CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

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ORDER NO. R4-2011-0176 NPDES NO. CA0059013

WASTE DISCHARGE REQUIREMENTS FOR LUBRICATING SPECIALTIES COMPANY PICO RIVERA FACILITY

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

 Table 1. Discharger Information

Discharger	Lubricating Specialties Company	
Name of Facility	Pico Rivera Facility	
	8015 Paramount Boulevard	
Facility Address	Pico Rivera, California 90660	
	Los Angeles County	
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a minor discharge.		

The discharge by the Lubricating Specialties Company from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge	Effluent	Discharge Point	Discharge Point	Receiving Water
Point	Description	Latitude	Longitude	
001	Treated Storm Water From Oil Storage and Blending Site	33º 58' 18"	118º 06' 56"	Rio Hondo (Reach 1)

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	November 10, 2011
This Order shall become effective on:	December 10, 2011
This Order shall expire on:	October 10, 2016
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:	April 13, 2016

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on November 10, 2011.

Samuel Unger, Executive Officer

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I. FACILITY INFORMATION

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

Discharger	Lubricating Specialties Company	
Name of Facility	Pico Rivera Facility	
	8015 Paramount Boulevard	
Facility Address	Pico Rivera, California 90660	
	Los Angeles County	
Facility Contact, Title, and Phone	Farhad Tabarsi, Regulatory Compliance Manager (562) 776-4017	
Mailing Address	8015 Paramount Boulevard, Pico Rivera, California 90660	
Type of Facility	Lubrication Oils and Greases (SIC 2992)	
Facility Design Flow	Discharge Point No. 001: 0.258 million gallons per day	

Table 4. Facility Information

II. FINDINGS

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

A. Background. Lubricating Specialties Company (hereinafter Discharger) is currently discharging pursuant to Order No. R4-2006-0065 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0059013. The Discharger submitted a Report of Waste Discharge, received February 18, 2011, and applied for a NPDES permit renewal to discharge up to 0.258 million gallons per day (MGD) from the Pico Rivera Facility (hereinafter Facility). On June 14, 2011, the application was determined to be incomplete and additional information was requested. The requested information was submitted on June 22nd, July 1st, 5th, and July 8, 2011. The application was determed complete on July 12, 2011.

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

B. Facility Description. Lubricating Specialties Company owns and operates the Pico Rivera Facility located at 8015 Paramount Boulevard in Pico Rivera, California. The Facility blends and packages lubricating oils for passenger cars and heavy duty engines, transmission oils, and an assortment of aftermarket specialty oils. The Facility receives refined base oils by rail and tanker truck. Oil additives are received mainly in drums loaded on trailers, and delivered by trucks.

The Facility stores base oils, additives and the majority of finished products in a tank farm, which consists of 50 tanks, located near the northwest corner of the manufacturing area. The capacity of the 50 storage tanks is 962,000 gallons. The

average volume of base oils, additives, and product stored at any given time is approximately 700,000 gallons. The capacity of the largest tank is 30,000 gallons. The Facility's railroad spur, situated within a containment structure and located to the north of the tank farm, can accommodate five tank cars for up to an additional 100,000 gallons of storage.

The Facility maintains two drum storage areas. All drums are stored on pallets and are covered to protect the product from water intrusion and eliminate the materials possible contact with rain water. One storage area is located in the southeastern area of the site, where 55 gallon drums of finished product and other petroleum chemicals are stored. The Facility leases a parcel of land that runs parallel to the north boundary of the property. This area is used for the storage of drums, which contain additives. This area is covered by asphalt and bermed for spill containment. The area is graded to drain to a low point, where the runoff will collect in a sump and be pumped to the storm water treatment unit.

Origins of storm water runoff from the Facility include: 1) the tank farm area; 2) the rail car loading/unloading area; and 3) the drum storage and loading/unloading areas. The rail car loading/unloading area has an impervious, asphalt surface and is surrounded by a concrete wall to provide containment. The railroad spur containment area is graded and trenched to route storm water runoff to the tank farm's three stage clarifier. The tank farm has an impervious, cement surface and is surrounded by a concrete wall to provide containment for up to 168,000 gallons and is equipped with a shut-off valve.

Storm water that collects in the tank farm is monitored by an on-site laboratory to assess the water quality. If this storm water contains elevated levels of contaminants, it is then disposed of through a contract with a Hazardous Waste Hauler for treatment offsite. Storm water of sufficient quality (i.e., the treatment system is capable of reducing pollutant levels to within limits) is released to a 3-stage oil/water separator, also referred to as a clarifier, then through a 4-inch underground pipe to the storm water collection pond, which collects storm water from other areas of the site as well. The tank farm drains by gravity for lower volumes of storm water; pumps are activated to accommodate higher volumes, which occurs approximately once per year.

Pavement grading directs runoff from other areas of the site, including the drum storage areas, to the storm water collection pond located along the western property line. The collection pond is concrete-lined and has a storage capacity of 15,000 gallons. From the storm water collection pond the storm water runoff is pumped through a 2-stage filter. The first stage, which consist of two (2) 10-micron sediment filters in parallel provide filtration to reduce total suspended solids. The second stage, which consists of an oil adsorbent textile media with a 3-micron pore size filter in series removes oil from the storm water prior to discharge. The oil adsorbent textile is periodically replaced and disposed of off-site. The treated storm water effluent is discharged through Discharge Point No. 001 to an unnamed, earthen, drainage course that runs adjacent to the Facility.

The Facilities' discharge commingles with other storm water sources within the drainage course and flows less than one half mile west to Reach 1 of the Rio Hondo Channel, a water of the United States, tributary to the Los Angeles River.

Attachment B provides a map of the area and site maps of the Facility and discharge point. Attachment C provides a flow schematic diagram of the storm water runoff.

- **C. Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).
- **D.** Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order.
- **E. California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.
- **F. Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations¹, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- **G. Water Quality-Based Effluent Limitations.** Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that 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,

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

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

H. Watershed Management Approach and Total Maximum Daily Loads (TMDLs). The Regional Water Board has implemented the Watershed Management Approach to address water guality 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. То achieve this goal, the Watershed Management Approach integrates the Regional Water Board's many diverse programs, particularly TMDLs, to better assess cumulative impacts of pollutants from all point and nonpoint sources. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby provides the basis to establish water quality based controls. These controls should provide the pollution reduction necessary for a waterbody to meet water quality standards. This process facilitates the development of watershedspecific solutions that balance the environmental and economic impacts within the The TMDLs will establish waste load allocations (WLAs) and load watershed. allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the waterbody.

The USEPA approved the State Water Resources Control Board's (State Water Board) 2010 California 303(d) List of impaired water bodies on November 12, 2010. Certain receiving waters in the Los Angeles and Ventura Counties' watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2010 303(d) List and have been scheduled for TMDL development. The 2010 State Water Board 303(d) List classifies the Rio Hondo Channel Reach 1, as impaired due to coliform bacteria, copper, lead, toxicity, trash, zinc, and pH. On July 9, 2010, the Regional Water Board adopted the Los Angeles River Watershed Bacteria TMDL to address coliform bacteria; however, it is not effective until approved by the State Water Board, the Office of Administrative Law (OAL), and USEPA. A TMDL to address toxicity is scheduled for development by 2021. Three TMDLs are in effect for the Rio Hondo Channel: the Los Angeles River Watershed Trash TMDL (hereinafter Trash TMDL), the Los Angeles River Nitrogen Compounds and Related Effects TMDL (hereinafter Nitrogen TMDL), and the Los Angeles River and Tributaries Metals TMDL (hereinafter Metals TMDL). The Regional Water Board is applying these three TMDLs to this Order. Effluent limitations based on these WLAs have been established in this Order.

1. **Trash TMDL for the Los Angeles River.** The *Los Angeles River Watershed Trash TMDL* was originally adopted by the Regional Water Board on September 19, 2001. The Trash TMDL was to be implemented via storm water permits in a phased reduction for a period of 10 years. The Trash TMDL was approved by the State Water Board on February 19, 2002, and OAL on July 16, 2002. The USEPA

approved the Trash TMDL on August 1, 2002, and it became effective on August 28, 2002. There were a number of challenges to the Los Angeles River Trash TMDL. The consideration of the challenges resulted in a requirement that the Trash TMDL be set aside, and not implemented until the CEQA requirements had been satisfied. On June 8, 2006, the Regional Water Board adopted Resolution No. R4-2006-0051 to set aside the adopted TMDL. On July 17, 2006, the State Water Board adopted Resolution No. 2006-0051, setting the TMDL aside. An amendment to the Los Angeles River Trash TMDL (Resolution No. 2007-012) was adopted by the Regional Water Board on August 9, 2007. The State Water Board approved the Trash TMDL with amendments on April 15, 2008. OAL approved the Trash TMDL with amendments on July 1, 2008. The USEPA approved the Trash TMDL with amendments on July 24, 2008, and it became effective on September 23, 2008. The Trash TMDL established a numeric target of zero trash in the Los Angeles River. The Trash TMDL will be implemented through the Municipal Separate Storm Sewer Systems (MS4) NPDES Permit Program. This Order requires development and implementation of a storm water pollution prevention plan (SWPPP), which is expected to prevent the discharge of trash from the Facility to the Los Angeles River watershed.

- 2. Nitrogen TMDL for the Los Angeles River. The Regional Water Board adopted Resolution No. 2003-009 on July 10, 2003, that amended the Basin Plan to incorporate the Los Angeles River Nitrogen Compounds and Related Effects TMDL. The Nitrogen TMDL was approved by the State Water Board and OAL on November 19, 2003, and February 27, 2004, respectively. The Nitrogen TMDL was approved by USEPA on March 18, 2004, and became effective on March 23, 2004. Subsequently, Resolution No. 2003-016, which revised the interim effluent limitations for ammonia, was adopted by the Regional Water Board on December 4, 2003. The State Water Board approved the TMDL with Resolution 2004-0014 on March 24, 2004. OAL approved the TMDL on September 27, 2004, and it became effective on the same date. The Nitrogen TMDL establishes WLAs for the Los Angeles River, to which Rio Hondo Channel is a tributary, for total ammonia as nitrogen, nitrate-nitrogen, nitrite-nitrogen, and nitrate-nitrogen plus nitrite-nitrogen. This Order includes effluent limitations based on the Nitrogen TMDL established for the Los Angeles River.
- 3. Metals TMDL for the Los Angeles River. The Regional Water Board adopted Resolution No. 2005-006 on June 2, 2005, that amended the Basin Plan to incorporate the Los Angeles River and Tributaries Metals TMDL. The State Water Board approved the Metals TMDL on October 20, 2005, and OAL approved the Metals TMDL on December 9, 2005. The USEPA approved the Metals TMDL on December 22, 2005, and it became effective on January 11, 2006. The metals TMDL establishes numeric water quality targets that are based on objectives established by USEPA in the CTR. An amendment to the Metals TMDL (Resolution R4-2007-014) adopted by the Regional Water No. was Board on September 6, 2007. The State Water Board and OAL approved the amended Metals TMDL on June 17, 2008, and October 14, 2008, respectively. USEPA approved the amended Metals TMDL on October 29, 2008, and it became effective

on the same date. This Order includes dry-weather effluent limitations for copper, lead, and zinc; and wet-weather effluent limitations for cadmium, copper, lead and zinc that are based on the amended Metals TMDL.

