with the control strategy;
- iv. An annual status report that shall be sent to the Regional Water Board at the same time the annual summary report is submitted in accordance with section X.D of the MRP (Attachment E), and include:
  - (a) All PMP monitoring results for the previous year;
  - (b) A list of potential sources of copper;
  - (c) A summary of all actions undertaken pursuant to the control strategy;
  - (d) A description of actions to be taken in the following year.

- 6. 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
- Special Provisions for Municipal Facilities (POTWs Only) [Not applicable]
- 8. Other Special Provisions

# VI. COMPLIANCE DETERMINATION

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

A. Single Constituent Effluent Limitation.

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

B. Multiple Sample Data.

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

- 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.
- C. 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.

D. 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).

# E. 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

#### **DEFINITIONS**

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

**Average Weekly Effluent Limitation (AWEL):** the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

**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.

**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.

μg/L: micrograms per Liter

mg/L: milligrams per Liter

MGD: million gallons per day

Six-month Median Effluent Limitation: the highest allowable moving median of all daily discharges for any 180-day period.

# **ACRONYMS AND ABBREVIATIONS**

AMEL Average Monthly Effluent Limitation

B Background Concentration

BAT Best Available Technology Economically Achievable

Basin Plan Water Quality Control Plan for the Coastal Watersheds of Los Angeles and

Ventura Counties

BCT Best Conventional Pollutant Control Technology

BMP Best Management Practices
BMPPP 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, L.P.
DMR Discharge Monitoring Report
DNQ Detected But Not Quantified

ELAP California Department of Health Services Environmental Laboratory

Accreditation Program

ELG Effluent Limitations, Guidelines and Standards

Facility Moorpark Facility gpd gallons per day IC Inhibition Coefficient

 $\begin{array}{lll} \text{IC}_{15} & \text{Concentration at which the organism is } 15\% \text{ inhibited} \\ \text{IC}_{25} & \text{Concentration at which the organism is } 25\% \text{ inhibited} \\ \text{IC}_{40} & \text{Concentration at which the organism is } 40\% \text{ inhibited} \\ \text{IC}_{50} & \text{Concentration at which the organism is } 50\% \text{ inhibited} \\ \end{array}$ 

LA Load Allocations

LOEC Lowest Observed Effect Concentration

µg/L micrograms per Liter mg/L milligrams per Liter

MDEL Maximum Daily Effluent Limitation
MEC Maximum Effluent Concentration

MGD Million Gallons Per Day

ML Minimum Level

MRP Monitoring and Reporting Program

ND Not Detected

NOEC No Observable Effect Concentration

NPDES National Pollutant Discharge Elimination System

NSPS New Source Performance Standards

NTR National Toxics Rule
OAL Office of Administrative Law

PMEL Proposed Maximum Daily Effluent Limitation

PMP Pollutant Minimization Plan

POTW Publicly Owned Treatment Works

QA Quality Assurance

QA/QC Quality Assurance/Quality Control

Ocean Plan Water Quality Control Plan for Ocean Waters of California

Regional Water Board California Regional Water Quality Control Board, Los Angeles Region

RPA Reasonable Potential Analysis SCP Spill Contingency Plan

SIP State Implementation Policy (*Policy for Implementation of Toxics* 

Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of

California)

SMR Self Monitoring Reports

State Water Board California State Water Resources Control Board

SWPPP Storm Water Pollution Prevention Plan

TAC Test Acceptability Criteria

Thermal Plan Water Quality Control Plan for Control of Temperature in the Coastal and

Interstate Water and Enclosed Bays and Estuaries of California

TIE Toxicity Identification Evaluation TMDL Total Maximum Daily Load TOC Total Organic Carbon TRE Toxicity Reduction Evaluation TSD Technical Support Document TSS Total Suspended Solid TUc Chronic Toxicity Unit

USEPA United States Environmental Protection Agency

WDR Waste Discharge Requirements

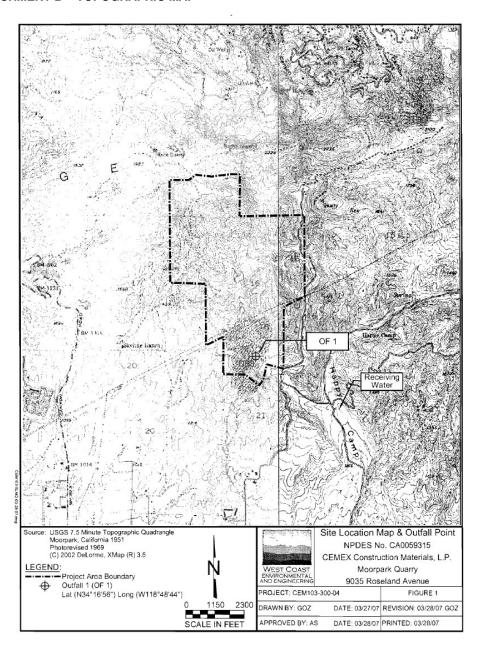
WET Whole Effluent Toxicity
WLA Waste Load Allocations

WQBELs Water Quality-Based Effluent Limitations

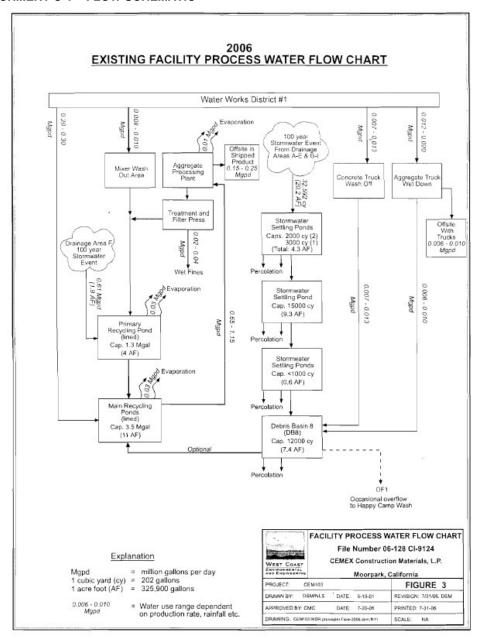
WQS Water Quality Standards

% Percent

# ATTACHMENT B - TOPOGRAPHIC MAP



# ATTACHMENT C-1 - FLOW SCHEMATIC



#### **ATTACHMENT C-2**

# GENERIC TOXICITY REDUCTION EVALUATION (TRE) WORKPLAN INDUSTRIAL

- 1. Information and Data Acquisition
  - a. Regulatory information
    - NPDES permit limits
    - ii. Trigger
  - b. Facility monitoring data
    - i. NPDES monitoring data
    - ii. In-house monitoring data
    - iii. State agency monitoring data
  - c. Plant and Process Description
    - Process and treatment plant description
      - (1) numbers and types of streams
      - (2) their size
      - (3) scheduled changes or events in process. stream operation
      - (4) types and configurations of equipment
      - (5) flow equalization facilities
      - (6) records of treatment plant upsets
    - ii. Physical/chemical monitoring data
      - (1) chemical analyses of process streams.
      - (2) physical/chemical analyses of treatment streams

#### 2. Housekeeping

- Initiation of housekeeping study
  - . Identify-areas which may contribute to toxicity
  - ii. Reduce these contributions through best management practices (BMPs), administrative, and procedural controls
- b. Evaluation of housekeeping practices
  - i. Review of plant policies
  - ii. "Walk-through" inspection
- . Identification of potential problem areas
  - i. Probability of release of toxic material
  - ii. Type and frequency of release which may occur
  - iii. Quantity of toxic substances involved
  - iv. Toxicity of substances released
  - v. Potential downstream impact of the substances released
  - vi. Effect of release on final effluent
- d. Identification of corrective measures
  - i. Area cleanup.
  - ii. Process or operational changes
  - iii. Material loss collection and recovery
  - iv. Chemical and biological testing of contained waters prior to release from diked storage areas
  - v. Increased storage capacity for contained waters
  - vi. Equipment modifications or changes
- e. Selection of corrective measures
- f. Implementation of corrective measures

Attachment C-2 C-2-1

# Treatment Plant Optimization

- Evaluation of influent wastestreams
  - Raw chemicals or materials used in the process
  - Byproducts or reaction products produced during the process
  - Reaction vessels, valves, piping systems, overflow points, and other mechanical aspects of the system
  - iv. Wastestreams produced, volumes, and routing paths
  - Non-point sources
- Description and evaluation of the treatment system b.
  - Design basis for each constituent, including variability in flow conditions and concentrations
  - Treatment sequence ii
  - Performance projections by constituents iii.
  - Operational flexibility of each process iv.
  - Treatment objectives and projected effluent standards ٧.
- Analysis of treatment system operation
  - Flow loading
  - Mass loading ii.
  - Frequency and impact of shock loadings iii.
    - (1) normal cleaning and maintenance
    - (2) spills and upsets
  - Changes in operating procedures

#### 4 Chemical optimization

- Information gathering

  - Examination of wastestreams produced by specific production processes Chemicals and raw materials and their contaminants and by-products ii.. used in the process
  - Chemicals used in treatment '
  - iν. Chemicals and material use rates
  - Percentage of chemical in final product ٧.
  - Chemical reuse and waste recycling activities vi.
- Process chemical review h
  - List all chemicals used
  - ii. List all quantities
  - Determine pounds per product
  - Determine pounds per gallon of wastewater discharged
- MSDS information review
  - Obtain MSDS for all process chemicals discharged:
  - Highlight MSDS sections on aquatic toxicity ii.
  - Examine Hazardous Ingredient section and note "hazardous substances"
  - Categorize all chemicals by hazard and irritation potential and use standard references to obtain aquatic toxicity information, if possible
- Chemical composition screen of incoming raw materials
- Outcome of chemical optimization phase
  - List of all chemicals used in processing and manufacturing the product i.
  - MSDS and literature reviews will be on file when needed
  - List of all chemicals and raw material purchased on a monthly basis and a record of production volumes during the same time period

C-2-2 Attachment C-2

#### ATTACHMENT D - FEDERAL 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 CWA and the 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)].
- 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 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, 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(c)]:

- 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)];
- 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)];
- 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)];
- 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 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 [ $section\ 122.41(m)(4)(A)$ ];
  - 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)(B)]; and

- c. The Discharger submitted notice to the Regional Water Board as required under Standard Provision Permit Compliance I.G.5 below [ $section\ 122.41(m)(4)(C)$ ].
- 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

- 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 [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 paragraph H.2 of this section 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)(i)];
  - The Discharger submitted notice of the upset as required in Standard Provisions Reporting V.E.2.b [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 CWC [section 122.41(I)(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(i)(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 [40 CFR §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

- 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 as follows:
  - a. For a corporation: 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)];
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [section 122.22(a)(2)]; or
  - c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal

geographic unit of the agency (e.g., Regional Administrators of USEPA) [section 122.22(a)(3)].

- 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 paragraph (b) of this provision, 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 paragraph (2.) of this provision [section 122.22(b)(1)];
  - b. The authorization specified 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
  - The written authorization is submitted to the Regional Water Board, State Water Board, or USEPA [section 122.22(b)(3)].
- 4. If an authorization under paragraph (3.) of this provision 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 paragraph (3.) of this provision must be submitted to the Regional Water Board, State Water Board or USEPA 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 paragraph (2.) or (3.) of this provision 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

- Monitoring results shall be reported at the intervals specified in the MRP in this Order [section 122.41(I)(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(I)(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(I)(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(I)(6)(ii)]:
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [section 122.41(I)(6)(ii)(A)].
  - b. Any upset that exceeds any effluent limitation in this Order [section 122.41(I)(6)(ii)(B)].
  - c. Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours [section 122.41(I)(6)(ii)(C)].
- 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(I)(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(I)(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 which 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)].

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

# G. Anticipated Noncompliance

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

- B. 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)].
- C. 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(i)(5)].
- D. 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 ( $\mu$ g/L) [section 122.42(a)(1)(i)];
  - b. 200 μg/L for acrolein and acrylonitrile; 500 μg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [section 122.42(a)(1)(ii)];
  - 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 40 CFR §122.44(f) [section 122.42(a)(1)(iv)].