- 4. **Bacteria TMDL for the Los Angeles River.** The *Los Angeles River Bacteria TMDL* (Resolution R4-2010-007) was adopted by the Regional Water Board on July 9, 2010. The TMDL establishes numeric target based on the Basin Plan Objectives for E. coli and assigns a WLA of zero days of exceedance to individual NPDES permits. Until the TMDL is approved by the State Water Board, the OAL and USEPA, it will not be implemented in this permit. Associated with Bacteria objectives, the High Flow Suspension of Recreational Uses Amendment to the Basin Plan became effective on November 2, 2004. This amendment suspends REC1 and REC2 beneficial uses as related to the application of bacteria objectives, for certain engineered channels. The Rio Hondo Channel is identified in the amendment as a High Flow Suspension water body.
- I. Water Quality Control Plans. The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Rio Hondo Channel below the Spreading Grounds, are as follows:

Discharge Point	Receiving Water Name (Hydro. Unit No.)	Beneficial Use(s)
001	Rio Hondo below Spreading Grounds (405.15)	Existing: Non-contact Water Recreation (REC-2) Intermittent: Ground Water Recharge (GWR); Wildlife Habitat (WILD) Potential: Municipal and Domestic Supply (MUN)*; Water Contact Recreation (REC-1) ¹ ; Warm Freshwater Habitat (WARM)

Table 5. Basin Plan Beneficial Uses of Surface Water

* MUN designations marked with an asterisk are conditional.

¹ Access prohibited by Los Angeles County Department of Public Works in concrete-channelized areas.

Discharge Point	Basin	Beneficial Use(s)		
001	Los Angeles Coastal Plain, Central Basin	Existing: MUN; Industrial Service Supply (IND); Industrial Process Supply (PROC); Agricultural Supply (AGR)		

 Table 6.
 Basin Plan Beneficial Uses of Ground Water

Requirements of this Order implement the Basin Plan.

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

Groundwater Recharge (GWR). The Rio Hondo Channel below the spreading grounds has an intermittent beneficial use designation of GWR. Surface water from the Rio Hondo Channel may percolate into the Los Angeles Coastal Plain, Central Groundwater Basin. Since groundwater from this Basin is designated as MUN (Table 6) it may be used to provide drinking water to the community and the groundwater aquifers should be protected, therefore, Title 22-based MCLs were evaluated with respect to the discharge.

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

On June 7, 2007, the Regional Water Board adopted Resolution No. 2007-005, *Amendments to the Water Quality Control Plan – Los Angeles Region – To Incorporate Site-Specific Objectives for Select Inland Surface Waters in the Santa Clara, Los Angeles, and San Gabriel River Watersheds.* This amendment to the Basin Plan incorporates site specific 30-day average objectives for ammonia, along with corresponding site specific early life stage implementation provisions for select water body reaches and tributaries in the Santa Clara, Los Angeles, and San Gabriel River Water Board, OAL, and USEPA approved this Basin Plan amendment on January 15, 2008, May 12, 2008, and March 30, 2009, respectively. Resolution No. 2007-005 became effective on April 23, 2009.

- L. National Toxics Rule (NTR) and California Toxics Rule (CTR). USEPA adopted the NTR on December 22, 1992, and 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.
- **M. 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.
- **N.** 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. The SIP further stipulates that 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. The SIP provision has expired, thus no compliance schedules are included in this Order.
- **O. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 CFR. § 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the

revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

P. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (BOD), oil and grease, total suspended solids (TSS), phenols, total petroleum hydrocarbons (TPH), turbidity, and settleable solids. Restrictions on these constituents are discussed in IV.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

The water quality-based effluent limitations consist of restrictions on pH, temperature, acute toxicity, cadmium, copper, lead, selenium, zinc, and cyanide. Water qualitybased 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 water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual water qualitybased 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 guality 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 guality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). The remaining water guality objectives and beneficial uses implemented by this Order (specifically ammonia) were approved by USEPA on September 25, 2002, and March 30, 2009, respectively. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

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

- **S. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
- **T. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- **U. 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.
- V. Provisions and Requirements Implementing State Law. The provisions/ requirements in subsection 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.
- **W. 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.
- X. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

THEREFORE, IT IS HEREBY ORDERED, that this Order supersedes Order No. R4-2006-065 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

- **A.** Wastes discharged shall be limited to a maximum of 0.258 MGD of treated storm water from Discharge Point No. 001, as described in the findings. The discharge of wastes from accidental spills or other sources is prohibited.
- **B.** Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to the Rio Hondo Channel, or other waters of the State, are prohibited.
- **C.** Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or a nuisance as defined by Section 13050 of the Water Code.
- **D.** Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- **E.** The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Board as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal CWA, and amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.
- **F.** The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.
- **G.** Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations-Discharge Point No. 001

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

		Effluent Limitations			
Parameter	Units	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants				-	
рН	s.u.			6.5	8.5
Biochemical Oxygen Demand	mg/L		30		
(BOD) (5-day @ 20 deg. C)	lbs/day1		65		
Oil and Grease	mg/L		15		
	lbs/day ¹		32		
Total Suspended Solids (TSS)	mg/L		75		
	lbs/day1		160		
Non-Conventional Pollutants	_				
Temperature	۴				86
Settleable Solids	ml/L		0.3		
Ammonia, Total (as N)	mg/L	2.3	10.1		
Ammonia, rotar (as N)	lbs/day1	4.9	22		
Nitroto Nitrogon, Total (ap. N)	mg/L	8.0			
Nitrate Nitrogen, Total (as N)	lbs/day1	17			
	mg/L	1.0			
Nitrite Nitrogen, Total (as N)	lbs/day1	2.2			
	mg/L	8.0			
Nitrate plus Nitrite, Total (as N)	lbs/day1	17			
Dhanala	mg/L		1.0		
Phenols	lbs/day ¹		2.2		
Total Petroleum Hydrocarbons	μg/L		100		
(TPH) ²	lbs/day1		0.22		
Turbidity	NTU		75		
Priority Pollutants					
Cadmium, Total Recoverable	μg/L		5.3		
(Dry-Weather) ³	lbs/day1		0.011		
Cadmium, Total Recoverable	μg/L		3.1		
(Wet-Weather) ⁴	lbs/day1		0.0067		
Copper, Total Recoverable (Dry-	μg/L		13		
Weather) ³	lbs/day1		0.028		
Copper, Total Recoverable	μg/L		17		
(Wet-Weather) ⁴	lbs/day ¹		0.037		

Table 7. Effluent Limitations for Discharge Point No. 001

			Efflu	ent Limitations	
Parameter	Units	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Lead, Total Recoverable (Dry-	μg/L		5.0		
Weather) ³	lbs/day ¹		0.011		
Lead, Total Recoverable (Wet-	µg/L		62		
Weather) ⁴	lbs/day ¹		0.13		
Selenium, Total Recoverable	μg/L		8.2		
Selenium, Total Recoverable	lbs/day ¹		0.018		
Zinc, Total Recoverable Dry-	μg/L		130		
Weather) ³	lbs/day ¹		0.28		
Zinc, Total Recoverable (Wet-	μg/L		160		
Weather) ⁴	lbs/day ¹		0.34		
Cyanide, Total (as CN)	µg/L		8.5		
Gyanide, Total (as Civ)	lbs/day1		0.018		

¹ The mass emissions rate is based on a maximum flow of 0.258 MGD and is calculated as follows:

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

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

³ Dry-Weather effluent limitations are applicable when the maximum daily flow in the Los Angeles River is less than 500 cubic feet per second (cfs), as measured at the Los Angeles County Department of Public Works (LACDPW) Wardlow gage station (F319-R). The daily flow data at F319-R station may be obtained by contacting Mr. Arthur Gotingco with the LACDPW at 626-458-6379 or via email at <u>agoting@dpw.lacunty.gov</u>.

⁴ Wet-Weather effluent limitations are applicable when the maximum daily flow in the Los Angeles River is equal to or greater than 500 cfs, as measured at the LACDPW Wardlow gage station (F319-R).

- **b.** Acute Toxicity. There shall be no acute toxicity in the discharge. The acute toxicity of the effluent shall be such that:
 - i. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay test shall be at least 90%, and
 - ii. No single test producing less than 70% survival. Compliance with the toxicity objectives will be determined by the method described in Section V of the MRP (Attachment E).

The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program No. 6521.

2. Interim Effluent Limitations

Not Applicable

B. Land Discharge Specifications

Not Applicable

C. Reclamation Specifications

Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitation

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

- 1. The normal ambient pH to fall below 6.5 nor exceed 8.5 units nor vary from normal ambient pH levels by more than 0.5 units.
- Surface water temperature to rise greater than 5°F above the natural temperature of the receiving waters at any time or place. At no time the temperature be raised above 80°F as a result of waste discharged.
- 3. State/Regional Water Board Water Contact Standards

In fresh waters designated for Water Contact Recreation (REC-1), the waste discharged shall not cause the following bacterial standards to be exceeded in the receiving water:

- a. Geometric Means Limits
 - i. *E. coli* density shall not exceed 126/100 ml.
 - ii. Fecal coliform density shall not exceed 200/100 ml.
- **b.** Single Sample Maximum (SSM)
 - i. *E. Coli* density shall not exceed 235/100 ml
 - ii. Fecal coliform density shall not exceed 400/100 ml
- **4.** Depress the concentration of dissolved oxygen to fall below 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.
- 5. Exceed total ammonia (as N) concentrations specified in the Regional Water Board Resolution No. 2002-011. Resolution No. 2002-011 revised the ammonia water quality objectives for inland surface waters characteristic of freshwater in the 1994 Basin Plan, to be consistent with the *"1999 Update of Ambient Water Quality Criteria for Ammonia"*. Adopted on April 25, 2002, Resolution No. 2002-011 was approved by State Water Board, OAL and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively and is now in effect.