- 2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [section 122.42(a)(2)]:
  - a. 500 micrograms per liter (µg/L) [section 122.42(a)(2)(i)];
  - b. 1 milligram per liter (mg/L) for antimony [section 122.42(a)(2)(ii)];
  - 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 40 CFR §122.44(f) [section 122.42(a)(2)(iv)].
- B. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following [section 122.42(b)]:

- Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the CWA if it were directly discharging those pollutants [section 122.42(b)(1)]; and
- Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order [section 122.42(b)(2)].

Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW [section 122.42(b)(3)].

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

The Code of Federal Regulations section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements which implement the federal and California regulations.

#### I. GENERAL MONITORING PROVISIONS

- A. An effluent sampling station shall be established for the point of discharge (Discharge Point 001 [Latitude 34°, 20', 05.62" North, Longitude 118°, 52', 42.23" West]) 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 March 12, 2007); 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 Health Services 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 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 Health Services 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
  - "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML; or,
  - "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, March 2, 2000.

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;
- 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 14, 1999);
- 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 X.D 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, until compliance with the average monthly limit has been demonstrated. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. In the event of noncompliance with an average monthly effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the average monthly effluent limitation has been demonstrated. The Discharger shall provide for the approval of the Executive Officer a program to ensure future compliance with the average monthly limit.
- O. In the event wastes are transported to a different disposal site during the report period, the following shall be reported in the monitoring report:
  - 1. Types of wastes and quantity of each type;
  - Name and address for each hauler of wastes (or method of transport if other than by hauling); and
  - 3. Location of the final point(s) of disposal for each type of waste.

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

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

## **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:

Attachment E – MRP

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**Table E-1. Monitoring Station Locations** 

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	Effluent discharge into Happy Camp Canyon
	RSW-001	Upstream of the discharge location into the tributary to Happy Camp Canyon, Happy Camp Canyon or Arrroyo Simi

# **III. INFLUENT MONITORING REQUIREMENTS**

[Not applicable]

# IV. EFFLUENT MONITORING REQUIREMENTS

# A. Monitoring Location EFF-001

1. The Discharger shall monitor storm water and truck wash water at EFF-001 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level.

**Table E-2. Effluent Monitoring** 

Parameter Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>1</sup>	Required Analytical Test Method
Biochemical Oxygen Demand (BOD)(5-day @20 Deg. C)	mg/L	Grab	once per discharge event	2
Oil and Grease	mg/L	Grab	once per discharge event	2
рН	s.u.	Grab	once per discharge event	2
Total Suspended Solids (TSS)	mg/L	Grab	once per discharge event	2
Arsenic, Total Recoverable	μg/L	Grab	once per discharge event	2
Barium	μg/L	Grab	once per discharge event	2
Cadmium, Total Recoverable	μg/L	Grab	once per discharge event	2
Copper, Total Recoverable	μg/L	Grab	once per discharge event	2
Lead, Total Recoverable	μg/L	Grab	once per discharge event	2
Mercury, Total Recoverable	μg/L	Grab	once per discharge event	2
Nickel, Total Recoverable	μg/L	Grab	once per discharge event	2
Selenium, Total Recoverable	μg/L	Grab	once per discharge event	2
Silver, Total Recoverable	μg/L	Grab	once per discharge event	2
Zinc, Total Recoverable	μg/L	Grab	once per discharge event	2
Remaining Priority Pollutants <sup>3</sup>	μg/L	Grab	once per year	2
TCDD <sup>4</sup>	μg/L	Grab	once per year	2
Acute toxicity	% survival	Grab	once per year	2
Chronic toxicity	$TU_{\mathtt{c}}$	Grab	once per year_	2
Chlorpyrifos	μg/L	grab	once per year 5	
Diazinon	μg/L	grab	once per year <sup>5</sup>	

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Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>1</sup>	Required Analytical Test Method
Ammonia as (N)	mg/L	Grab	once per discharge event	2
Boron	mg/L	Grab	once per discharge event	2
Chloride	mg/L	Grab	once per discharge event	2
Conductivity	mg/L	Grab	once per discharge event	2
Total Flow	MGD	Continuous	once per discharge event	
MTBE	μg/L	Grab	once per discharge event	2
Nitrate-N + Nitrite-N	mg/L	Grab	once per discharge event	2
Phenolic Compounds, Total <sup>6</sup>	μg/L	Grab	once per discharge event	2
Settleable Solids	mg/L	Grab	once per discharge event	2
Sulfate	mg/L	Grab	once per discharge event	2
Temperature	μg/L	Grab	once per discharge event	2
Total Petroleum Hydrocarbons <sup>7</sup>	μg/L	Grab	once per discharge event	2
Turbidity	NTU	Grab	once per discharge event	2

Sampling shall be during the first hour of discharge. If a sample cannot be obtained due to safety reasons, documentation shall be included in the report.

- Pollutants shall be analyzed using the analytical methods described in Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, provided as Attachment H. Where no methods are specified for a given pollutant, methods must be approved by this Regional Water Board or the State Water Board.
- Sampling shall be conducted only when there is a discharge. Only one sample shall be collected for priority pollutant analysis per year. Priority Pollutants as defined by the CTR defined in Finding II.I of the Limitations and Discharge Requirements of this Order, and included as Attachment I. Annual samples shall be collected during the first hour of discharge from the first storm event of the wet season (October 1 May 30).
- All seventeen congeners of TCDD must be analyzed as stipulated in State Implementation Policy
- If the detected concentration exceeds the criteria, the frequency of analysis must be increased to once per discharge. After four consecutive samplings demonstrating compliance the frequency reverts back to annually.
- 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-diritrophenol; 2,4-dinitrophenol; 2-methyl-4,6-dinitrophenol; pentachlorophenol; and 4-nitrophenol.
- Both gasoline and diesel fractions; analysis using USEPA 8015 Modified method

# V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

## A. Acute Toxicity Monitoring Program

- The Discharger shall conduct acute toxicity tests on effluent grab samples by methods specified in 40 CFR Part 136 which cites USEPA's Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fifth Edition. October 2002 (EPA/821-R-012) or a more recent edition to ensure compliance in 100 % effluent.
- 2. The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish effluent. The method for topsmelt is found in USEPA's *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, October 2002 (EPA/821-R-02-013).

3. In lieu of conducting the standard acute toxicity testing with the fathead minnow, the Discharger may elect to report the results or endpoint from the first 48 hours of the chronic toxicity test as the results of the acute toxicity test.

## B. Chronic Toxicity Effluent Monitoring Program

- The Discharger shall conduct critical life stage chronic toxicity tests on effluent samples (24-hour composite) or receiving water samples in accordance with EPA's Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, October 2002 (EPA/821-R-02-013) or EPA's Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition, October 2002, (EPA/821-R-02-014).
- Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.

# 3. Test Species and Methods:

- a. The Discharger shall conduct tests as follows: with a vertebrate, an invertebrate, and an alga for the first three suites of tests. After the screening period, monitoring shall be conducted using the most sensitive species.
- b. Re-screening is required every 15 months. The Discharger shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive than the re-screening does not need to include more that one suite of tests. If a different species is the most sensitive or if there is ambiguity then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.
- c. The presence of chronic toxicity shall be estimated as specified using West Coast marine organisms according to EPA's Short-Term Methods for Estimating Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms, Fourth Edition, October 2002 (EPA/821-R-02-013).

# C. Quality Assurance

- Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).
- If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manuals (EPA/600/4-91/002 and EPA/821-R-02-013), then the Discharger must re-sample and re-test within 14 days of notification by the laboratory of an invalid test.
- Control and dilution water shall be receiving water or laboratory water as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

## D. Accelerated Monitoring

- 1. If toxicity exceeds the limitations (as defined in Order No. R4-2007-0XXX, Section IV.A.1.b.(a).i and IV.A.1.b.(b).i), then the Discharger shall immediately implement accelerated testing, as specified at Section IV.A.1.b.(a).ii and IV.A.1.b.(b).ii. The Discharger shall ensure that they receive results of a failing toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 3 business days of receipt of the results or at the first opportunity of discharge. If the accelerated testing shows consistent toxicity, the discharger shall immediately implement the Initial Investigation of the TRE Workplan.
- 2. If implementation of the initial investigation TRE workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger may discontinue the TIE.
- 3. The first step in the initial Investigation TRE Workplan for downstream receiving water toxicity can be a toxicity test protocol designed to determine if the effluent causes or contributes to the measured downstream chronic toxicity. If this first step TRE testing shows that the outfall effluent does not cause or contribute to downstream chronic toxicity, using EPA's Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, October 2002(EPA/821-R-02-013). Then a report on this testing shall be submitted to the Board and the TRE will be considered to be completed. Routine testing in accordance with MRP No. 6658 shall be continued thereafter.
- E. Steps in Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE)
  - Following a TRE trigger, the Discharger shall initiate a TRE in accordance with the facility's initial investigation TRE workplan. At a minimum, the Discharger shall use EPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. The Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 30 days of the trigger, which will include, but not be limited to:
    - a. Further actions to investigate and identify the cause of toxicity;
    - Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity;
    - Standards the Discharger will apply to consider the TRE complete and to return to normal sampling frequency; and,
    - d. A schedule for these actions
  - 2. The following is a stepwise approach in conducting the TRE
    - a. Step 1 Basic data collection. Data collected for the accelerated monitoring requirements may be used to conduct the TRE;
    - Step 2 Evaluates optimization of the treatment system operation, facility housekeeping, and the selection and use of in-plant process chemicals;
    - If Steps 1 and 2 are unsuccessful, Step 3 implements a Toxicity Identification Evaluation (TIE) and employment of all reasonable efforts and using currently available TIE

methodologies. The objective of the TIE is to identify the substance or combination of substances causing the observed toxicity;

- d. Assuming successful identification or characterization of the toxicant(s), Step 4
   evaluates final effluent treatment options;
- e. Step 5 evaluates in-plant treatment options; and,
- f. Step 6 consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of implementation of these control measures may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there is no longer toxicity (or six consecutive chronic toxicity results are less than or equal to 1.0 TU<sub>c</sub>).

- The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the EPA acute and chronic manuals, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) as guidance.
- 4. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required by Part IV.A.1.b.(a) .ii and Part IV.A.1.b.(a) .ii of this permit, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.
- Toxicity tests conducted as part of a TRE/TIE may also be used for compliance, if appropriate.
- 6. The Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

#### F. Reporting

 The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month as required by this permit. Test results shall be reported in Toxicity Units (percent survival or TU<sub>c</sub>) with the discharge monitoring reports (DMR) for the month in which the test is conducted.

If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to Section IV.A.1.b., those results shall also be submitted with the DMR for the period in which the Investigation occurred.

- The full report shall be submitted on or before the end of the month in which the DMR is submitted.
- 3. The full report shall consist of (1) the results; (2) the dates of sample collection, initiation,

and completion of each toxicity tests; (3) the acute toxicity limit or chronic toxicity limit or trigger as described in Order No. R4-2004-0111 sections IV.A.1.b.(a) and IV.A.1.b.(a); and (4) printout of the ToxCalc or CETIS program results.

- 4. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the DMR. Routine reporting shall include, at a minimum, as applicable, for each test:
- sample date(s);
- 6. test initiation date;
- 7. test species;
- 8. end point values for each dilution (e.g., number of young, growth rate, percent survival);
- 9. NOEC value(s) in percent effluent;
- 10.  $IC_{15}$ ,  $IC_{25}$ ,  $IC_{40}$  and  $IC_{50}$  values in percent effluent;
- 11.  $TU_c$  values  $\left(TU_c = \frac{100}{NOEC}\right)$ ;
- 12. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);
- 13. NOEC and LOEC values for reference toxicant test(s);

toxicity data from at least eleven of the most recent samples.

14. IC<sub>25</sub> value for reference toxicant test(s);

15. Any applicable control charts; and

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- 16. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).
- The Discharger shall notify, by telephone or electronically, this Regional Board of any toxicity exceedance of the limit or trigger within 24 hours of receipt of the results followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan the Discharger will pursue. The

17. The Discharger shall provide a compliance summary, which includes a summary table of --

written report shall describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

## VI. LAND DISCHARGE MONITORING REQUIREMENTS

[Not applicable]

## VII. RECLAMATION MONITORING REQUIREMENTS

[Not applicable]

Attachment E - MRP

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# VIII. RECEIVING WATER MONITORING REQUIREMENTS - SURFACE WATER

# A. Monitoring Location RSW-001

Receiving Water Monitoring for TMDL based effluent limitations established for Calleguas Creek and its tributaries. Monitoring will occur in the tributary to Happy Camp Canyon, in Happy Canyon or in Arroyo Simi in the area where wastewater discharges enters the receiving water.

Table E-3. Receiving Water Monitoring for TMDL based effluent limitations

Constituent	Units	Type of	Minimum Frequency of
		Sample	Analysis
Hardness as CaCO₃	mg/L	grab	Yearly <sup>2</sup>
рН	pH units	grab	Yearly
Temperature	°F	grab	Yearly <sup>2</sup>
Ammonia (as N)	mg/L	Grab	Yearly <sup>2</sup>
Priority Pollutants <sup>3</sup>	μg/L	Grab	Yearly <sup>2</sup>
Chlorpyrifos	μg/L	grab	Yearly 1, 2
Diazinon	μg/L	grab	Yearly 1, 2
Chlordane	μg/L	grab	Yearly 1, 2
4,4-DDD	μg/L	grab	Yearly 1, 2
4,4-DDE	μg/L	grab	Yearly 1, 2
4,4-DDT	μg/L	grab	Yearly 1, 2
Dieldrin	μg/L	grab	Yearly 1, 2
PCBs	μg/L	grab	Yearly 1, 2
Toxaphene	μg/L	grab	Yearly 1, 2

- 1 Compliance is determined by comparing the final concentration to the limits listed in Finding IV.B.1. of Order R4-2007-0XXX.
- Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, provided as Attachment H. Where no methods are specified for a given pollutant, methods must be approved by this Regional Water Board or the State Water Board. If a sample cannot be obtained at the same time as effluent discharge due to safety reasons or if the discharge occurs during non-operating hours, documentation shall be included in the report.
- Monitoring shall be conducted at the same time as effluent discharge. Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.I of the Limitations and Discharge Requirements of this Order, and included as Attachment I.

# IX. RECEIVING WATER SEDIMENT SAMPLING

The Calleguas Creek OC Pesticides and PCBs TMDL includes requirements for the concentrations of several pesticides and PCBs in sediment. Therefore this permit includes requirements to monitor sediment for these constituents. The Discharger may choose to join the Calleguas Creek Watershed TMDL Monitoring Program (CCWTMP) and collect the required sediment samples along with a host of other stakeholders in the watershed. As an alternative the Discharger may choose to collect the sediment samples at the base of the subwatershed where the discharge occurs. The exact location of the sampling point must be stipulated in the initial self-monitoring report. Samples shall be collected only if there is an effluent discharge.

The in-stream sediment sampling shall be conducted according to methods developed by the USGS and outlined in *Guidelines for Collecting and Processing Samples of Stream Bed Sediment for Analysis of Trace Elements and Organic Contaminants for the National Water Quality* 

Assessment Program (1994). A brief description of the protocol also appears in the Draft Calleguas Creek Watershed Management Plan Quality Assurance Project Plan (QAPP) Monitoring and Reporting Program Plan for Nitrogen, OC and PCBs, and Toxicity Total Maximum Daily Loads dated September 26, 2006, beginning on page 38. Discussions include field measurements and observations, sample handling and custody, sample handling and shipping, and analytical methods.

Table E-4. Receiving Water Sediment Monitoring

Table E-4. Receiving water Sediment Monitoring				
Constituent	Units	Type of Sample	Minimum Frequency of Anaysis	
Sediment toxicity (chronic 10-day				
eohaustorius estuarius toxicity)	NA	grab	annually <sup>1</sup>	
48-hour Bivalve Embryo toxicity				
(Mytilus edulis or Crassostrea	NA	grab	annually <sup>1</sup>	
gigas)				
Total ammonia	mg/wet kg	grab	<u>annually <sup>1</sup></u>	
% Moisture	%	grab	annually <sup>1</sup>	
Particle Size Distribution	um	grab	annually <sup>1</sup>	
Total Organic Carbon	% dry weight	grab	annually <sup>1</sup>	
Water velocity	ft/sec	grab	annually <sup>1</sup>	
pH	pH Units	grab	annually <sup>1</sup>	
Temperature	∘C	grab	annually 1	
Dissolved Oxygen	mg/L	grab	annually <sup>1</sup>	
Conductivity	umhos/cm	grab	annually <sup>1</sup>	
Chlordane	ng/g	grab	annually <sup>1</sup>	
4,4-DDD	ng/g	grab	annually <sup>1</sup>	
4,4-DDE	ng/g	grab	annually <sup>1</sup>	
4,4-DDT	ng/g	grab	annually 1	
Dieldrin	ng/g	grab	annually 1	
PCBs	ng/g	grab	annually 1	
Toxaphene	ng/g	grab	annually <sup>1</sup>	

If a discharge occurs during the year

## X. 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 at sampling location EFF-001 or at the discharge point from the facility to Happy Camp Canyon on at least one storm event per month that produces a significant storm water discharge to observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity, and odor. A "significant storm water discharge" is a continuous discharge of storm water for a minimum of one hour, or the intermittent discharge of storm water for a minimum of 3 hours in a 12-hour period.

### B. SWPPP and Spill Contingency Plan Status and Effectiveness Report

- As required under Special Provision VI.C.3 of this Order, the Discharger shall submit an updated SWPPP and Spill Contingency Plan to the Executive Officer of the Regional Water Board within 180 days of the effective date of this permit
- 2. Annually the Discharger shall report the status of the implementation and the effectiveness of the SWPPP and Spill Contingency Plan Status required under Special Provision VI.C.3 of this Order. The SWPPP and Spill Contingency Plan Status shall be reviewed at a minimum once per year and updated as needed to ensure all actual or potential sources of pollutants in wastewater and storm water discharged from the facility are addressed in the SWPPP and Spill Contingency Plan Status. All changes or revisions to the SWPPP and Spill Contingency Plan Status will be summarized in the annual report required under Attachment E, Monitoring and Reporting, Section X.D.

# C. Chemical Use Report

- The Discharger shall submit to the Regional Water Board, together with the first monitoring report required by this permit, a list of all chemicals and proprietary additives which could affect the waste discharge, including quantities of each.
- The Discharger shall report annually summarizing 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.

## XI. REPORTING REQUIREMENTS

- A. General Monitoring and Reporting Requirements
  - 1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
  - 2. If there is no discharge during any reporting period, the report shall so state.
  - 3. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.
  - 4. The Discharger shall inform the Regional Water Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.
  - 5. The Discharger shall report the results of acute toxicity testing, TRE and TIE as required in the Attachment E, Monitoring and Reporting Program, section V.F.
- B. Self Monitoring Reports (SMRs)
  - At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs. Until such notification is given, the Discharger shall submit SMRs in accordance with the requirements described below.

- 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. Quarterly reports shall be due on May 1, August 1, November 1, and February 1 following each calendar quarter.
- 3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-4. Monitoring Periods and Reporting Schedule

Sampling	Monitoring Period Begins	Monitoring Period	SMR Due Date
Frequency	On		
Once per	First discharge event after	January 1 through March 31	May 1
discharge event	January 6, 2008	April 1 through June 30	August 1
		July 1 through September 30	November 1
		October 1 through December 31	February 1
Yearly	January 6, 2008	January 1 through December 31	February 1

- 4. The Discharger shall report with each sample result the applicable Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in section 136.
- 5. 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. Where applicable, the Discharger shall include results of receiving water observations.
- 6. Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.
- 7. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
- 8. SMRs must be submitted to the Regional Water Board, signed and certified as required by the standard provisions (Attachment D), to the address listed below:

California Regional Water Quality Control Board Los Angeles Region 320 W. 4<sup>th</sup> Street, Suite 200 Los Angeles, CA 90013

- C. Discharge Monitoring Reports (DMRs)
  - As described in section X.B.1 of this MRP, at any time during the term of this permit, the State or Regional Water Board may notify the discharger to electronically submit SMRs. Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.
  - DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharge shall submit the original DMR and one copy of the DMR to the address listed below:

Standard Mail	FedEx/UPS/ Other Private Carriers
State Water Resources Control Board	State Water Resources Control Board
Division of Water Quality	Division of Water Quality
c/o DMR Processing Center	c/o DMR Processing Center
PO Box 100	1001 I Street, 15th Floor
Sacramento, CA 95812-1000	Sacramento, CA 95814

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated or modified cannot be accepted.

# D. Other Reports

- 1. In accordance with Special Provision VI.C.3, the Discharger is required to submit the following to the Regional Water Board within 180 days of the effective date of this permit:
  - a. Initial Investigation TRE workplan
  - b. Updated SWPPP
  - c. Updated BMPP
  - d. Spill Prevention Control and Countermeasures (SPCC) Plan
- 2. By March 1 of each year, the Discharger shall submit an annual report to the Regional Water Board. The report shall contain the following:
  - a. Both tabular and graphical summaries of the monitoring data obtained during the previous year,
  - A discussion on the compliance record and the corrective actions taken or planned to bring the discharge into full compliance with the waste discharge requirements,
  - c. A report discussing the following: 1) operation/maintenance problems; 2) changes to the facility operations and activities; 3) potential discharge of the pollutants associated with the changes and how these changes are addressed in the BMPP; 3) calibration of flow meters or other equipment/device used to demonstrate compliance with effluent limitations of this Order.
  - d. A report summarizing 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.
  - e. A report on the status of the implementation and the effectiveness of the SWPPP, BMPP, and SPCC Plan.
- 3. This Regional Water Board requires the Discharger to file with the Regional Water Board, within 90 days after the effective date of this Order, a technical report on his preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:

- a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.
- b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.
- Describe facilities and procedures needed for effective preventive and contingency plans.
- d. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational.

This Regional Water Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions may be incorporated as part of this Order, upon notice to the Discharger.

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## ATTACHMENT F - FACT SHEET

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

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

# I. PERMIT INFORMATION

The following table summarizes administrative information related to the Facility.

**Table F-1 Facility Information** 

Table F-1 Facility illiorination	
WDID	4A562022001
Discharger	CEMEX Construction Materials, L.P.
Name of Facility	Moorpark Facility
	9035 Roseland Avenue
Facility Address	Moorpark, California 93020
	Los Angeles County
Facility Contact, Title and Phone	Jorge Lanza, Plant Manager, (805) 529-1535
Authorized Person to Sign and	Holly Ebright, Environmental Coordinator, (805) 529-1535
Submit Reports	
Mailing Address	P.O. Box 1030, Moorpark, California 93021
Billing Address	SAME
Type of Facility	Industrial (sand and gravel quarry)
Major or Minor Facility	Minor
Threat to Water Quality	3
Complexity	С
Pretreatment Program	NA
Reclamation Requirements	NA
Facility Permitted Flow	0.120 million gallons per day or more (based on severity of storm)
Watershed	Calleguas Creek
Receiving Water	Happy Camp Canyon
Receiving Water Type	Inland Surface Water

A. CEMEX Construction Materials, L.P. (hereinafter Discharger) is the owner and operator of Moorpark Facility (hereinafter Facility) a sand and gravel mining and process facility.

For 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 Happy Camp Canyon, a water of the United States and is currently regulated by Order No. R4-2002-0102 which was adopted on May 23, 2002, and expired on April 10, 2007. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order.
- C. The Discharger filed a Report of Waste Discharge (ROWD) and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on Octobers 9, 2006. Supplemental Information was requested on April 10, 2007 and received on May 30, 2007. A site visit was conducted on January 17, 2007, to observe operations and collect additional data to develop permit limitations and conditions.

## II. FACILITY DESCRIPTION

CEMEX Construction, L.P. is the owner and operator of a 1400-acre sand and gravel mining and processing facility located at 9035 Roseland Avenue in Moorpark, California that 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, vehicle fueling, and vehicle maintenance. The Facility is approximately 4 miles north of the City of Moorpark. Production varies, but the annual production rate in 2006 was 1.3 million tons of wash plaster sand, wash concrete sand, rock, pea gravel, fill sand, and dry plaster sand.