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

B. Groundwater Limitations

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

VI. PROVISIONS

A. Standard Provisions

- **1.** Federal Standard Provisions. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
- **2.** Regional Water Board Standard Provisions. The Discharger shall comply with the following provisions:
 - **a.** This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of sections 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
 - b. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Water Board to local agencies.
 - **c.** Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.
 - **d.** The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 318, 405, and 423 of the Federal CWA and amendments thereto.
 - e. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

- f. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- **g.** A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.
- **h.** After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - i. Violation of any term or condition contained in this Order;
 - ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- i. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- **j.** The Discharger shall notify the Regional Water Board not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.
- **k.** The Discharger shall file with the Regional Water Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.
- 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 the planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:
 - i. Name and general composition of the chemical,
 - ii. Frequency of use,
 - iii. Quantities to be used,
 - iv. Proposed discharge concentrations, and
 - v. USEPA registration number, if applicable.
- r. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.
- s. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, AMEL, MDEL, instantaneous, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (216)-576-6600 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall

describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

t. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Wat. Code § 1211.)

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

1. Reopener Provisions

- **a.** If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.
- **b.** This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the reasonable potential analysis.
- **c.** This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new 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 Rio Hondo Channel.
- **e.** This Order may be reopened upon submission by the Discharger of adequate information, as determined by the Regional Water Board, to provide for dilution credits or a mixing zone, as may be appropriate.
- f. This Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this Order as a result of the special condition monitoring data.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan. The Discharger shall submit to the Regional Water Board an Initial Investigation TRE workplan (1-2 pages) within 90 days of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected, and should include at a minimum:
 - i. A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency;
 - ii. A description of the facility's method of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility;
 - iii. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor) (section V of the MRP, Attachment E) provides references for the guidance manuals that should be used for performing TIEs.

3. Storm Water Pollution Prevention Plan, Best Management Practices, and Spill Prevention Control and Countermeasures Plan

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

a. An updated Storm Water Pollution Prevention Plan (SWPPP) that describes sitespecific 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 address the following specific areas of concern: petroleum storage tanks, equipment washing, vehicle traffic, and chemical loading and unloading, and chemical storage. The SWPPP shall be developed in accordance with the requirements in Attachment G.

The SWPPP shall also specify Best Management Practices (BMPs) that will be implemented to reduce the discharge of pollutants in storm water. In particular, the Discharger shall focus on improving secondary containment and good housekeeping practices. Further, the Discharger shall assure that the storm water discharges from the Facility would neither cause, nor contribute to the exceedance of water quality standards and objectives, nor create conditions of nuisance in the receiving water, and that the unauthorized discharges (i.e., spills) to the receiving water have been effectively prohibited. The BMPs shall be consistent with the general guidance contained in the USEPA *Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004).

b. A Spill Prevention Control and Countermeasures (SPCC) Plan that shall be sitespecific and shall cover all areas of the Facility including the tank farm, the rail car loading/unloading area and the drum storage areas. The SPCC Plan shall describe the preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events.

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., petroleum storage tanks); describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material.

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

4. Construction, Operation and Maintenance Specifications

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

5. Special Provisions for Municipal Facilities (POTWs Only)

Not Applicable

6. Other Special Provisions

Not Applicable

7. Compliance Schedules

Not Applicable

VII. COMPLIANCE DETERMINATION

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

A. Single Constituent Effluent Limitation.

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

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

If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations

of a group of pollutants, consider constituents reported as ND or DNQ to have concentrations equal to zero, provided that the applicable ML is used.

C. Effluent Limitations Expressed as a Median.

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

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

D. Mass-based Effluent Limitations.

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

E. Multiple Sample Data.

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

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

F. Average Monthly Effluent Limitation (AMEL).

If the average (or when applicable, the median determined by subsection E above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be

considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

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

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

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

When one or more sample results are reported as "Not-Detected (ND)" or "Detected, but Not Quantified (DNQ)" (see Reporting Requirement I.G. of the MRP), the median value of these four samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.

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

G. Maximum Daily Effluent Limitations (MDEL).

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

H. Instantaneous Minimum Effluent Limitation.

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and the discharger will be

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

I. Instantaneous Maximum Effluent Limitation.

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

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (µ)

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

Arithmetic mean = $\mu = \Sigma x / n$

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

Average Monthly Effluent Limitation (AMEL)

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

Best Management Practices (BMPs)

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

Bioaccumulative

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

Carcinogenic

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

Coefficient of Variation (CV)

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

Daily Discharge

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

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day. For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ)

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

Dilution Credit

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

Effluent Concentration Allowance (ECA)

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

Enclosed Bays

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

Estimated Chemical Concentration

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

Estuaries

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

Existing Discharger

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

Four-Day Average of Daily Maximum Flows

The average of daily maximums taken from the data set in four-day intervals.

Infeasible

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

Inland Surface Waters

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

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Maximum Daily Effluent Limitation (MDEL)

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

Median

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

Method Detection Limit (MDL)

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

Minimum Level (ML)

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

Mixing Zone

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

Not Detected (ND)

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

Ocean Waters

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

Persistent Pollutants

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

Pollutant Minimization Program (PMP)

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

Pollution Prevention

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

Reporting Level (RL)

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

cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Satellite Collection System

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

Source of Drinking Water

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

Standard Deviation (σ)

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

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

where:

- x is the observed value;
- μ is the arithmetic mean of the observed values; and
- n is the number of samples.

Toxicity Reduction Evaluation (TRE)

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

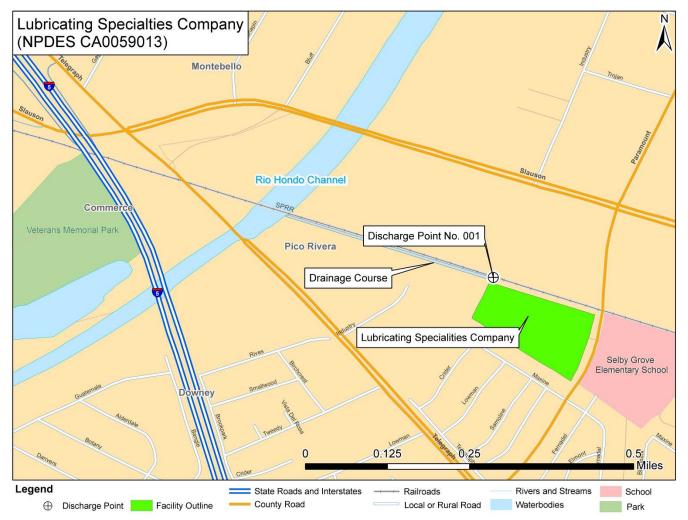
ACRONYMS AND ABBREVIATIONS

AMEL	Average Monthly Effluent Limitation
В	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
BMPs	Best Management Practices
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 ℃
BPT	Best Practicable Treatment Control Technology
С	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	Lubricating Specialties Company
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	California Department of Public Health Environmental
	Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Facility	Pico Rivera Facility
gpd	gallons per day
IC	Inhibition Coefficient
IC ₁₅	Concentration at which the organism is 15% inhibited
IC ₂₅	Concentration at which the organism is 25% inhibited
IC ₄₀	Concentration at which the organism is 40% inhibited
IC ₅₀	Concentration at which the organism is 50% inhibited
LA	Load Allocations
LOEC	Lowest Observed Effect Concentration
μg/L	micrograms per Liter
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
ND	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards

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

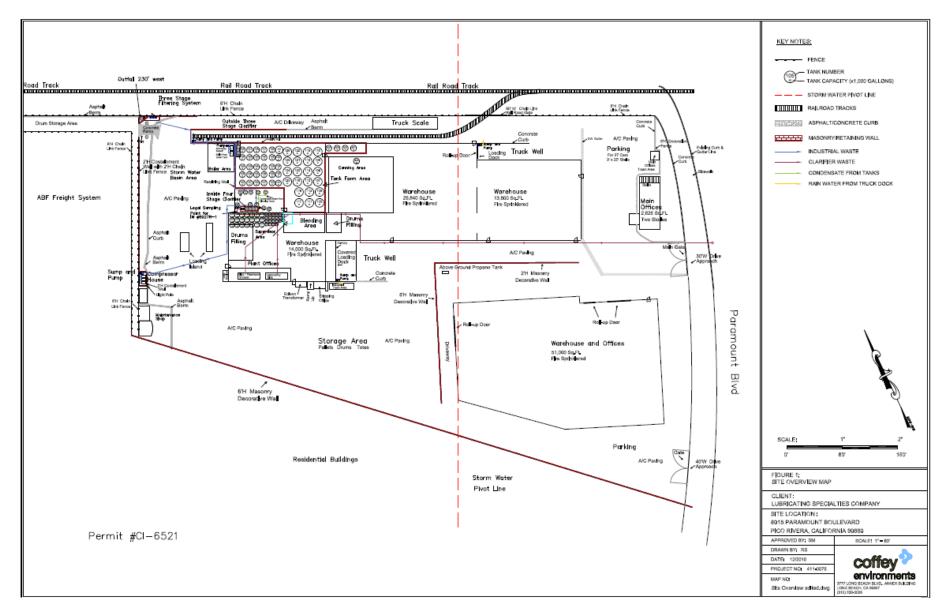
ATTACHMENT B – MAPS

Figure 1. Site Location Map

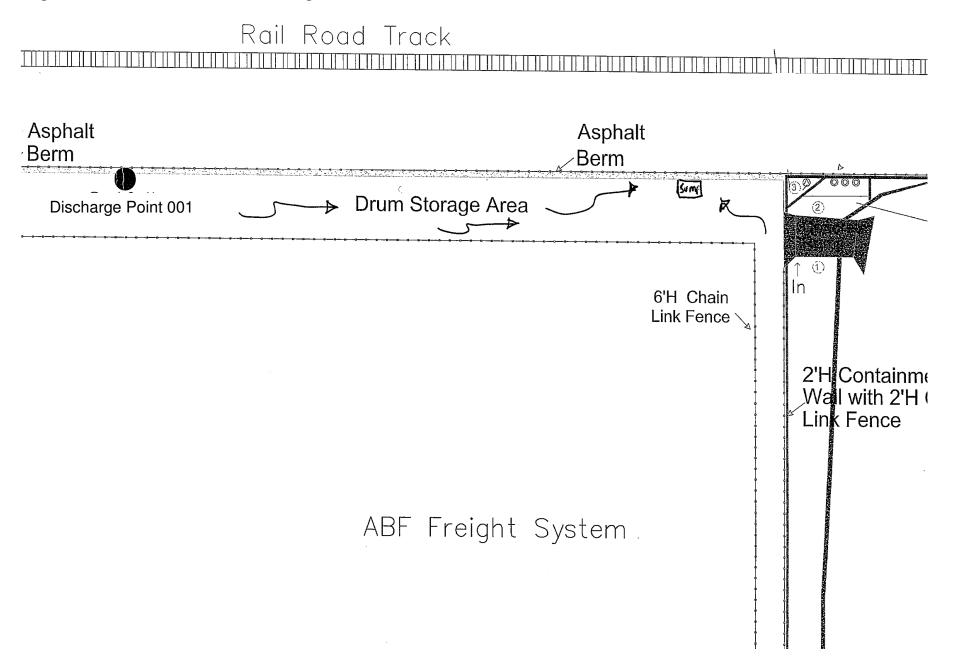


Lubricating Specialties Company 8015 Paramount Boulevard Pico Rivera, CA 90660-4888