## A. Description of Wastewater and Treatment

The Discharger intermittently discharges 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, which flows through eight settling basins placed in series. Storm water flow to the basins varies with rainfall. Ready-mix concrete operations are typically suspended during heavy rainfall. Discharges of truck washwater and wet down water range from 13,000 to 23,000 gpd, depending on production at the Facility.

There are two large basins; the upper Basin No. 1 (3 million gallons capacity), and the lower Basin, No. 8 (2.4 million gallons capacity). The remaining six are smaller basins (with a capacity range of 0.2 million gallons to 1 million gallons), placed in series. The total design capacity of the basins is approximately 7.1 million gallons.

Debris Basin Nos. 1 through 4 are designed to settle solids and water is allowed to percolate into the ground and/or be pumped back into recycle ponds for reuse. Water in these debris basins may also be pumped to the quarry for additional on-site containment during heavy rain events. In addition, during heavy rain Debris Basin No. 4 may overflow into a second set of debris basins (Basin Nos. 5-8).

The large lower settling basin (Debris Basin No. 8) is an unlined pond used for percolation and evaporation per Waste Discharge Requirements Order No. 83-016 and also acts as a debris basin. The debris basins are dredged annually to prevent sediment build-up and possible overflow. Only during extremely heavy storm events will a discharge occur from Debris Basin No. 8.

Process water is discharged to Debris Basin Nos. 6 and 7. Aggregate truck wet down water is discharged directly to Debris Basin No. 8.

The existing permit required that annual sampling of the wastewater contained in the lower debris basin (Detention Basin No. 8) be performed if no surface water discharges occurred. Three such sampling events were conducted. In addition, during the last 5 years there were two discharges from the Facility to the surface water. A discharge in January 2005 had an estimated discharge volume of 76,000 gallons and a discharge in February 2005 had a discharge volume of 60,700 gallons. Due to dangerous conditions, the flow was not measured and effluent sampling did not occur during the discharge event. The Discharger sampled the wastewater held in the lower detention basin (Detention Basin No. 8) within 2 days of the discharge event.

The following table summarizes the monitoring data for the five debris basin sampling events:

Table F-2. Summary of Debris Basin Sampling Data

Parameter (units)	Monitoring Data
BOD₅20ºC (mg/L)	18 <sup>1</sup>
Oil and Grease (mg/L)	1.6 – 1.7
pH (s.u.)	7.5 – 9.8
TSS (mg/L)	21 – 265
Turbidity (NTU)	83 – 87
Arsenic (μg/L)	1.1 – 3.5
Barium (μg/L)	22 – 49
Cadmium (μg/L)	0.25 <sup>1</sup>
Chromium, Trivalent (μg/L)	5.9 – 6.9
Chromium, Hexavalent (µg/L)	9.6 <sup>1</sup>
Copper (µg/L)	76 – 110
Lead (µg/L)	3.7 <sup>1</sup>
Nickel (μg/L)	4 <sup>1</sup>
Selenium (µg/L)	1.6 <sup>1</sup>
Zinc (μg/L)	32 – 85
Dioxin (μg/L)	3.5+ E- <sup>10</sup>
Phenol (μg/L)	1.6
Acute Toxicity (% survival)	95 – 100

Parameter (units)	Monitoring Data
Chloride (mg/L)	5.4 – 70
Conductivity (µmho/cm)	180 – 420
Hardness (mg/L)	70 – 160
Nitrate-N + Nitrite-N (mg/L)	0.012
Phenols, Total (μg/L)	1.6 – 1.9
Sulfate (mg/L)	11 – 52
Total Dissolved Solids (mg/L)	120 – 260
Turbidity (NTU)	12 – 87

One detected value.

## B. Discharge Points and Receiving Waters

The basins are designed to allow solids to settle out and 120,000 gpd or more (based on the severity of storm) of water is intermittently discharged through the lower basin/debris basin from Discharge Serial No. 001 (Latitude: 34°, 20', 05.62" North; Longitude: 118°, 52', 42.23" West) into an unnamed tributary to Happy Camp Canyon. Happy Camp Canyon is a tributary to Arroyo Simi and Calleguas Creek, a water of the United States, above the Calleguas Creek estuary, and is part of the Calleguas Creek Watershed Area.

# C. Summary of Existing Requirements

Effluent Limitations contained in the existing Order for discharges from Discharge Point 001 (Monitoring Location EFF-001) are summarized in Table F-3, below.

Table F-3. Summary of Existing Effluent Limitations (Order No. R4-2002-0102)

Parameter (units)	Existing Effluent Limitations (Order No. R4-2002-0102)				
	Instantaneous Minimum	Instantaneou s Maximum	Average Monthly	Maximum Daily	
BOD <sub>5</sub> 20°C (mg/L)		-	20	30	
Oil and grease (mg/L)			10	15	
pH (s.u.)	6.5	8.5	-		
Total Suspended Solids (mg/L)			50	75	
Arsenic, Total Recoverable (μg/L)		1	50		
Barium (µg/L)		-	1,000		
Cadmium, Total Recoverable (µg/L)				5	
Acute Toxicity (% survival)	1				

Parameter (units)	Existing Effluent Limitation				
	Instantaneous Minimum	Instantaneou s Maximum	Average Monthly	Maximum Daily	
Boron (mg/L)				1.0	
Chloride (mg/L)				150	
Nitrate-N + Nitrite-N (mg/L)				10	
Settleable Solids (ml/L)			0.1	0.3	
Sulfates (mg/L)				250	
Temperature (ºF)		100			
Total Dissolved Solids (mg/L)				850	
Turbidity (mg/L)			50	75	

The acute toxicity of the effluent shall be such that: (i) the average survival in undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90 percent, and (ii) no single test results in less than 70 percent survival.

## D. Compliance Summary

Only two discharge events occurred during the permit term and effluent sampling was not performed as required by the permit.

A Notice of Violation letter dated September 17, 2007, was sent to the Discharger.

E. Planned Changes [Not applicable]

# III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed 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 Waste Discharge Requirements (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 provision of CEQA, Public Resources Code sections 21100 through 21177.

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

 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 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 Basin Plan at 2-4 states that the beneficial uses of any specifically identified water body generally apply to its tributary streams. The Basin Plan does not specifically identify beneficial uses for Happy Camp Canyon, but does identify present and potential uses for Arroyo Simi, to which Happy Camp Canyon, is tributary. The Arroyo Simi is tributary to the Calleguas Creek. The beneficial uses of the Arroyo Simi and other tributaries of the Calleguas Creek are:

Arroyo Simi – Hydrologic Unit 403.62

Existing: wildlife habitat, rare, threatened, or endangered species habitat,

Intermittent: industrial process supply, groundwater recharge, freshwater

replenishment, contact and non-contact water recreation, warm

freshwater habitat.

Arroyo Las Posas - Hydrologic Unit 403.62

Existing: groundwater recharge, freshwater replenishment, contact and non-

contact water recreation, warm freshwater habitat, wildlife habitat,

Potential: industrial process supply, industrial service supply, agricultural supply, and

cold freshwater habitat.

Calleguas Creek - Hydrologic Unit 403.12

Existing: industrial service supply, industrial process supply, agricultural supply,

groundwater recharge, contact and non-contact water recreation, warm

freshwater habitat, and wildlife habitat.

Calleguas Creek - Hydrologic Unit 403.11

Existing: agricultural supply, groundwater recharge, freshwater replenishment;

contact and non-contact water recreation, warm freshwater habitat, cold freshwater habitat, wildlife habitat, rare, threatened or endangered species,

and wetland habitat.

Calleguas Creek Estuary – Hydrologic Unit 403.11

Existing: noncontact water recreation, commercial and sport fishing, estuarine

habitat, wildlife habitat, rare, threatened or endangered species, migration of aquatic organisms, spawning, reproduction, and/or early development,

and wetland habitat,

Potential: navigation and water contact recreation.

Mugu Lagoon - Hydrologic Unit 403.11

Existing: navigation, non-contact water recreation, commercial and sport fishing,

estuarine habitat, marine habitat, preservation of biological habitats, wildlife habitat, rare, threatened or endangered species, migration of aquatic organisms, spawning, reproduction, and/or early development, shellfish

harvesting, and wetland habitat,

Potential: water contact recreation.

All of the reaches of Calleguas Creek, except the estuary, also include conditional municipal and domestic supply designations as an intermittent or potential beneficial use in the Basin Plan.

2. Ammonia Basin Plan Amendment. The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Table 3-1 through Table 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Water Board with the adoption of Resolution No. 2002-011, Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Life. The amendment reflects the revised water quality criteria developed by USEPA in the "1999 Update of Ambient Water Quality Criteria for Ammonia," December 1999. The 1999 Update contains USEPA's most recent freshwater aquatic life criteria for ammonia and supersedes all previous freshwater aquatic life criteria for ammonia. The ammonia Basin Plan amendment was approved by the State Water Board, the Office of Administrative Law, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with USEPA's 1999 ammonia criteria update.

No limitation for ammonia included in this Order because there is insufficient monitoring data to conduct reasonable potential analysis (RPA). The Order includes requirements for monitoring of ammonia for both effluent and receiving waters.

- 3. Thermal Plan. The State Water Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. Requirements of the Order implement the Thermal Plan.
- 4. 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.
- 5. State Implementation Policy. On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July

- 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- 6. 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 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- 7. Antidegradation Policy. Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing water quality is maintained unless degradation is justified based on specific findings.

The 2006 State Water Board's California 303(d) List classifies the the Calleguas Creek Reach 7 (was Arroyo Simi Reaches 1 and 2 on 1998 303(d) List) as impaired. The pollutants of concern include boron, chloride, fecal coliform, sulfates, and TDS. . The effluent limits in the permit for constituents with reasonable potential are established to protect the beneficial uses of Happy Camp Canyon and to ensure that the discharge does not degrade its water quality. Also, this permit requires receiving water monitoring for priority pollutants, even if there is no discharge from the facility. This information will be used to complete a reasonable potential analysis (RPA) of all priority pollutants. The permit also includes Reopener Provision which allows revision of effluent limitations for toxic pollutants based on the results of RPA. To date, the Regional Water Board has adopted a TMDL for Metals for the Calleguas Creek, its Tributaries, and Mugu Lagoon, through Resolution No. R4-2006-012.

The discharge is not a new discharge. Discharges only occur in emergency situations, during prolonged periods of rain when the storm water runoff collected cannot be reused or evaporated. Only two intermittent discharges occurred from the Facility to Happy Camp Canyon since 2002, each lasting a day. Potential treatment technologies are being evaluated for storm water treatment prior to discharge to ensure that the WQBELs are met.

This NPDES permit includes effluent limits to ensure that the discharge does not adversely impact the beneficial uses of Happy Camp Canyon or degrade water quality. The inclusion of the effluent limits and prohibitions in the NPDES permit, which ensure that any discharge would not result in the lowering of water quality, coupled with the fact that the discharge occurs infrequently and is temporally limited, support the conclusion that no degradation will arise as a result of reissuing this permit. The issuance of this permit, therefore, is consistent with the state's antidegradation policy.

8. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations<sup>1</sup> section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a

<sup>&</sup>lt;sup>1</sup> All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

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

The TMDL development for Calleguas Creek has been developed for a number of the constituents on the California State Water Board 2002 303(d) list. The WQBELS in this permit have been analyzed to ensure they are consistent with the assumptions and requirements of the WLAs in those TMDLS.

The previous Order (No. R4-2002-0102) referenced the 1998 303(d) List, stating the Arroyo Simi Reach 1 (Moorpark Freeway 23 to Brea Canyon) was impaired by ammonia, boron, chloride, chromium, nickel, selenium, silver, sulfates, TDS, and zinc. No effluent limitations contained in the previous Order were based on TMDLs.

On November 20, 2006 USEPA gave final approval to California's 2006 section 303(d) List of Water Quality Limited Segments. This list was approved by the State Water Board during a Board Meeting on October 25, 2006 (Resolution No. 2006-0079). Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2006 303(d) list and have been scheduled for TMDL development.

1. <u>Calleguas Creek Toxicity, Chlorpyrifos, Diazinon TMDL</u>. The Regional Board approved the Basin Plan amendment to incorporate the TMDL for toxicity, chlorpyrifos, and diazinon in the Calleguas Creek, its tributaries and Mugu Lagoon (Resolution No. R4-2005-009) on July 7, 2005. The TMDL addresses impairment to water quality due to elevated levels of chlorpyrifos, diazinon, other pesticides and/or other toxicants. The amendment includes numeric targets, WLAs, and load allocations for Toxicity Unit Chronic, chlorpyrifos, and diazinon. It also includes a compliance schedule of two years from the effective date of the TMDL to meet the final WLAs and ten years to meet the LAs applied to nonpoint sources.

State Board approved the TMDL on September 22, 2005 (Resolution No. 2005-0067). OAL and EPA approvals were effective on November 27, 2005, and March 14, 2006, respectively. The TMDL became effective on March 24, 2006. A wasteload of 1.0 TUc is allocated to the major point sources (POTWs) and minor point sources discharging to the Calleguas Creek Watershed. Interim and final waste load allocations were also established for chlorpyrifos and diazinon. The implementation schedule specifies that the interim limits for chlorpyrifos and diazinon in storm water NPDES permits be in stream limits.

2. Calleguas Creek and Mugu Lagoon OC Pesticides, PCBs, and Siltation TMDL. Resolution No. R4-2005-0010, a TMDL for organochlorine (OC) pesticides, polychlorinated biphenyl (PCBs) and siltation in Calleguas Creek, its tributaries, and Mugu Lagoon, was also approved by the Regional Board on July 7, 2005. The 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. The TMDL establishes water column targets, fish tissue targets, and sediment targets to ensure the protection of beneficial uses. The TMDL establishes a twenty-year compliance plan for reducing OC pesticides, PCBs and siltation loads from point sources and nonpoint sources.

State Board approved the TMDL on September 22, 2005 (Resolution No. 2005-0068). OAL

and EPA approvals followed on January 20, 2006, and March 14, 2006, respectively. The TMDL was effective on March 24, 2006.

The TMDL also includes waste load allocations for OC pesticides and PCBs in sediment in Calleguas Creek and its tributaries. The waste load allocations have been translated directly into ambient contaminant concentrations in the sediment of Arroyo Simi. Those ambient contaminant concentrations will be compared directly to sediment concentrations measured in the samples collected to determine compliance with the interim or final waste load allocations stipulated.

The Calleguas Creek OC Pesticides and PCBs TMDL includes a compliance schedule of twenty years. This permit includes both the final and interim WLAs with a compliance schedule providing a maximum of five years of operation utilizing the interim WLAs. The permit includes a provision to reopen the permit to implement the final WLAs if the data collected supports implementation of the final WLAs prior to the renewal of the permit.

The waste load allocations in the water column will be translated into effluent limitations utilizing the steady state model from the SIP. The calculated effluent limits will be included in the permit as receiving water effluent limits. Since the discharge is storm water and it is near the top of the watershed, the Discharger may utilize the option of sampling the discharge for the OC pesticides and PCBs or sampling the receiving water. The Discharger may also choose to join the Calleguas Creek Watershed TMDL Monitoring Program (CCWTMP) and monitor at an established compliance sampling location in Arroyo Simi.

3. Calleguas Creek and Mugu Lagoon Metals and Selenium TMDL. Resolution R4-2006-012, the TMDL for metals and selenium for Calleguas Creek, its tributaries and Mugu Lagoon was adopted by the Los Angeles Regional Board on June 8, 2006. The TMDL establishes numeric targets for dissolved copper, nickel, and zinc, and in total recoverable mercury and selenium. It also includes fish tissue targets for mercury, bird egg targets for mercury and selenium and sediment quality guidelines for copper, nickel, and zinc.

State Board approved the TMDL on October 25, 2006 (Resolution No. 2006-0078). OAL and EPA approval the TMDL on February 6, 2007, and March 26, 2007, respectively. The TMDL became effective on March 26, 2007. The TMDL includes final waste load allocations for wet weather total recoverable copper and nickel. A concentration-based waste load allocation applied during both wet and dry weather was also included in the TMDL for mercury.

Discharge from the site enter Calleguas Creek in Reach 7, which was noted as Arroyo Simi Reaches 1 and 2 in the 1998 303(d) List. Dry weather discharges from this area do not reach Calleguas Creek and Mugu Lagoon. Therefore, no dry weather waste load allocations are established for the constituents in the water column. The final waste load allocation developed for mercury was 0.051  $\mu g/L$  based on CTR.

The final waste load allocation for wet daily maximum concentrations of nickel is stipulated as 958  $\mu$ g/L. The TMDL-based daily maximum for nickel (958  $\mu$ g/L), which was developed to protect aquatic life in the lower Calleguas Creek and Mugu Lagoon, is greater than the Title 22-based MCL limit of 100  $\mu$ g/L. Since the groundwater basin below the Arroyo Simi has the municipal and domestic supply as an existing beneficial use and Arroyo Simi has groundwater recharge as an intermittent beneficial use, the effluent limitation implemented must be protective of both groundwater recharge and of the downstream aquatic life beneficial uses. Therefore, the 100  $\mu$ g/L effluent limitation, which is protective of the

beneficial uses of Arroyo Simi and the groundwater basin below it, has been implemented for nickel.

E. Other Plans, Polices and Regulations [Not Applicable]

## IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source discharges 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: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include WQBELs 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. In addition, truck wash water may also contain oil and grease, heavy metals, TSS, turbidity, or chemical residues from concrete additives. Effluent limitations in the current permit were established for pH, temperature, acute toxicity, TSS, turbidity, BOD<sub>5</sub>@20°C, oil and grease, TDS, settleable solids, sulfates, chloride, boron, nitrate-N + nitrite N, arsenic, barium, and cadmium.

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 limitation on a case-by-case basis limitation based on mass are infeasible because the mass or pollutant cannot be related to a measure of production. The limitations, however, must ensure that dilution will not be used as a substitute for treatment. Due to the intermittent and infrequent nature of the Facility's discharge, mass-based effluent limitations have not been established.

# A. Discharge Prohibitions

The discharge prohibitions are based on the requirements of the Basin Plan, State Water Board's plans and policies, the Water Code, and previous permit provisions, and are consistent with the requirements set for other discharges regulated by NPDES permit to Happy Camp Canyon.

# B. Technology-Based Effluent Limitations

# 1. Scope and Authority

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 nonconventional 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 nonconventional pollutants.
- c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and section 125.3 of the Code of Federal Regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in section 125.3.

2. Applicable Technology-Based Effluent Limitations

ELGs have not been developed for discharges from the Facility.

The basis for the effluent limitations for BOD, oil and grease, TSS, and turbidity established in Order No. R4-2002-0102 is not clearly defined as water quality based or technology-based. For TSS, turbidity, BOD, oil and grease, and settleable solids, the existing limitations are technology-based, as these parameters are typically used to monitor treatment plant performance. Pursuant to State and federal anti-backsliding regulations, Order No. R4-2007-XXXX carries over effluent limitations for TSS, turbidity, BOD, oil and grease, and settleable solids as technology-based effluent limitations based on BPJ in accordance with section 125.3. These limitations were determined on a case-by-case basis and are similar to those established for similar facilities within the Los Angeles Region. Further, they continue to be appropriate for this Facility.

The previous Order required the Discharger to develop and implement a *Storm Water Pollution Prevention Plan* (SWPPP). This Order will require the Discharger to update and continue to implement, consistent with the existing Order requirements, a SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into the receiving water. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water. Because storm water discharges do occur at the Facility, this Order will require that the Facility update and continue to implement their SWPPP.

The previous Order also required the Discharger to develop and implement a Best Management Practices Plan (BMPP). This Order will require the Discharger to update and

continue to implement the BMPP. The purpose of the BMPs in the BMPP will be to establish site-specific plans and procedures to prevent hazardous waste/material from being discharged to waters of the State. The updated BMPP shall be consistent with the requirements of 40 CFR 125, Subpart K, and the general guidance contained in the NPDES Best Management Guidance Document, USEPA Report No. 600/9-79-045, December 1979 (revised June 1981). In particular, a risk assessment of each are identified by the Discharger shall be performed to determine the potential of hazardous waste/materials discharge to surface waters.

This Order will require the Discharger to update and continue to implement their Spill Prevention Control and Countermeasures (SPCC) Plan.

The combination of the SWPPP, BMPs, SPCC plan, and existing Order limitations based on past performance and reflecting BPJ will serve as the equivalent of technology-based effluent limitations, in the absence of established ELGs, in order to carry out the purposes and intent of the CWA.

Table F-5. Summary of Technology-based Effluent Limitations: Discharge Point 001

			•	Effluent Limitation	s	
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
BOD₅20ºC	mg/L	20		30		
Oil and grease	mg/L	10		15		
Total Suspended Solids	mg/L	50		75		
Settleable Solids	mg/L	0.1		0.3		
Turbidity	NTU	50		75		

#### 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, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

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

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

## 2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in Section II of the Limitations and Discharge Requirements, the Regional Water Board adopted a Basin Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The beneficial uses applicable to Happy Camp Canyon 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 Happy Camp Canyon. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with section 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time. The CTR criteria for freshwater or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of the Happy Camp Canyon, a water of the United States in the vicinity of the discharge.

Some water quality criteria are hardness dependent. The Discharger provided hardness data for the receiving water (Happy Camp Canyon) as part of their required CTR monitoring. The hardness values reported ranged from 160 mg/L to 550 mg/L as CaCO<sub>3</sub>.

The lowest hardness value (160 mg/L), representing the most conservative approach for establishing criteria, was used for evaluation of reasonable potential.

As previously stated, the existing permit required that annual priority pollutant sampling of the wastewater contained in the lower debris basin (Detention Basin No. 8) discharge be performed if no surface water discharges occurred. Three such sampling events were conducted. In addition, during the last 5 years there were two discharges from the Facility to the surface water. Due to dangerous conditions, the flow was not measured and effluent sampling did not occur during the discharge event. The Discharger sampled the wastewater held in the lower detention basin (Detention Basin No. 8) within 2 days of the discharge event. This detention basin is the last in the chain of treatment basins and it is presumed that wastewater from the basin is characteristic of what was or could be discharged through Discharge Point 001. Therefore, data from all five of these monitoring events have been used to determine reasonable potentiall to cause or contribute to an exceedance of a water quality standard.

Table F-6 summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the detention basin wastewater or receiving water. These criteria were used in conducting the RPA for this Order.

Table F-6. Applicable Water Quality Criteria

				CTR	/NTR Wa	ater Quali	ty Criteria	
			Fresh	water	Salt	water		lealth for ption of:
CTR		Selected Criteria	Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms only
No.	Constituent	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
1	Arsenic	150.00	340.00	150.00				
4	Cadmium	3.56	7.68	3.56				Narrative
5a	Chromium, Trivalent	304.16	2,551.83	304.16				Narrative
5b	Chromium, Hexavalent	11.43	16.29	11.43				Narrative
6	Copper	13.94	21.8	13.94		N/A		
7	Lead	5.79	148.52	5.79				Narrative
9	Nickel	77.63	698.26	77.63				4,600
10	Selenium	5	20	5				
13	Zinc	178.43	178.43	178.43				
14	Cyanide	22	22	5.20				220,000
54	Phenol	4,600,000						4,600,000

"N/A" indicates the receiving water body is not characterized as saltwater, nor are the water quality criteria for the protection of human health for the consumption of water and organisms applicable.