Figure 2. Facility Site Map

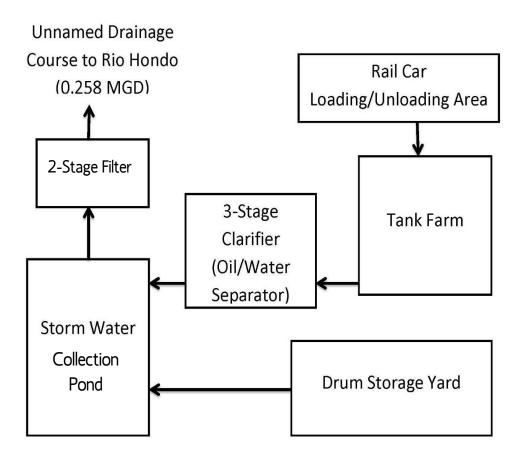






ATTACHMENT C – FLOW SCHEMATIC

Storm Water Process Flow - Lubricating Specialties Company, Pico Rivera Facility



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

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

B. Need to Halt or Reduce Activity Not a Defense

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

C. Duty to Mitigate

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

D. Proper Operation and Maintenance

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

E. Property Rights

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

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

F. Inspection and Entry

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

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

G. Bypass

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

- **3.** Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [section 122.41(m)(4)(i)]:
 - Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [section 122.41(m)(4)(i)(A)];
 - **c.** There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [section 122.41(m)(4)(i)(B)]; and
 - d. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below [section 122.41(m)(4)(i)(C)].
- 4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions Permit Compliance I.G.3 above [section 122.41(m)(4)(ii)].
- 5. Notice
 - **a.** Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [section 122.41(m)(3)(i)].
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice) [section 122.41(m)(3)(ii)].

H. Upset

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

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

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

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code [section 122.41(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(j)(3)(i)];
 - 2. The individual(s) who performed the sampling or measurements [section 122.41(j)(3)(ii)];
 - **3.** The date(s) analyses were performed [section 122.41(j)(3)(iii)];
 - 4. The individual(s) who performed the analyses [section 122.41(j)(3)(iv)];
 - 5. The analytical techniques or methods used [section 122.41(j)(3)(v)]; and
 - **6.** The results of such analyses [section 122.41(j)(3)(vi)].
- C. Claims of confidentiality for the following information will be denied [section 122.7(b)]:
 - 1. The name and address of any permit applicant or Discharger [section 122.7(b)(1)]; and
 - 2. Permit applications and attachments, permits and effluent data [section 122.7(b)(2)].

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance

with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order [section 122.41(h)] [Water Code section 13267].

B. Signatory and Certification Requirements

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

operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative [section 122.22(c)].

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

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

C. Monitoring Reports

- **1.** Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order [section 122.22(I)(4)].
- 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(l)(4)(iii)].

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date [section 122.41(I)(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(I)(6)(i)].

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

F. Planned Changes

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

- The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) [section 122.41(l)(1)(i)]; or.
- 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [section 122.41(l)(1)(ii)].

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements [section 122.41(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 above [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(I)(8)].

VI. STANDARD PROVISIONS – ENFORCEMENT

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

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

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

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

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

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

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

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP NO. 6521)

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. 6521

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 Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

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

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

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

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

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

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

- 1. When the pollutant under consideration is not included in Attachment H;
- 2. When the Discharger and Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in 40 CFR Part 136 (revised March 26, 2007);
- **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.B shall also summarize the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per sampling period, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples.
- **M.** When requested by the Regional Water Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.
- **N.** For parameters that both average monthly and daily maximum limits are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the average monthly limit, the Discharger shall collect four additional samples at approximately equal intervals during the month, 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 associated with the stormwater treatment system are transported off site during the report period, the following shall be reported in the monitoring report:
 - 1. Types of wastes and quantity of each type;
 - 2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and

3. Location of the final point(s) of disposal for each type of waste.

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

- **P.** Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.
- **Q.** Laboratories analyzing monitoring samples shall be certified by the Department of Public Health, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.

II. MONITORING LOCATIONS

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

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	Effluent monitoring for Discharge Point 001 shall be conducted where representative effluent samples may be obtained from a dedicated sampling port (not within the drainage ditch).
RSW-001		The Discharge shall establish a receiving water monitoring location where a representative sample can be obtained within the Rio Hondo Channel at least 50 feet upstream of the point of confluence (latitude 33° 58' 24", longitude 118° 07' 12") with the drainage course. ¹

Table E-1. Monitoring Station Locations

If the receiving water sampling cannot be safely conducted upstream of the of the confluence with the drainage course, the Discharger may propose an appropriate receiving water sampling location and obtain approval from the Regional Water Board within 90 days of the effective date of the Order.

III. INFLUENT MONITORING REQUIREMENTS

Not Applicable

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

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

Table E-2. Effluent Monitoring at Monitoring Location EFF-00	Table E-2.	Effluent Monitoring	g at Monitoring	Location EFF-001
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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	gal/day	Meter	1/Day ¹	
Conventional Pollutants				
рН	s.u.	Grab	1/Discharge Event ²	3
Biochemical Oxygen Demand (BOD) (5-day @ 20 deg. C)	mg/L	Grab	1/Discharge Event ²	3
Oil and Grease	mg/L	Grab	1/Discharge Event ²	3
Total Suspended Solids (TSS)	mg/L	Grab	1/Discharge Event ²	3
Non-Conventional Polluta	ants			
Temperature	۴	Grab	1/Discharge Event ²	3
Settleable Solids	ml/L	Grab	1/Discharge Event ²	3
Ammonia, Total (as N)	mg/L	Grab	1/Discharge Event ²	3
Nitrate-Nitrogen (as N)	mg/L	Grab	1/Discharge Event ²	3
Nitrite-Nitrogen (as N)	mg/L	Grab	1/Discharge Event ²	3
Nitrite plus Nitrate (as N)	mg/L	Grab	1/Discharge Event ²	3
Chromium, Total	μg/L	Grab	1/Discharge Event ²	3
Phenols	mg/L	Grab	1/Discharge Event ²	3
Sulfides	mg/L	Grab	1/Discharge Event ²	3
Turbidity	NTU	Grab	1/Discharge Event ²	3
Total Petroleum Hydrocarbons (TPH) as Gasoline (C_4 - C_{12})	μg/L	Grab	1/Discharge Event ²	EPA Method 503.1 or 8015B
TPH as Diesel (C ₁₃ -C ₂₂)	μg/L	Grab	1/Discharge Event ²	EPA Method 503.1, 8015B, or 8270
TPH as Oil (C ₂₃₊)	μg/L	Grab	1/Discharge Event ²	EPA Method 503.1, 8015B, or 8270
Xylenes	μg/L	Grab	1/Discharge Event ²	3
E. coli	MPN/100 ml	Grab	1/Month ⁴	3
Fecal Coliform	MPN/100 ml	Grab	1/Month ⁴	3
Acute Toxicity	% Survival	Grab	1/Year ⁵	6
Priority Pollutants				
Arsenic, Total Recoverable	μg/L	Grab	1/Discharge Event ²	3
Cadmium, Total Recoverable	μg/L	Grab	1/Discharge Event ²	3
Chromium (III)	μg/L	Grab	1/Discharge Event ²	3
Chromium (VI)	μg/L	Grab	1/Discharge Event ²	3
Copper, Total Recoverable	μg/L	Grab	1/Discharge Event ²	3
Lead, Total Recoverable	μg/L	Grab	1/Discharge Event ²	3
Mercury, Total Recoverable	μg/L	Grab	1/Discharge Event ²	3
Nickel, Total Recoverable	μg/L	Grab	1/Discharge Event ²	3
Selenium, Total Recoverable	μg/L	Grab	1/Discharge Event ²	3

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Silver, Total Recoverable	μg/L	Grab	1/Discharge Event ²	3
Zinc, Total Recoverable	μg/L	Grab	1/Discharge Event ²	3
Benzene	μg/L	Grab	1/Discharge Event ²	3
Bis (2-ethylhexy) Phthalate	μg/L	Grab	1/Discharge Event ²	3
Ethylbenzene	μg/L	Grab	1/Discharge Event ²	3
Toluene	μg/L	Grab	1/Discharge Event ²	3
Remaining Priority Pollutants ⁷	μg/L	Grab	1/Year ⁵	3
TCDD Equivalents ⁸	μg/L	Grab	1/Year ⁵	3

¹ Required only during periods of discharge.

² A discharge event is greater than 0.1 inch of rainfall in a 24-hour period. No more than one sample per month is required to be collected and analyzed during extended periods of rainfall. A new storm event must be preceded by at least 72 hours of dry weather. Sampling shall be performed during the first hour of discharge.

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

⁴ Monthly monitoring shall be conducted for the first two years, during months in which a discharge occurs. If water quality objectives are not exceeded then annual effluent monitoring shall be conducted. Sampling shall be performed during the first hour of discharge.