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

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

The RPA was performed for the priority pollutants regulated in the CTR for which data are available. As previously stated, the existing permit required that annual priority pollutant sampling of the wastewater contained in the lower debris basin (Detention Basin No. 8) discharge be performed if no surface water discharges occurred. Three such sampling events were conducted. In addition, during the last five years there were two discharges from the facility to the surface water. Due to dangerous conditions, the flow was not measured and effluent sampling did not occur during the discharge event. The Discharger sampled the wastewater held in the lower detention basin (Detention Basin No. 8) within two days of the discharge event. This detention basin is the last in the chain of treatment basins and it is presumed that wastewater from the basin is characteristic of what was or could be discharged through Discharge Point 001. Therefore, data from all five of these monitoring events have been used to determine reasonable potentiall to cause or contribute to an exceedance of a water quality standard.

Based on the RPA, pollutants that demonstrate reasonable potential are copper, lead, and selenium through Discharge Point 001. Refer to Attachment I for a summary of the RPA and associated effluent limitation calculations.

Table F-7. Summary Reasonable Potential Analysis

CTR		Applicable Water Quality Criteria (C)	Max Effluent Conc. (MEC)	Maximum Detected Receiving Water Conc. (B)	RPA Result - Need	
No.	Constituent	μg/L	μg/L	μg/L	Limit?	Reason
1	Arsenic	150.00	3.5		No	MEC < C; B is ND <sup>1</sup>
4	Cadmium	3.56	0.25	0.25	No	MEC & B < C
5a	Chromium, Trivalent	304.16	6.9	0.21	No	MEC & B < C
5b	Chromium, Hexavalent	11.43	9.6		No	MEC < C; B is ND <sup>1</sup>
6	Copper	13.94	110	48	Yes	MEC & B > C
7	Lead	5.79	3.7	25	Yes	B > C; detected in effluent
9	Nickel	77.63	4		No	MEC < C; B is ND <sup>1</sup>
10	Selenium	5	1.6	5.7	Yes	B > C; detected in effluent
13	Zinc	178.43	85	34	No	MEC & B < C
14	Cyanide	22		42	No	B > C; effluent is ND <sup>1</sup>
54	Phenol	4,600,000	1.6		No	MEC & B < C

ND = nondetect

# 4. WQBEL Calculations

- a. If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in Section 1.4 of the SIP. These procedures include:
  - (1) If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).
  - (2) Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).
  - (3) Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.
- b. Water quality based effluent limits (final) for copper, lead, and selenium are based on monitoring results and following the procedure based on the steady-state model, available in Section 1.4 of the SIP.
- c. Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this tentative Order, no dilution credit is being allowed. However, in accordance with the reopener provision in Section VI.C.1.e in the tentative Order, this Order may be reopened upon the

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submission by the Discharger of adequate information to establish appropriate dilution credits or a mixing zone, as determined by the Regional Water Board.

# d. WQBELs Calculation Example

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

## Concentration-Based Effluent Limitations

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

Calculation of aquatic life AMEL and MDEL:

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

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

Where

- C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order a hardness value of 160 mg/L (as CaCO<sub>3</sub>) was used for development of hardness-dependant criteria, and a pH of 7.9 was used for pH-dependant criteria.
- D = The dilution credit, and
- B = The ambient background concentration

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

For lead the applicable water quality criteria are (reference Table F-2):

$$\begin{array}{ll} ECA_{acute} = & 148.52 \ \mu g/L \\ ECA_{chronic} = & 5.79 \ \mu g/L \end{array}$$

**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.

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

For lead, the following data was used to develop the acute and chronic LTA 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 <sub>acute 99</sub>	ECA Multiplier <sub>chronic 99</sub>
5	0.6	0.32108	0.52743

LTA<sub>acute</sub> =  $148.52 \mu g/L \times 0.32108 = 47.69 \mu g/L$ 

 $LTA_{chronic} = 5.79 \, \mu g/L \, x \, 0.52743 = 3.05 \, \mu g/L$ 

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

LTA = most limiting of LTA<sub>acute</sub> or LTA<sub>chronic</sub>

For lead, the most limiting LTA was the LTA<sub>acute</sub>

$$LTA = 3.05 \mu g/L$$

**Step 4:** Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitation (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 coefficient of variation (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 multipliers are based on a 95<sup>th</sup> percentile occurrence probability, and the MDEL multipliers are based on the 99<sup>th</sup> 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 lead, the following data was used to develop the AMEL and MDEL for aquatic life using equations provided in Section 1.4, Step 5 of the SIP (Table 2 of the SIP also provides this data up to two decimals):

No. of Samples Per Month	CV	Multiplier <sub>MDEL 99</sub>	Multiplier <sub>AMEL 95</sub>
4	0.6	3.1145	1.5524

AMEL<sub>aquatic life</sub> = 
$$3.05 \times 1.5524 = 4.74 \mu g/L$$

$$MDEL_{aquatic life} = 3.05 \times 3.1145 = 9.51 \mu g/L$$

Calculation of human health AMEL and MDEL:

Step 5: For the ECA based on human health, set the AMEL equal to the ECA human health

However, for lead: ECA<sub>human health</sub> = Not Available.

The CTR does not contain a numeric lead criterion protective of human health; therefore, it was not possible to develop a lead AMEL based on human health criteria.

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

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

A lead MDEL<sub>human health</sub> could not be calculated because a lead AMEL<sub>human health</sub> was not available. There are no criteria protective of human health for lead; therefore, none of the limitations for lead are based on human health criteria.

No. of Samples Per Month	CV	Multiplier <sub>MDEL 99</sub>	Multiplier <sub>AMEL 95</sub>	Ratio
4	0.60	3.11	1.55	2.01

**Step 7:** Select the lower of the AMEL and MDEL based on aquatic life and human health as the water-quality based effluent limit for the Order.

## For lead:

AMEL <sub>aquatic life</sub>	MDEL <sub>aquatic life</sub>	AMEL <sub>human health</sub>	MDEL <sub>human health</sub>
<b>4.74</b> μg/L	<b>9.51</b> μg/L	Not Applicable	Not Applicable

The lowest (most restrictive) effluent limits are based on aquatic toxicity and were incorporated into this Order. For lead and selenium there are no human health criteria; therefore, the AMEL and MDEL based on aquatic life criteria are established as the WQBELs. These limits will be protective of aquatic life.

TMDLs are applicable for copper and nickel; however, the WLAs contained in the TMDL (31  $\mu g/L$  Wet Daily Maximum for copper and 958  $\mu g/L$  Wet Daily Maximum for nickel) are greater than the applicable water quality criteria contained in the CTR. Therefore, WQBELs for copper and nickel are established based on the applicable water quality criteria contained in the CTR.

#### 5. WQBELs based on Basin Plan Objectives

The Basin Plan states that the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge. Based on the requirements of the Basin Plan an instantaneous minimum limitation of 6.5 and an instantaneous maximum limitation of 8.5 for pH are included in the proposed permit. The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. Based on the requirements of the Thermal Plan and a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*, a maximum effluent temperature limitation of 86 °F is included in the proposed permit. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. The new temperature effluent limit is reflective of new information available that indicates that the 100 °F temperature is not protective of aquatic organisms. A survey was completed for several kinds of fish and the 86 °F temperature was found to be protective.

The previous Order (No. R4-2002-0102) contained effluent limitations for TDS, sulfates, chloride, boron, nitrate-N plus nitrite-N, arsenic, barium, and cadmium. The basis for these effluent limitations was not clearly defined in the previous Order; however, the effluent limitations contained in the previous Order are consistent with water quality objectives in the Basin Plan. Table 3-5 in the Basin Plan contains maximum contaminant levels (MCLs) for inorganic chemicals, including arsenic, barium, and cadmium. The beneficial uses of the receiving water include groundwater recharge; therefore, it is reasonable to include MCLs as a consideration for developing effluent limitations for this discharge. In addition, Table 3-8 in the Basin Plan contains water quality objectives for selected constituents in inland surface waters, including TDS, sulfate, chloride, boron, and nitrogen. The effluent limitations contained in the previous Order for TDS, sulfate, chloride, boron, and nitrate-N plus nitrite-N are carried over in Order No. R7-2004-XXXX.

## 6. Final WQBELs

Summaries of the WQBELs are described in Table F-8.

Table F-8. Summary of Water Quality-based Effluent Limitations: Discharge Point 001

				Effluent Limitation	S	
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
рН	s.u.				6.5	8.5
Arsenic	μg/L	50				
Cadmium	μg/L			5		
Copper	μg/L	11		22		
Lead	μg/L	4.8		9.5		
Selenium	μg/L	4.1		8.2		
Barium	mg/L	1,000				
Boron	mg/L			1.0		
Chloride	mg/L			150		
Nitrate-N plus Nitrite-N	mg/L			10		
Sulfates	mg/L			250		
Temperature	ºF					86
Total Dissolved Solids (TDS)	mg/L			850		

### 7. Whole Effluent Toxicity (WET)

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test 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 response on 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. The existing permit does not contain toxicity limitations or monitoring requirements.

In accordance with the Basin Plan, acute toxicity limitations dictate 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 acute toxicity limitations.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters.

The Discharger will be required to conduct chronic toxicity testing. The Order includes a chronic testing trigger hereby defined as an exceedance of 1.0 toxic units chronic (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.) If the chronic toxicity of the effluent exceeds 1.0 TUc, the Discharger will be required to immediately implement accelerated chronic toxicity testing according to Monitoring and Reporting Program, Item IV.D.1. If the results of two of the six accelerated tests exceed 1.0 TUc, the Discharger shall initiate a toxicity identification evaluation (TIE).

# D. Final Effluent Limitations

Section 402(o) of the CWA and section 122.44(l) require that effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders based on the submitted sampling data. Effluent limitations for BOD, pH, oil and grease, total suspended solids, arsenic, cadmium, copper, lead, selenium, barium, boron, chloride, nitrate-n plus nitrite-n, settleable solids, sulfates, temperature, total dissolved solids, and turbidity are being carried over from the previous Order (Order No. 99-137). Removal of these numeric limitations would constitute backsliding under CWA section 402(o). The Regional Water Board has determined that these numeric effluent limitations continue to be applicable to the Facility and that backsliding is not appropriate. Effluent limitations for pH and temperature have been revised to reflect WQO changes in the Basin Plan and Thermal Plan. In addition, the effluent limitations for copper, lead, and selenium have been added to this Order because the Facility's discharge was found to have reasonable potential to exceed water quality criteria for these parameters.

### 1. Satisfaction of Anti-Backsliding Requirements

All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.

# 2. Satisfaction of Antidegradation Policy

The discharge from Facility is not a new discharge; the discharge has been permitted for at least the past 19 years. However, discharges of storm water runoff and other waste streams (i.e., ready-mix truck rinse water and aggregate truck wetdown water) from the final settling/debris basin only occur following heavy storm events. During the tenure of the previous Order (2002-2007), there were two discharges from the Facility to the receiving water. The flow during these two discharges were estimated at 76,000 gallons (January 2005) and 60,700 gallons (February 2005). The Order also includes Reopener Provision VI.C.b which allows revision of effluent limitations for toxic pollutants based on the results of an RPA.

This NPDES permit includes effluent limits to ensure that the discharge does not adversely impact the beneficial uses of the receiving waters or degrade water quality. The inclusion of the effluent limits and prohibitions in the NPDES permit, which ensure that any discharge would not result in the lowering of water quality, coupled with the fact that the discharge occurs infrequently and is temporally limited, support the conclusion that no degradation will arise as a result of reissuing this permit. The issuance of this permit, therefore, is consistent with the state's antidegradation policy.

# 3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on TSS, turbidity,  $BOD_520^{\circ}C$ , oil and grease, and settleable solids. Restrictions on these pollutants are discussed in section IV of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

## 4. Mass-based Effluent Limitations

Due to the intermittent and infrequent nature of the Facility's discharge, no mass-based effluent limitations have been established.

Table F-9. Summary of Final Effluent Limitations: Discharge Point 001

	5				+0+		
C				Emuent cinitations	itations 		C
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Basis
BOD <sub>5</sub> 20⁰C	mg/L	20	1	30	-	ł	Previous Order <sup>1</sup>
Hd	s.u.	1	1	1	6.5	8.5	Basin Plan <sup>2</sup>
Oil and Grease	mg/L	10	;	15	1	ł	Previous Order <sup>1</sup>
Total Suspended Solids	mg/L	50	;	75	ŀ	ł	Previous Order <sup>1</sup>
Arsenic	hg/L	20	:	1	1	ŀ	Previous Order, Basin Plan 1
Cadmium	T/Brl	1	;	2	1	1	Previous Order, Basin Plan 1
Copper	hg/L	11	1	22	1	ŀ	SIP/CTR <sup>3</sup>
Lead	T/Brl	4.8	1	9.5	-	1	SIP/CTR <sup>3</sup>
Mercury	T/BH	ł		0.05	1	ŀ	Calleguas Creek Metal TMDL
Nickel	T/BH	ł		100	1	ł	Calleguas Creek Metal TMDL/Basin Plan (Title 22)
Selenium	hg/L	4.1	1	8.2	1	ŀ	SIP/CTR <sup>3</sup>
Barium	T/Brl	1,000	-			-	Previous Order, Basin Plan <sup>1</sup>
Boron	mg/L	-		1.0		-	Previous Order, Basin Plan <sup>1</sup>
Chloride	mg/L	-		150		-	Previous Order, Basin Plan <sup>1</sup>
Nitrate-N plus Nitrite-N	mg/L	1	-	10	-	I	Previous Order, Basin Plan <sup>1</sup>
Settleable Solids	mg/L	0.1	-	0.3		1	Previous Order <sup>1</sup>
Sulfates	T/bm	1	1	250	1	1	Previous Order, Basin Plan <sup>1</sup>
Temperature	J₀	1	-			86	Thermal Plan <sup>4</sup>
Total Dissolved Solids	ml/L	1	-	850	-	ŀ	Previous Order, Basin Plan <sup>1</sup>
Turbidity	NTN	20	1	75		1	Previous Order <sup>1</sup>

These effluent limitations have been carried over from the existing Order (No. R4-2002-0102) to comply with anti-backsliding regulations.

Basin Plan Objectives are instantaneous maximum concentrations of pollutants that when not exceeded are protective of the beneficial uses of the particular water body. They are generally set at the level required to protect the most sensitive beneficial use or at an even lower level based on antidegradation principles.

These effluent limitations are established based on the California Toxics Rule (CTR) and the State Implementation Policy (SIP).

The effluent limitation for temperature has been established based on the Basin Plan and a white paper developed by Regional Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region.* The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel.

## E. Receiving Water Limitations

The discharge shall not cause the concentration of constituents in Happy Camp Canyon or Arroyo Simi, tributaries of Calleguas Creek, in excess of the following limits.

Constituents	<u>Units</u>	<u>Discharge</u> <u>Monthly</u> <u>Average</u>	<u>Limitations</u> <u>Daily Maximum</u>	Rationale
Chlorpyrifos	μg/L		0.02 <sup>1</sup>	Toxicity TMDL
Diazinon	μg/L		0.16 <sup>1</sup>	Toxicity TMDL
Chlordane	μg/L		0.001	OC Pest & PCBs TMDL
4,4-DDD	μg/L		0.0014	OC Pest & PCBs TMDL
4,4-DDE	μg/L		0.001	OC Pest & PCBs TMDL
4,4-DDT	μg/L		0.001	OC Pest & PCBs TMDL
Dieldrin	μg/L		0.0002	OC Pest & PCBs TMDL
PCBs	μg/L		0.0003	OC Pest & PCBs TMDL
Toxaphene	μg/L		0.0003	OC Pest & PCBs TMDL

Limit effective March 24, 2008, through June 10, 2009. The TMDL specifies interim limits which are effective from March 24, 2006, through March 23, 2008.

# F. Receiving Water Sediment Effluent Limitations

The following are the final ambient WLAs for storm water permittees that were established in the Calleguas Creek OC Pesticides & PCBs TMDL. They are measured as in-stream annual averages at the base of each subwatershed where the discharges are located.

The final WLAs must be achieved and become sediment limits after the sampling indicates that the Discharger is able to comply with the final WLAs or at the end of the 20-year compliance schedule specified in the TMDL (March 24, 2026), which ever occurs first. In either event, the permit will be reopened at that time to include appropriate sediment limits.

Constituents	<u>Units</u>	<u>Discharge</u> <u>Monthly</u> <u>Average</u>	<u>Limitations</u> <u>Daily Maximum</u>	<u>Rationale</u>
Chlordane	μg/g		0.0033	OC Pest & PCBs TMDL
4,4-DDD	μg/g		0.002	OC Pest & PCBs TMDL
4,4-DDE	μg/g		0.0014	OC Pest & PCBs TMDL
4,4-DDT	μg/g		0.0003	OC Pest & PCBs TMDL
Dieldrin	μg/g		0.0002	OC Pest & PCBs TMDL
PCBs	μg/g		0.12	OC Pest & PCBs TMDL
Toxaphene	μg/g		0.0006	OC Pest & PCBs TMDL

# G. Interim Limitations

# 1. Effluent

Section 131.38(e) provides conditions under which interim effluent limitations and compliance schedules may be issued. The SIP allows inclusion of an interim limitation with a specific compliance schedule included in an NPDES permit for priority pollutants if the limitation for the priority pollutant is based on CTR criteria and the Discharger

demonstrates that it is infeasible to achieve immediate compliance with the effluent limitations. Because based on existing data, it appears that it is infeasible for the Discharger to immediately comply with the CTR-based effluent limitations for copper an interim effluent limitation and compliance schedule is included in the tentative Order.

Pursuant to the SIP (Section 2.2.1, Interim Requirements under a Compliance Schedule), when compliance schedules are established in an Order, interim limitations must be based on current treatment facility performance or existing permit limitations, whichever is more stringent to maintain existing water quality. There are insufficient data to perform a meaningful statistical analysis to develop interim limitations. Order No. R4-2002-0102 does not contain effluent limitations for copper; therefore, the MEC, 110  $\mu$ g/L, serves as the basis for the interim effluent limitations. It should be noted that the Regional Water Board might take appropriate enforcement actions if interim limitations and requirements are not met.

The SIP requires that the Regional Water Board establish other interim requirements such as requiring the discharger to develop a pollutant minimization plan and/or source control measures and participate in the activities necessary to achieve the final effluent limitations. These interim limitations shall be effective from the effective date of this Order (January 6, 2008) until May 17, 2010, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

Table F-10. Interim Effluent Limitations

Parameter	Unit	MDEL
Copper	μg/L	110

# 2. Receiving Waters

Interim effluent limitations effective for the receiving water from the effective date of the permit through March 23, 2008. The final effluent limitations in Table A for these constituents are effective from March 24, 2008, through the term of the permit.

Constituents	<u>Units</u>	<u>Discharge</u> <u>Monthly Average</u>	<u>Limitations</u> Daily Maximum	<u>Rationale</u>
Chlorpyrifos	μg/L		0.74	Toxicity TMDL
Diazinon	μg/L		0.91	Toxicity TMDL

## 3. Receiving Water Sediment

The following sediment interim WLAs for Calleguas Creek are effective from January 6, 2008, through November 10, 2012 (five years from the effective date of this permit).

Constituents	<u>Units</u>	<u>Discharge</u> <u>Monthly Average</u>	Limitations Daily Maximum	<u>Rationale</u>
Chlordane	μg/g		0.0033	OC Pest & PCBs TMDL
4,4-DDD	μg/g		0.014	OC Pest & PCBs TMDL
4,4-DDE	μg/g		0.17	OC Pest & PCBs TMDL
4,4-DDT	μg/g		0.025	OC Pest & PCBs TMDL

Constituents	<u>Units</u>	<u>Discharge</u> <u>Monthly Average</u>	Limitations Daily Maximum	<u>Rationale</u>
Dieldrin	μg/g		0.0011	OC Pest & PCBs TMDL
PCBs	μg/g		25.7	OC Pest & PCBs TMDL
Toxaphene	μg/g		0.23	OC Pest & PCBs TMDL

- H. Land Discharge Specifications [Not Applicable]
- I. Reclamation Specifications [Not Applicable]

## V. RATIONALE FOR RECEIVING WATER LIMITATIONS

## A. Surface Water

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

B. Groundwater [Not Applicable]

# VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits to specify recording and reporting of monitoring results. Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements 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 those pollutants expected to be present in the Monitoring Locations EFF-001 at Discharge Point 001 will be required as shown in the proposed MRP. To determine compliance with effluent limitations, the proposed monitoring plan carries forward monitoring requirements from previous Order No. R4-2002-0102.

In addition and as per the SIP, the Discharger is required to monitor the effluent for the CTR priority pollutants, to determine reasonable potential. In the event that no discharge occurs during a calendar year, the Discharge is required to provide the sampling results form the lower debris basin (Basin #8) in order to characterize potential discharge. This data will not be used to

determine compliance with effluent limitations, but will be used to determine reasonable potential for the discharge to exceed water quality standards. The monitoring requirements and frequencies of the priority pollutants in the proposed permit are carried over from the previous permit.

# 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.1.a.

# D. Receiving Water Monitoring and Reporting

The Calleguas Creek Toxicity TMDL and the Calleguas Creek OC Pesticides & PCBs TMDL include receiving water concentrations that are to be accomplished utilizing BMPs. The OC Pesticides & PCBs TMDL includes sediment contaminant concentrations for tributaries of Calleguas Creek as well. This permit includes monitoring requirements to demonstrate compliance with the stipulated effluent limits.

# E. Sediment Monitoring and Reporting

The Calleguas Creek OC Pesticides & PCBs TMDL includes waste load allocations and a requirement for monitoring of the sediment. The TMDL stipulates that compliance with the sediment based WLAs is measured as an in-stream annual average at the base of each subwatershed where the discharges are located.

#### F. Other Monitoring Requirements

[Not Applicable]

# VII. RATIONALE FOR PROVISIONS

## A. Standard Provisions

# 1. Federal Standard Provisions

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

Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections

122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

# 2. Regional Water Board Standard Provisions

Regional Water Board Standard Provisions are based on the CWA, USEPA regulations, and the Water Code.

# B. Special Provisions

## 1. Reopener Provisions

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

# 2. Special Studies and Additional Monitoring Requirements

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

# 3. Best Management Practices and Pollution Prevention

This provision is based on section 122.44(k) and includes the requirement to develop a SWPPP.

#### 4. Compliance Schedules

This provision is based on the SIP, Section 2.1, Compliance Schedules. CTR's Compliance Schedule provisions sunset on May 18, 2005. After this date, the provisions of the SIP allow for Compliance Schedules not to exceed 5 years from issuance or past May 17, 2010, which ever is sooner. The Discharger is required to develop and submit a Compliance Plan.

According to the SIP, pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. Receiving water data provided by the Discharger indicated concentrations of selenium above applicable water quality criteria; effluent limitations for selenium are established in this Order. This permit also requires that the Discharger develop and implement a Pollution Minimization Plan for selenium. Pursuant to section 2.4.5.1 of the SIP, pollution minimization includes: monitoring for potential sources of the pollutants, periodic monitoring, control strategy, control measure implementation, and an annual status report sent to the Regional Water Board.

# 5. Construction, Operation, and Maintenance Specifications

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

- 6. Special Provisions for Municipal Facilities (POTWs Only)
  - a. Sludge Disposal Requirements. Requirements are based on the previous Order and part 503.
  - b. Pretreatment Program Requirements. Requirements are based on the previous Order and part 403.
- 7. Other Special Provisions

## VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Board, Los Angeles Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollution Discharge Elimination System (NPDES) permit for the Vopak Terminal Los Angeles, Inc. 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 should 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 should be received at the Regional Water Board offices on November 29, 2007, by 5:00 p.m.

# C. Hearing Date and Location

The Regional Board is scheduled to hold a public hearing on:

December 6, 2007 at 9:00 AM Metropolitan Water District of Southern California 700 North Alameda Street, Los Angeles, California

Please check the Regional Board website (<a href="http://www.waterboards.ca.gov/losangeles/">http://www.waterboards.ca.gov/losangeles/</a>) for the most up to date public hearing location as it is subject to change.