- ⁵ Monitoring is required only during years in which a discharge occurs. Annual samples shall be collected during the first discharge of the year.
- ⁶ Refer to section V., Whole Effluent Toxicity Testing Requirements.
- ⁷ Priority Pollutants as defined by the CTR defined in Finding II.L of the Limitations and Discharge Requirements of this Order, and included as Attachment I.
- ⁸ TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (ML), and toxicity equivalency factors (TEFs) are as listed in the Table below: The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

Dioxin-TEQ (TCDD equivalents) = $\Sigma(C_x \times TEF_x)$

Where: C_X = concentration of dioxin or furan congener x TEF_x = TEF for congener x

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

Toxicity Equivalency Factors

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

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity

1. Definition of Toxicity

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

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

2. Acute Toxicity Effluent Monitoring Program

- **a. Method.** The Discharger shall conduct acute toxicity tests (96-hour static renewal toxicity tests) on <u>effluent grab samples</u>, by methods specified in 40 CFR Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, October 2002, USEPA, Office of Water, Washington D.C. (EPA/821/R-02/012) or a more recent edition to ensure compliance. Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.
- **b.** Test Species. The fathead minnow, *Pimephales promelas* (Acute Toxicity Test Method 2000.0), 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. However, if the salinity of the receiving water is between 1 to 32 parts per thousand (ppt), the Discharger may have the option of using the inland silverside, *Menidia beryllina* (Acute Toxicity Test Method 2006.0), instead of the topsmelt. The method for topsmelt (Larval Survival and Growth Test Method 1006.0) is found in USEPA's *Short-term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, First Edition, August 1995* (EPA/600/R-95/136).
- **c.** Alternate Reporting. For the acute toxicity testing with topsmelt, the Discharger may elect to report the results or endpoint from the first 96 hours of the chronic

toxicity test as the results of the acute toxicity test, using USEPA's August 1995 method (EPA/600/R-95/136) to conduct the chronic toxicity test.

d. Acute Toxicity Accelerated Monitoring. If either of the above requirements (sections 1.a and 1.b) is not met, the Discharger shall conduct six additional tests, approximately every 2 weeks, over a 12-week period (or over the next six storm events for storm water monitoring). 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 5 business days of the receipt of the result. If the additional tests indicate compliance with the acute toxicity limitation, the Discharger may resume regular testing.

e. Toxicity Identification Evaluation

- i. If the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall immediately begin a Toxicity Identification Evaluation (TIE) and implement the Initial Investigation Toxicity Reduction Evaluation (TRE) workplan. 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.
- ii. If the initial test and any of the additional six acute toxicity bioassay tests results are less than 70% survival, the Discharger shall immediately begin a TIE and implement Initial Investigation TRE workplan. Once the sources are identified the Discharger shall take all reasonable steps to reduce toxicity to meet the requirements.

B. Quality Assurance

- 1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).
- 2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manuals (EPA/600/4-91/002 and EPA/821-R-02-014), then the Discharger must re-sample and re-test at the earliest time possible.
- **3.** Control and dilution water should be receiving water (if non-toxic) or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the water the test species are grown in (culture water), a second control using culture water shall be used.

C. Preparation of an Initial Investigation TRE Workplan

The Discharger shall prepare and submit a detailed initial investigation Toxicity Reduction Evaluation (TRE) workplan to the Executive Officer of the Regional Water

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

- 1. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
- 2. A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the facility; and,
- **3.** If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP Section V.D.3 for guidance manuals.

D. Steps in TRE and TIE Procedures

- If results of the implementation of the facility's initial investigation TRE workplan indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 30 days of completion of the initial investigation TRE. The detailed workplan shall include, but not be limited to:
 - **a.** Further actions to investigate and identify the cause of toxicity;
 - **b.** Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity;
 - c. A schedule for these actions.
- **2.** The following 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;
 - **b.** Step 2 Evaluates optimization of the treatment system operation, facility housekeeping, and the selection and use of in-plant process chemicals;
 - c. Step 3 If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity;
 - d. Step 4 Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options;

- e. Step 5 Evaluates in-plant treatment options; and,
- f. Step 6 Consists of confirmation once a toxicity control method has been implemented.

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

- **3.** The Discharger shall initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute manual, chronic manual, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III), as guidance.
- 4. If a TRE/TIE is initiated prior to completion of the accelerated testing required in section V.A.2.d required in this program, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.
- **5.** Toxicity tests conducted as part of a TRE/TIE may also be used for compliance determination, if appropriate.
- 6. The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Regional Water Board will be based, in part, on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

E. Ammonia Removal

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

- **b.** Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.
- **c.** Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.
- **d.** Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.
- 2. When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water Board, and receiving written permission expressing approval from the Executive Officer of the Regional Water Board.

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 as % survival for acute toxicity test results with the self monitoring reports (SMR) for the quarter in which the test is conducted. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to section V.A.2.d., then those results also shall be submitted with the SMR for the period in which the investigation occurred.

- **1.** The full report shall be submitted on or before the end of the quarter in which the SMR is submitted.
- 2. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the acute toxicity average limit or chronic toxicity limit or trigger; and (4) the printout of the ToxCalc or CETIS (Comprehensive Environmental Toxicity Information System) program results.
- **3.** Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test:
 - a. Sample date(s);
 - **b.** Test initiation date;
 - **c.** Test species;
 - **d.** End point values for each dilution (e.g., number of young, growth rate, percent survival);
 - **e.** LC₅₀ value(s) in percent effluent;

f.
$$TU_a$$
 values $\left(TU_a = \frac{100}{LC_{50}}\right)$;

- **g.** IC_{15} , IC_{25} , IC_{40} and IC_{50} values in percent effluent;
- **h.** NOEC value(s) in percent effluent;

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

- j. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);
- **k.** NOEC and LOEC values for reference toxicant test(s);
- I. IC₂₅ value for reference toxicant test(s);
- m. Any applicable charts; and
- **n.** Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).
- **4.** The Discharger shall provide a compliance summary, which includes a summary table of toxicity data from all samples collected during that year.
- 5. The Discharger shall notify by telephone or electronically, this Regional Water 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 has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

Not Applicable

VII. RECLAMATION MONITORING REQUIREMENTS

Not Applicable

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

A. Monitoring Location RSW-001

1. The Discharger shall monitor the Rio Hondo Channel, at Monitoring Location RSW-001, within 50 feet upstream of the confluence with the drainage course as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
рН	s.u.	Grab	1/Year ¹	2, 3
Temperature	⁰F	Grab	1/Year ¹	2, 3
Ammonia, Total (as N)	mg/L	Grab	1/Year ¹	2, 3
Dissolved Oxygen	mg/L	Grab	1/Year ¹	2, 3
Hardness, Total (as CaC0 ₃)	mg/L	Grab	1/Year ¹	2, 3
Priority Pollutants ⁴	μg/L	Grab	1/Year ¹	2, 3
TCDD Equivalents ⁵	μg/L	Grab	1/Year ¹	2

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

¹ Monitoring is only required during years in which a discharge occurs. Annual samples shall be collected during the first hour of discharge from the first storm event of the wet season (October 1 – April 30). If, for safety reasons, a sample cannot be obtained during the first hour of discharge, a sample shall be obtained at the first safe opportunity, and the reason for the delay shall be included in the report.

- ² Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; for priority pollutants the methods must meet the lowest MLs specified in Attachment 4 of the SIP, provided as Attachment H. Where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level.
- ³ Receiving water samples for pH, temperature, ammonia, dissolved oxygen, hardness and priority pollutants must be collected at the same time.
- ⁴ Priority Pollutants as defined by the CTR, defined in Finding II.L of the Limitations and Discharge Requirements of this Order, and included as Attachment I.
- ⁵ TCDD equivalents shall be calculated using the following formula, where the Minimum Levels (MLs), and toxicity equivalency factors (TEFs) are as listed in the table below. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating TCDD equivalents, the Discharger shall set congener concentrations below the minimum levels to zero. USEPA method 1613 may be used to analyze dioxin and furan congeners.

Dioxin-TEQ (TCDD equivalents) = $\Sigma(C_x \times TEF_x)$

where: C_X = concentration of dioxin or furan congener x

 $TEF_X = TEF$ for congener x

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

IX. OTHER MONITORING REQUIREMENTS

A. Storm Water Monitoring

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

B. Storm Water Pollution Prevention Plan (SWPPP) and Spill Prevention Control and Countermeasures (SPCC) Plan Effectiveness Report

- 1. As required under Special Provision VI.C.3 of this Order, the Discharger shall submit an updated SWPPP and SPCC Plan to the Executive Officer of the Regional Water Board for approval within 90 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, BMP and SPCC Plan as required under Special Provision VI.C.3 of this Order. The SWPPP, BMP and SPCC Plan 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, BMP and SPCC Plan. All changes or revisions to the SWPPP, BMP and SPCC Plan will be summarized in the annual report required under Attachment E, Monitoring and Reporting, section X.D.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

- **1.** The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
- 2. If there is no discharge during any reporting period, the report shall so state.
- **3.** Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.

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

B. Self Monitoring Reports (SMRs)

- 1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
- 2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit quarterly SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
- **3.** Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	SMR Due Date
1/Day	December 10, 2011	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	May 15 August 15 November 15 February 15
1/Discharge Event	December 10, 2011	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 15 August 15 November 15 February 15
1/Month	December 10, 2011	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 15 August 15 November 15 February 15
1/Year	December 10, 2011	January 1 through December 31	February 15

 Table E-4.
 Monitoring Periods and Reporting Schedule

 Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in Part 136.

- **5.** The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
 - **a.** Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
 - **b.** Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

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

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

- **b.** The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
- 8. The Discharger shall submit SMRs in accordance with the following requirements:
 - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - **b.** The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
 - **c.** 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. 4th Street, Suite 200 Los Angeles, CA 90013

C. Discharge Monitoring Reports (DMRs)

Not Applicable

D. Other Reports

- 1. Within 90 days of the effective date of this permit, the Discharger is required to submit the following to the Regional Water Board:
 - **a.** Initial Investigation TRE workplan
 - b. Updated SWPPP
 - c. Updated BMPs
 - d. SPCC Plan

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

WDID	4B192127001
Discharger	Lubricating Specialties Company
Name of Facility	Pico Rivera Facility
	8015 Paramount Boulevard
Facility Address	Pico Rivera, California 90660
	Los Angeles County
Facility Contact, Title and Phone	Farhad Tabarsi, Regulatory Compliance Manager, (562) 776-4017
Authorized Person to Sign and Submit Reports	Steve Milam, President and Chief Executive Officer, (562) 776-4000
Mailing Address	8015 Paramount Boulevard, Pico Rivera, CA 90660
Billing Address	Same as Mailing Address
Type of Facility	Lubrication Oils Blending and Packaging (SIC 2992)
Major or Minor Facility	Minor
Threat to Water Quality	Category 3
Complexity	Category C
Pretreatment Program	Not Applicable
Reclamation Requirements	Not Applicable
Facility Permitted Flow	Discharge Point No. 001: 0.258 million gallons per day (MGD)
Facility Design Flow	Not Applicable
Watershed	Los Angeles River Watershed
Receiving Water	Rio Hondo Reach 1
Receiving Water Type	Inland Surface Water

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

A. Lubricating Specialties Company (hereinafter Discharger) is the owner and operator of the Pico Rivera Facility (hereinafter Facility), a facility engaged in blending and packaging of lubricating oil.