# D. Availability of Documents

The Report of Waste Discharge (ROWD), related documents, tentative requirements, comments received, and other information received on the discharge are available for inspection and copying between the hours of 8:00 a.m. and 4:30 p.m. at the following address:

California Regional Water Quality Control Board Los Angeles Region 320 West 4<sup>th</sup> Street, Suite 200 Los Angeles, CA 90013

Arrangements for file review and/or obtaining copies of the documents may be made by calling the Los Angeles Regional Board at (213) 576-6600. The entire file will become a part of the administrative record of this proceeding, irrespective of whether individual documents are specifically referenced during the hearing. The entire file will not be present in the hearing room. Should any interested persons desire staff to bring to the hearing any particular documents that are not included in the agenda packet, they must submit a written or electronic request to staff during business hours, not later than [5] business days before the hearing. The request must identify the documents with enough specificity for staff to locate them.

# E. Nature of Hearing

This proceeding will be a formal adjudicatory proceeding. For such proceedings, the Regional Board follows procedures established by the State Water Resources Control Board, which are set forth in regulations commencing with section 647 of title 23 of the California Code of Regulations, in particular, Article 2, commencing with section 648. While this proceeding is formal, as an administrative proceeding, the Board does not generally require the prior identification or cross examination of witnesses, or other procedures not specified in this notice, that might typically be expected of parties in a courtroom.

# F. Communications with Staff Before the Hearing

The lead staff member responsible for this item is:

Name: Mazhar Ali

Address: 320 West 4<sup>th</sup> Street, Suite 200, Los Angeles, CA 90013

Telephone: 213-576-6652 Fax: 213-576-6660

Email: mali@waterboards.ca.gov

# G. Parties to the Hearing

The following are the parties to this proceeding:

1. The Applicant/Permittee: CEMEX Construction Materials, L.P. (Moorpark Facility)

2. Regional Board Staff: Cassandra Owens, Chief

Industrial Permitting Unit

Mazhar Ali, Industrial Permitting Unit

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.

#### H. Public Comments and Submittal of Evidence

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to the above address. To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments must be received no later than close of business on November 29 2007. 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.

# I. 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 30 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.

If there should not be a quorum on the scheduled date of this meeting, all cases will be automatically continued to the next scheduled meeting on January 10, 2008. A continuance will not extend any time set forth herein.

# J. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water 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

# ATTACHMENT G - STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

## Objectives

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

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

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

# 2. 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 the Monitoring and Reporting Program (Attachment E). The SWPPP shall clearly identify the 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 Order. Facility operators should identify any existing facility plans that contain storm water pollutant control measures or relate to the requirements of this Order. 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.

## 3. Site Map

The SWPPP shall include a site map. The site map shall be provided on an  $8-\frac{1}{2}$  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

# PLANNING AND ORGANIZATION

Form Pollution Prevention Team Review other plans

# ASSESSMENT PHASE

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

# BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE

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

## **IMPLEMENTATION PHASE**

Train employees
Implement BMPs
Conduct recordkeeping and reporting

# **EVALUATION / MONITORING**

Conduct annual site evaluation Review monitoring information Evaluate BMPs Review and revise SWPPP The following information shall be included on the site map:

- a. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, and ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.
- b. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil-water separators, diversion barriers, etc.
- c. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.
- d. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks 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.

## 4. 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.

# 5. Description of Potential Pollutant Sources

a. The SWPPP shall include a narrative description of the facility's industrial activities 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:

#### i. 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.

# ii. 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.

# iii. 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.

# iv. Significant Spills and Leaks

Describe materials that have spilled or leaked in significant quantities in storm water. 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 Order.

# v. Non-Storm Water Discharges

Facility operators shall investigate the facility to identify all non-storm water discharges and their sources not authorized by this Order. As part of this investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

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

The SWPPP must include BMPs to prevent or reduce contact of un-authorized non-storm water discharges with significant materials or equipment.

## vi. 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.

 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
 The last column of Table B, "Control Practices", should be completed in accordance with Section 7. below.

## 6. Assessment of Potential Pollutant Sources

- a. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described above to determine:
  - i. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and
  - iii. Which pollutants are likely to be present in storm water discharges and authorized nonstorm 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 runon 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 7 below.

# 7. Storm Water Best Management Practices

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections 5 and 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	Spills and leaks during delivery.	fuel oil	Use spill and overflow protection.
Fueling				Minimize run-on of storm water into
		Spills caused by topping off fuel		the fueling area.
		tanks.		Cover fueling area.
		Hosing or washing down fuel oil fuel area.		Use dry cleanup methods rather than hosing down area.
		Leaking storage tanks.		Implement proper spill prevention control program.
		Rainfall running off fuel oil, and rainfall running onto and off		Implement adequate preventative maintenance program to preventive tank and line leaks.
		fueling area.		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 7.b, below). Below is a list of non-structural BMPs that should be considered:

## i. Good Housekeeping

Good housekeeping generally consist of practical procedures to maintain a clean and orderly facility.

## ii. 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.

# iii. 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.

# iv. 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.

# v. 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.

## vi. Waste Handling/Recycling

This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

# vii. 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.

# viii. 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.

#### ix. 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.

### x. 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 7.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:

## i. 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.

## ii. Retention Ponds

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

#### iii. Control Devices

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

# iv. Secondary Containment Structures

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

## v. 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.

# 8. 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.
- 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 Order.
- e. When any part of the SWPPP is infeasible to implement by the deadlines specified in this Order 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 (ML)

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

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

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

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
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	10	5	
di-n-Butyl phthalate		10	<u> </u>	
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2	0.1	
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene	10	10	0.03	
Hexachloro-cyclopentadiene	5	5	0.1	
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1 1	+	
Hexachloroethane	5	1 1		
Indeno(1,2,3,cd)-pyrene	-	10	0.05	
Isophorone	10	1	5.00	
N-Nitroso diphenyl amine	10	1	1	
N-Nitroso-dimethyl amine	10	5	1	
N-Nitroso -di n-propyl amine	10	5	1	
Naphthalene	10	1	0.2	
Nitrobenzene	10	1 1	0.2	
Pentachlorophenol	1	5	+	
Phenanthrene	'	5	0.05	
Phenol **	1	1	0.00	50
Pyrene	'	10	0.05	50
1 yrono	I	1 10	0.03	l .

<sup>\*</sup> 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
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

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\* 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 - PRIORITY POLLUTANTS

CTR	Parameter	CAS	Suggested Analytical Methods		
Number		Number	Analytical	wetnoas	
	Antingonic	7440000	1		
1	Antimony	7440360	1		
2	Arsenic	7440382	1		
<u>3</u>	Beryllium	7440417	1		
-	Cadmium	7440439	1		
<u>5a</u>	Chromium (III)	16065831	1		
5a	Chromium (VI)	18540299	1		
6	Copper	7440508	1		
7	Lead	7439921	1		
8	Mercury	7439976	1		
9	Nickel	7440020			
10	Selenium	7782492	1		
11	Silver	7440224	1		
12	Thallium	7440280			
13	Zinc	7440666			
14	Cyanide	57125	1		
15	Asbestos	1332214			
16	2,3,7,8-TCDD	1746016	1		
17	Acrolein	107028	1		
18	Acrylonitrile	107131	1		
19	Benzene	71432	1		
20	Bromoform	75252	1		
21	Carbon Tetrachloride	56235	1		
22	Chlorobenzene	108907	1		
23	Chlorodibromomethane	124481	1		
24	Chloroethane	75003	1		
25	2-Chloroethylvinyl Ether	110758	1		
26	Chloroform	67663	1		
27	Dichlorobromomethane	75274	1		
28	1,1-Dichloroethane	75343	1		
29	1,2-Dichloroethane	107062	1		
30	1,1-Dichloroethylene	75354	1		
31	1,2-Dichloropropane	78875	1		
32	1,3-Dichloropropylene	542756	1		
33	Ethylbenzene	100414	1		
34	Methyl Bromide	74839	1		
35	Methyl Chloride	74873	1		
36	Methylene Chloride	75092	1		
37	1,1,2,2-Tetrachloroethane	79345	1		
38	Tetrachloroethylene	127184	1		
39	Toluene	108883	1		
40	1,2-Trans-Dichloroethylene	156605	1		
41	1,1,1-Trichloroethane	71556	1		
42	1,12-Trichloroethane	79005	1		
43	Trichloroethylene	79016	1		
43	Vinyl Chloride	75014	1		
45	2-Chlorophenol	95578	1		
45 46	2,4-Dichlorophenol	120832	1		

CTR	Parameter	CAS	Suggested
Number		Number	<b>Analytical Methods</b>
47	2,4-Dimethylphenol	105679	1
48	2-Methyl-4,6-Dinitrophenol	534521	1
49	2,4-Dinitrophenol	51285	1
50	2-Nitrophenol	88755	1
51	4-Nitrophenol	100027	1
52	3-Methyl-4-Chlorophenol	59507	1
53	Pentachlorophenol	87865	1
54	Phenol	108952	1
55	2,4,6-Trichlorophenol	88062	1
56	Acenaphthene	83329	1
57	Acenaphthylene	208968	1
58	Anthracene	120127	1
59	Benzidine	92875	1
60	Benzo(a)Anthracene	56553	1
61	Benzo(a)Pyrene	50328	1
62	Benzo(b)Fluoranthene	205992	1
63	Benzo(ghi)Perylene	191242	1
64	Benzo(k)Fluoranthene	207089	1
65	Bis(2-Chloroethoxy)Methane	111911	1
66	Bis(2-Chloroethyl)Ether	111444	1
67	Bis(2-Chloroisopropyl)Ether	108601	1
68	Bis(2-Ethylhexyl)Phthalate	117817	1
69	4-Bromophenyl Phenyl Ether	101553	1
70	Butylbenzyl Phthalate	85687	1
71	2-Chloronaphthalene	91587	1
72	4-Chlorophenyl Phenyl Ether	7005723	1
73	Chrysene	218019	1
74	Dibenzo(a,h)Anthracene	53703	1
75	1,2-Dichlorobenzene	95501	1
76	1,3-Dichlorobenzene	541731	1
77	1,4-Dichlorobenzene	106467	1
78	3,3'-Dichlorobenzidine	91941	1
79	Diethyl Phthalate	84662	1
80	Dimethyl Phthalate	131113	1
81	Di-n-Butyl Phthalate	84742	1
82	2,4-Dinitrotoluene	121142	1
83	2,6-Dinitrotoluene	606202	1
84	Di-n-Octyl Phthalate	117840	1
85	1,2-Diphenylhydrazine	122667	1
86	Fluoranthene	206440	1
87	Fluorene	86737	1
88	Hexachlorobenzene	118741	1
89	Hexachlorobutadiene	87863	1
90	Hexachlorocyclopentadiene	77474	1
91	Hexachloroethane	67721	1
92	Indeno(1,2,3-cd)Pyrene	193395	1
93	Isophorone	78591	1
94	Naphthalene	91203	1
95	Nitrobenzene	98953	1
96	N-Nitrosodimethylamine	62759	1
97	N-Nitrosodi-n-Propylamine	621647	1
98	N-Nitrosodiphenylamine	86306	1
99	Phenanthrene	85018	1

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
100	Pyrene	129000	1
101	1,2,4-Trichlorobenzene	120821	1
102	Aldrin	309002	1
103	alpha-BHC	319846	1
104	beta-BHC	319857	1
105	gamma-BHC	58899	1
106	delta-BHC	319868	1
107	Chlordane	57749	1
108	4,4'-DDT	50293	1
109	4,4'-DDE	72559	1
110	4,4'-DDD	72548	1
111	Dieldrin	60571	1
112	alpha-Endosulfan	959988	1
113	beta-Endosulfan	33213659	1
114	Endosulfan Sulfate	1031078	1
115	Endrin	72208	1
116	Endrin Aldehyde	7421934	1
117	Heptachlor	76448	1
118	Heptachlor Epoxide	1024573	1
119	PCB-1016	12674112	1
120	PCB-1221	11104282	1
121	PCB-1232	11141165	1
122	PCB-1242	53469219	1
123	PCB-1248	12672296	1
124	PCB-1254	11097691	1
125	PCB-1260	11096825	1
126	Toxaphene	8001352	1

<sup>1.</sup> Pollutants shall be analyzed using methods described in 40 CFR Part 136

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