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

- B. The Facility discharges storm water to an unnamed drainage course to Reach 1 of the Rio Hondo Channel, a water of the United States, and is currently regulated by Order No. R4-2006-0065 which was adopted on August 3, 2006 and expired on July 10, 2011. The terms and conditions of the current Order (R4-2006-0065) have been continued as per 40 CFR Part 122.6, which stipulates that if the Discharger submits a timely report of waste discharge (ROWD) and the permit is not renewed prior to the expiration date, the permit may be administratively extended. The current Order remains in effect until new Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order.
- **C.** The Discharger filed a ROWD and submitted an application for renewal of its WDRs and NPDES permit on February 18, 2011. On June 14, 2011, the application was determined to be incomplete and additional information was requested. The requested information was submitted on June 22nd, July 1st, 5th, and July 8, 2011. The application was deemed complete on July 12, 2011.

II. FACILITY DESCRIPTION

The Discharger owns and operates the Pico Rivera Facility located at 8015 Paramount Boulevard, Pico Rivera, California. The Facility blends and packages lubricating oils for passenger cars and heavy duty engines, transmission oils, and an assortment of aftermarket specialty oils. The Facility receives refined oils by rail and tanker truck. Oil additives are received mainly in drums loaded on trailers, and delivered by trucks.

The Facility stores base oils, additives and the majority of finished products in a tank farm, which consists of 50 tanks, located near the northwest corner of the manufacturing area. The capacity of the 50 storage tanks is 962,000 gallons. The average volume of base oils, additives, and product stored at any given time is approximately 700,000 gallons. The capacity of the largest tank is 30,000 gallons. The Facility's railroad spur, situated within a containment structure and located to the north of the tank farm, can accommodate five tank cars for up to an additional 100,000 gallons of storage.

The Facility maintains two drum storage areas. All drums are stored on pallets and are covered to protect the product from water intrusion and eliminate the materials possible contact with rain water. One storage area is located in the southeastern area of the site, where 55 gallon drums of finished product and other petroleum chemicals are stored. The Facility leases a parcel of land that runs parallel to the north boundary of the property. This area is used for the storage of drums, which contain additives. This area is covered by asphalt and bermed for spill containment. The area is graded to drain to a low point, where the runoff will collect in a sump and be pumped to the storm water treatment unit.

A. Description of Wastewater and Biosolids Treatment or Controls

Origins of storm water runoff from the Facility include: 1) the tank farm area; 2) the rail car loading/unloading area; and 3) the drum storage and loading/unloading areas. The rail car loading/unloading area has an impervious, asphalt surface and is surrounded by a concrete wall to provide containment. The railroad spur containment area is graded and trenched to route storm water runoff to the tank farm's three stage clarifier. The

tank farm has an impervious, cement surface and is surrounded by a concrete wall to provide containment for up to 168,000 gallons and is equipped with a shut-off valve.

Storm water that collects in the tank farm is monitored by an on-site laboratory to assess the water quality. If this storm water contains elevated levels of contaminants, it is then disposed of through a contract with a Hazardous Waste Hauler for treatment offsite. Storm water of sufficient quality (i.e., the treatment system is capable of reducing pollutant levels to within limits) is released to a 3-stage oil/water separator, also referred to as a clarifier, then through a 4-inch underground pipe to the storm water collection pond, which collects storm water from other areas of the site as well. The flow from the tank farm is by gravity for lower volumes. If higher volumes accumulate in the tank farm, pumps are used to discharge water to the clarifier and subsequently to the storm water collection pond. This situation occurs approximately once per year.

Pavement grading directs runoff from other areas of the site, including drum storage areas, directly to the storm water collection pond located along the western property line. The storm water collection pond is concrete-lined and has a storage capacity of 15,000 gallons. From the storm water collection pond, storm water runoff is pumped through a 2-stage filter. The first stage, which consist of two (2) 10-micron sediment filters in parallel provide filtration to reduce total suspended solids. The second stage, which consists of an oil adsorbent textile media with a 3-micron pore size filter in series removes oil from the storm water prior to discharge. The oil adsorbent textile is periodically replaced and disposed of off-site. The treated storm water effluent is discharged to an unnamed, earthen drainage course, where it commingles with runoff from other sites.

B. Discharge Points and Receiving Waters

Treated storm water is released through Discharge Point No. 001 to an unnamed drainage course that runs adjacent to the property. The Facilities' discharge commingles with other storm water sources within the drainage course and flows less than one half mile west to Reach 1 of the Rio Hondo Channel, a water of the United States. From the confluence with the drainage course, the Rio Hondo Channel flows approximately 4.4 miles to the Los Angeles River.

Attachment B provides a map of the area and site maps of the Facility and discharge point. Attachment C provides a flow schematic diagram of the storm water runoff.

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

Effluent limitations contained in the existing Order (Order No. R4-2006-0065) for discharges from Discharge Point No. 001 (Monitoring Location EFF-001) and representative monitoring data from the term of the existing Order are as follows:

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

001.	[Monito	ring Data	
Parameter	Units	Effluent Limitation			December 20, 2010)	
rarameter	Onits	Average Monthly	Maximum Daily	Highest Average Monthly Discharge	Highest Daily Discharge	
Conventional Pol	lutants					
рН	s.u.	6.5-8	8.5 ¹	5.96	-10.72	
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	mg/L		30		167	
Oil and Grease	mg/L		15		89	
Total Suspended Solids (TSS)	mg/L		75		230	
Non-Conventiona	al Pollutant	s				
Acute Toxicity	% Survival	2		0		
Temperature	⁰F		86 ³		74	
Turbidity	NTU		75		178	
Ammonia, Total (as N)	mg/L	2.3 ⁴	10.1 ⁵		7.0	
Nitrate, Total (as N)	mg/L		8.0		164	
Nitrite, Total (as N)	mg/L		1.0		1.45	
Nitrate plus Nitrite (as N)	mg/L		8.0		165	
Phenols	mg/L		1		0.48	
Priority Pollutant	s					
Cadmium, Total Recoverable ⁶	μg/L		15.9 ⁶		20 ⁷	
Copper, Total Recoverable ⁶	μg/L		63.6 ⁶		800 ⁷	
Lead, Total Recoverable ⁶	μg/L		81.6 ⁶		20 ⁷	
Zinc, Total Recoverable ⁶	μg/L		117 ⁶		2,440 ⁷	

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

^{2.} Average survival in effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70% survival.

^{3.} This value represents an instantaneous maximum value, not to be exceeded at any time.

- ^{4.} Thirty day average at pH = 7.9 and 20 °C, when hourly samples are collected and composited or only one grab sample is collected. Analysis for the temperature and pH of the receiving water at the same time as the discharge would provide data for a site-specific determination of the ammonia limit.
- ^{5.} One hour average WLA at 7.9 pH and 20 °C, applies if hourly samples are taken throughout the storm and each is analyzed. No single sample may exceed the 10.1 mg/L limit. Analysis for the temperature and pH of the receiving water at the same time as the discharge would provide data for a site-specific determination of the ammonia limit.
- ^{6.} Effective January 11, 2011.
- ^{7.} Based on monitoring data collected before the effective date of the limitations. No results available since effective date.

D. Compliance Summary

Monitoring data from January 2006 through December 2010, submitted to the Regional Water Board indicate that the Discharger has exceeded existing permit limitations as listed in Table F-3. In addition to the violations of effluent limitations, the Regional Water Board documented five (5) instances of "Deficient Monitoring" and 30 instances of "Deficient Reporting" from January 2006 through December 2010.

	Table F-3. Summary of Compliance History							
Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units		
2/18/2006	1 st Quarter, 2006	Instantaneous Minimum	рН	6.14	6.5	s.u.		
2/18/2006	1 st Quarter, 2006	Daily Maximum	Oil and Grease	46	15	mg/L		
3/6/2006	1 st Quarter, 2006	Instantaneous Minimum	рН	6.44	6.5	s.u.		
3/7/2006	1 st Quarter, 2006	Instantaneous Minimum	рН	6.32	6.5	s.u.		
3/20/2006	1 st Quarter, 2006	Daily Maximum	Oil and Grease	89	15	mg/L		
4/6/2006	2 nd Quarter, 2006	Daily Maximum	Oil and Grease	22	15	mg/L		
4/17/2006	2 nd Quarter, 2006	Daily Maximum	Oil and Grease	19	15	mg/L		
12/27/2006	4 th Quarter, 2006	Daily Maximum	BOD	95	30	mg/L		
12/27/2006	4 th Quarter, 2006	Daily Maximum	TSS	116	75	mg/L		
12/27/2006	4 th Quarter, 2006	Daily Maximum	Turbidity	178	75	NTU		
2/11/2007	1 st Quarter, 2007	Instantaneous Minimum	рН	6.36	6.5	s.u.		
2/11/2007	1 st Quarter, 2007	Daily Maximum	BOD	40.2	30	mg/L		
2/18/2007	1 st Quarter, 2007	Instantaneous Minimum	рН	6.27	6.5	s.u.		
2/18/2007	1 st Quarter, 2007	Daily Maximum	BOD	51.7	30	mg/L		
2/23/2007	1 st Quarter, 2007	Instantaneous Minimum	рН	6.37	6.5	s.u.		
2/23/2007	1 st Quarter, 2007	Daily Maximum	BOD	54.6	30	mg/L		

 Table F-3.
 Summary of Compliance History

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units
2/23/2007	1 st Quarter, 2007	Daily Maximum	Oil and Grease	22	15	mg/L
3/21/2007	1 st Quarter, 2007	Daily Maximum	BOD	41.4	30	mg/L
3/21/2007	1 st Quarter, 2007	Daily Maximum	Oil and Grease	38	15	mg/L
4/23/2007	2 nd Quarter, 2007	Daily Maximum	Nitrate-N	164	8.0	mg/L
4/23/2007	2 nd Quarter, 2007	Daily Maximum	Nitrite-N	1.45	1.0	mg/L
4/23/2007	2 nd Quarter, 2007	Daily Maximum	Nitrite plus Nitrate-N	165	8.0	mg/L

On August 11, 2010, the State Water Board issued an Administrative Civil Liability Complaint No. OE-2010-0006 for mandatory minimum penalties in the amount of \$93,000 against Lubricating Specialties Company for violating waste discharge requirements contained in Regional Board Order Nos. 97-052 and R4-2006-0065. Twenty (20) effluent violations of Order No. R4-2006-0065 were subject to mandatory minimum penalties in the amount of \$60,000. Additionally, the Discharger had four (4) effluent violations of Order No. 97-052 and seven (7) late reporting violations, which were subject to mandatory minimum penalties in the amount of \$33,000. On November 18, 2010, a hearing was held before a Hearing Officer of the State Water Board on this Complaint pursuant to Water Code sections 13323(c) and 183. The Hearing Officer's decision is pending.

The Discharger is investigating alternate treatment methods for upgrading the current storm water treatment system in order to address the pH, BOD, oil and grease, turbidity and TSS violations.

E. Planned Changes

The Discharger has contracted with Stormwater Online, Inc. to install a treatment system to treat the stormwater runoff from the Facility and achieve compliance with the effluent limitations.

The proposed improvements will result in the stormwater runoff passing through Stormwater Online, Inc.'s StorminatorTM an automated water treatment unit designed to reduce the contaminants in the effluent to below regulatory limits. The StorminatorTM has a three tiered treatment train. Tier 1 is a clay based ion exchange media used in the primary pressure vessel. The clay media will remove solids that range from approximately 10-25 microns. It also allows oil to adhere to the media surface providing second stage oil removal. Tier 2 is a pressure vessel containing activated carbon. The activated carbon will remove volatile organic compounds, any remaining oil and grease, and solids. The third pressure vessel is a filter rated to 1 micron with 400 ft² of surface area.

During installation of the new treatment system the existing 2-stage filter system may be removed or may be used in conjunction with the new treatment system. In addition, eight (8) removable stratus filters, which are no longer been utilized will be removed. The vertical stratus filters are located at the top flight of the permanent wall surrounding the containment pond. Currently, the wastewater is pumped through the existing treatment system to maintain the water level below the vertical filters. These filters will be removed and the containment wall will be extended to the same height as the rest of the containment pond.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

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

B. California Environmental Quality Act (CEQA)

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

C. State and Federal Regulations, Policies, and Plans

1. Water Quality Control Plans. The Regional Water Board adopted a *Water Quality Control Plan Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Rio Hondo Channel are as follows:

Table F-4.Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name (Hydro. Unit No.)	Beneficial Use(s)
001	Rio Hondo below Spreading Grounds (405.15)	Existing: Non-contact water recreation (REC-2). Intermittent: Ground water recharge (GWR); wildlife habitat (WILD). Potential: Municipal and domestic supply (MUN)*; water contact recreation (REC-1) ¹ ; warm freshwater habitat (WARM).

* MUN designations marked with an asterisk are conditional.

^{1.} Access prohibited by Los Angeles County Department of Public Works in concrete-channelized areas.

Table F-5. Basin Plan Ground Water Beneficial Uses

Discharge Point	Basin	Beneficial Use(s)
001	Los Angeles Coastal Plain, Central Basin	Existing: Municipal and Domestic Supply (MUN); Industrial Service Supply (IND); Industrial Process Supply (PROC); Agricultural Supply (AGR)

Requirements of this Order implement the Basin Plan.

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

Groundwater Recharge (GWR). The Rio Hondo Channel, below the spreading grounds, has an intermittent beneficial use designation of GWR. Surface water from the Rio Hondo Channel may percolate into the Los Angeles Coastal Plain, Central Groundwater Basin. Since groundwater from this Basin is designated as MUN (Table F-5) it may be used to provide drinking water to the community and the groundwater aquifers should be protected, therefore, Title 22-based MCLs were evaluated with respect to the discharge.

2. Thermal Plan. The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. Requirements of this Order implement the Thermal Plan. Additionally, a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved* Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. A maximum effluent temperature limitation of 86 °F was determined to be appropriate for protection of aquatic life and is included in this Order.

3. 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 aguatic 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 (OAL), 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.

On June 7, 2007, the Regional Water Board adopted Resolution No. 2007-005, *Amendments to the Water Quality Control Plan – Los Angeles Region – To Incorporate Site-Specific Objectives for Select Inland Surface Waters in the Santa Clara, Los Angeles, and San Gabriel River Watersheds.* This amendment to the Basin Plan incorporates site specific 30-day average objectives for ammonia, along with corresponding site specific early life stage implementation provisions for select water body reaches and tributaries in the Santa Clara, Los Angeles, and San Gabriel River watersheds. The State Water Board, OAL, and USEPA approved this Basin Plan amendment on January 15, 2008, May 12, 2008, and March 30, 2009, respectively. Resolution No. 2007-005 became effective on April 23, 2009.

- 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 CFR § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- **7. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- 8. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations¹ section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

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

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Regional Water Board plans to develop and adopt total maximum daily loads (TMDLs) that will specify WLAs for point sources and load allocations (LAs) for non-point sources, as appropriate.

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

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

the 2010 303(d) list and have been scheduled for TMDL development. The 2010 State Water Board 303(d) List classifies of Rio Hondo Channel Reach 1 as impaired due to coliform bacteria, copper, lead, toxicity, trash, zinc, and pH. On July 9, 2010, the Regional Water Board adopted a Bacteria TMDL for the Los Angeles River. This TMDL is not effective until approved by the State Water Board, USEPA and OAL. TMDL development to address toxicity is scheduled for 2021.

Trash TMDL for the Los Angeles River. The Los Angeles River Trash TMDL was adopted by the Regional Water Board on September 19, 2001. The Trash TMDL was to be implemented via storm water permits in a phased reduction for a period of 10 years. The Trash TMDL was approved by the State Water Board on February 19, 2002, and OAL on July 16, 2002. The USEPA approved the trash TMDL on August 1, 2002. and it became effective on August 28, 2002. There were a number of challenges to the Los Angeles River Trash TMDL. The consideration of the challenges resulted in a requirement that the TMDL be set aside and not implemented until the CEQA requirements had been satisfied. On June 8, 2006, the Regional Water Board adopted Resolution No. R4-2006-0051 to set aside the adopted TMDL. On July 17, 2006, the State Water Board adopted Resolution No. 2006-0051, setting the TMDL aside. An amendment to the Los Angeles River Trash TMDL (Resolution No. 2007-012) was adopted by the Regional Water Board on August 9, 2007. The State Water Board approved the Trash TMDL on April 15, 2008. OAL approved the Trash TMDL on July 1, 2008. The USEPA approved the Trash TMDL on July 24, 2008, and it became effective on September 23, 2008. The Trash TMDL established a numeric target of zero trash in the Los Angeles River. This TMDL will be implemented through Municipal Separate Storm Sewer Systems (MS4) NPDES Permit Program. This permit requires development and implementation of a storm water pollution prevention plan (SWPPP), which is expected to prevent the discharge of trash from the Facility to the Los Angeles River watershed. The Order is consistent with the intent of Resolution No. 2007-012.

Nitrogen TMDL for the Los Angeles River. The Regional Water Board adopted Resolution No. 2003-009 on July 10, 2003, that amended the Basin Plan to incorporate the *Los Angeles River Nitrogen Compounds and Related Effects TMDL (Nitrogen TMDL)*. The Nitrogen TMDL was approved by the State Water Board and OAL on November 19, 2003, and February 27, 2004, respectively. The Nitrogen TMDL was approved by USEPA on March 18, 2004, and it became effective on March 23, 2004. Subsequently, Resolution No. 2003-016, which revised the interim effluent limitations for ammonia, was adopted by the Regional Water Board on December 4, 2003. The State Water Board approved the TMDL with Resolution 2004-0014 on March 24, 2004. OAL approved the TMDL on September 27, 2004, and it became effective on the same date. Resolution Nos. 2003-009 and 2003-016 establish WLAs for the Los Angeles River, to which Rio Hondo Channel is a tributary, for ammonia, nitrate-nitrogen, nitrite-nitrogen, and nitrite plus nitrate-nitrogen. Effluent limitations based on these WLAs have been established in this Order.

Metals TMDL for the Los Angeles River. The Regional Water Board adopted Resolution No. R4-2005-006 on June 2, 2005, that amended the Basin Plan to incorporate the *Los Angeles River and Tributaries Metals TMDL* (Metals TMDL). The State Water Board approved the Metals TMDL on October 20, 2005, and OAL approved

the Metals TMDL on December 9, 2005. The USEPA approved the Metals TMDL on December 22, 2005, and it became effective on January 11, 2006. The metals TMDL establishes numeric water quality targets that are based on objectives established by USEPA in the CTR. An amendment to the Metals TMDL (Resolution No. R4-2007-014) was adopted by the Regional Water Board on September 6, 2007. The State Water Board and OAL approved the amended Metals TMDL, on June 17, 2008, and October 17, 2008, respectively. USEPA approved the amended Metals TMDL on October 29, 2008, and it became effective on the same date. Resolution No. R4-2007-014 establishes WLAs in Rio Hondo Channel for cadmium (wet weather only), copper, lead, and zinc. This permit implements the conditions of Resolution No. R4-2007-014.

Bacteria TMDL for the Los Angeles River. The *Los Angeles River Bacteria TMDL* (Resolution R4-2010-007) was adopted by the Regional Water Board on July 9, 2010. The TMDL establishes a numeric target based on Basin Plan Objectives for E. coli and assigns a WLA of zero days of exceedance to individual NPDES permits. In order to be effective, the TMDL must be approved by the State Water Board, the OAL and USEPA. This Order does not include effluent limitations for bacteria at this time. Associated with Bacteria objectives, the High Flow Suspension of Recreational Uses Amendment to the Basin Plan became effective on November 2, 2004. This amendment suspends REC1 and REC2 beneficial uses as related to bacteria objectives, for certain engineered channels. The Rio Hondo Channel is identified in the amendment as a High Flow Suspension water body.

E. Other Plans, Polices and Regulations

Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

The list of pollutants of concern was developed based on constituents that are regulated in the Basin Plan or CTR and were detected in the effluent, as well as pollutants commonly associated with petroleum storage facilities, and/or for which the Rio Hondo Channel is identified as a 303(d) impaired waterbody. The Facility engages in blending and packaging of lubricating oils. Wastewater discharged from the Facility is comprised of storm water runoff from the rail car loading/unloading area, the tank farm and the drum storage yard. The following pollutants are pollutants of concern as they are commonly associated with petroleum storage facilities: oil and grease, total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylene, and sulfides. In addition, the Discharger stores bis(2-ethylhexyl)phthalate on site. Reach 1 of the Rio Hondo Channel is included on the 303(d) list for coliform bacteria, copper, lead, toxicity, trash, zinc, and pH. Pollutants commonly

associated with storm water discharges include turbidity, settleable solids, TSS, BOD, and pH; therefore, these are considered pollutants of concern as well. Intermittent discharges of storm water may carry a combination of pollutants that may contribute to acute toxicity. Therefore, toxicity, as an indicator of the presence of toxic pollutants, is also considered a pollutant of concern.

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. This Order includes new mass-based effluent limitations, where appropriate, to comply with 40 CFR 122.45(f)(1).

The discharge of storm water is infrequent and of short duration. For this reason, maximum daily limitations are sufficient to ensure protection of the beneficial uses in the Rio Hondo Channel. However, this Order does include average monthly effluent limitations for ammonia, nitrate nitrogen, nitrite nitrogen, and nitrate plus nitrite as nitrogen, which is consistent with the Nitrogen TMDL.

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 the Rio Hondo Channel.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3.

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

a. Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

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

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

2. Applicable Technology-Based Effluent Limitations

Currently, no technology-based ELGs exist for oil blending and packaging facilities. The technology-based requirements in the Order are based on case-by-case numeric limitations, developed in the existing Order, using BPJ. The technology-based effluent limitations carried over from the existing Order include maximum daily effluent limitations (MDELs) for BOD, oil and grease, TSS, turbidity, and phenols (Table F-6). These BPJ limitations are consistent with those established for similar facilities within the Los Angeles Region and continue to be appropriate for this Facility.

This Order includes new BPJ effluent limitations for total petroleum hydrocarbons and settleable solids. Large quantities of petroleum products are stored and used on site and have the potential to contaminate storm water runoff. In addition, an effluent sample collected December 20, 2010, resulted in a TPH oil (C_{23+}) concentration of 27,000 µg/L. A maximum daily effluent limitation equal to 100 µg/L is established, based on permits for other petroleum storage facilities in the Region. Monitoring data from January 2, 2006 through December 20, 2010, detected settleable solids in 9 out of 10 samples, with results varying from less than 0.1 ml/L to 0.5 ml/L. This Order includes a maximum daily effluent limitation for settleable solids equal to 0.3 ml/L, based on requirements in other storm water permits within the Region.

Order No. R4-2006-0065 required the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). This Order requires the Discharger to update the SWPPP. The revised SWPPP will reflect current operations, treatment activities, and staff responsible for implementing and supporting the SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water contamination and for preventing contaminated storm water from being discharged directly into the storm drain. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water. This Order requires the Discharger to update the SWPPP consistent with requirements in Attachment G.

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

The Order requires the Discharger to develop a Spill Prevention Control and Countermeasures (SPCC) Plan. The SPCC Plan is required in order to report on preventive and contingency (cleanup) procedures for controlling accidental discharges and for minimizing the adverse effects of such events. Further discussion is provided in VII.B.3.b.

The combination of the SWPPP (including BMPs), SPCC Plan and existing Order limitations reflecting BPJ will serve as the equivalent of technology-based effluent limitations, in the absence of established ELGs, in order to carry out the purposes and intent of the CWA. Table F-6 summarizes the technology-based effluent limitations for Discharge Point No. 001.

Parameter	Units	Average Monthly	Maximum Daily
BOD	mg/L		30
БОЛ	lbs/day ¹		65
Oil and Grease	mg/L		15
Oli allu Grease	lbs/day ¹		32
Phenols	mg/L		1.0
Filehois	lbs/day ¹		2.2
Settleable Solids	ml/L		0.3
Total Petroleum	μg/L		100
Hydrocarbons (TPH) ²	lbs/day ¹		0.22
Turbidity	NTU		75
TSS	mg/L		75
100	lbs/day ¹		160

Table F-6.Summary of Technology-based Effluent Limitations for Discharge
Point No. 001.

^{1.} The mass emissions rate is based on a maximum flow of 0.258 MGD and is calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

 $^{2.}$ TPH equals the sum of TPH gasoline (C4-C12), TPH diesel (C13-C23), and TPH oil (C23+)

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 USEPA Technical Support Document for Water Quality-Based Toxics Control (TSD) for storm water discharges and in the SIP for non-storm water discharges. The Regional Water Board has determined that the procedures for determining reasonable potential and calculating WQBELs contained in the SIP for non-storm water discharges may also be used to evaluate reasonable potential and calculate WQBELs for storm water discharges as well. Hence, in this Order the SIP methodology is used to evaluate reasonable potential for storm water discharges through Discharge Point No. 001.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in Section II of the Limitations and Discharge Requirements, the Regional Water Board adopted a Basin Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The beneficial uses applicable to the Rio Hondo Channel are summarized in Section III.C.1 of this Fact Sheet. The Basin Plan includes both narrative and numeric water quality objectives applicable to the receiving water.

Priority pollutant water quality criteria in the CTR are applicable to the Rio Hondo Channel. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with section 131.38(c)(3), saltwater criteria apply at salinities of 10 part per thousand (ppt) and greater at locations where this occurs 95 percent or more of the time. 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 Rio Hondo Channel, a water of the United States in the vicinity of the discharge. To support the beneficial use of GWR, and the MUN beneficial use of the underlying ground water basin, Title 22 MCLs were included as criteria within the RPA. For parameters for which reasonable potential could not be established, WQBELs were not developed based on CTR water quality criteria.

Some water quality criteria are hardness dependent. The most recent available hardness values for the Rio Hondo Channel were available in the Final Staff Report supporting the Metals TMDL. Within this data set, the median hardness in the Rio Hondo Channel was reported as 141 mg/L CaCO₃, based on 74 samples collected between 1988 and 1995. This value was selected for evaluation of reasonable potential.

Table F-7 summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent or receiving water.

				СТ	R/NTR V	Vater Qual	ity Criteria	
CTR		Selected	Freshwater		Saltwater		Human Health for Consumption of:	
No.	Constituent	Criteria	Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms only
		μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
4	Cadmium, Total Recoverable	3.2	6.7	3.2				
10	Selenium, Total Recoverable	5.0	20	5.0				
14	Cyanide, Total Recoverable	5.2	22	5.2				220,000
19	Benzene	71						71
39	Toluene	150 ¹						200,000
79	Diethyl Phthalate	120,000						120,000
84	Di-n-Octyl Phthalate	No Criteria						No Criteria

Table F-7. Applicable Water Quality Criteria

"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.

Basin Plan-Title 22 criteria

a. TMDL Waste Load Allocations

In addition to the criteria summarized in Table F-7, the Metals TMDL establishes wet-weather WLAs for cadmium, copper, lead, and zinc, applicable to tributaries to Reach 1 of the Los Angeles River, and dry-weather WLAs for copper, lead, and zinc for Reach 1 of the Rio Hondo Channel. The cadmium, copper, lead, and zinc wet-weather WLAs are based on CTR criteria, the median hardness value measured at the Wardlow station between 1996 and 2002, and conversion factors adjusted to reflect the differences in particulate phase during wet weather. The dry-weather zinc WLA is based on the CTR criterion and the 10th percentile hardness value in the Rio Hondo Channel. The dry-weather WLAs for copper, lead and zinc are based on CTR criteria and the median hardness value measured within Reach 1 of the Rio Hondo Channel.

Order No. R4-2006-0065 included wet-weather effluent limitations for copper, lead, and zinc based on the implementation provisions applicable to the general industrial storm water discharge permits. The Metals TMDL states that the category of "Other NPDES permits" refers to minor NPDES permits, general nonstorm water NDPES permits, and major permits other than the Tillman, LA-Glendale, and Burbank POTWs." Since the Discharger is a minor permit and is not enrolled in the general industrial storm water permit, it is more appropriately addressed by WLAs assigned to the "Other NPDES permits" category.

Consistent with the implementation portion of the TMDL, effluent limitations have been calculated using procedures specified in Section 1.4 of the SIP based on the WLAs assigned to "Other NPDES permits". The numeric target portion of the Metals TMDL specifies when the wet-weather and dry-weather criteria are applicable. Wet-weather effluent limitations are applicable when the flow in the Los Angeles River measured at the Wardlow Station (Los Angeles County Department of Public Works [LACDPW] gage station F319-R) is equal to or greater than 500 cubic feet per second (cfs). Dry-weather effluent limitations are applicable when flow measured at the Wardlow gage station is less than 500 cfs. Flow gage measurements are available by contacting the LACDPW.

Table F-8 summarizes the applicable dry-weather and wet-weather WLAs for cadmium, copper, lead, and zinc contained in the Metals TMDL.

Table F-8.	Dry-Weather and Wet-Weather Waste Load Allocations Applicable to
	Rio Hondo Channel Reach

Constituent	Units	Dry-Weather ¹	Wet-Weather ¹
Cadmium, Total Recoverable	μg/L		3.1
Copper, Total Recoverable	μg/L	13	17
Lead, Total Recoverable	μg/L	5.0	62
Zinc, Total Recoverable	μg/L	131	159

Wet-weather effluent limitations are applicable when the flow in the Los Angeles River measured at the Wardlow Station (LACDPW gage station F319-R) is equal to or greater than 500 cfs. Dry-weather effluent limitations are applicable when flow measured at the Wardlow gage station is less than 500 cfs. Flow gage measurements are available by contacting the LACDPW.

3. Determining the Need for WQBELs

In accordance with Section 1.3 of the SIP, the Regional Water Board conducts an 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) <u>Trigger 1</u> 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.
- 3) <u>Trigger 3</u> If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

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

The RPA was performed for the priority pollutants regulated in the CTR for which data are available. Effluent data from SMRs and annual reports from the period of January 2, 2006 through December 20, 2010 were available for inclusion in the RPA. No receiving water data were available.

CTR No.	Constituent	Applicable Water Quality Criteria (C)	Max Effluent Conc. (MEC)	Maximum Detected Receiving Water Conc. (B)	RPA Result - Need Limit?	Reason
4	Cadmium, Total Recoverable (Dry- weather)	3.2	20	NA	Yes ¹	MEC>C
10	Selenium, Total Recoverable	5.0	80	NA	Yes	MEC>C
14	Cyanide, Total Recoverable	5.2	90	NA	Yes	MEC>C
19	Benzene	71	10.6	NA	No	MEC <c< td=""></c<>
39	Toluene	200,000	24.2	NA	No	MEC <c< td=""></c<>
79	Diethyl Phthalate	120,000	5.04	NA	No	MEC <c< td=""></c<>
84	Di-n-Octyl Phthalate	No Criteria	6.69	NA	No	No Criteria

Table F-9. Summary Reasonable Potential Analysis

Dry-weather only. Reasonable potential for cadmium during wet-weather and applicable wet-weather WLA is established in the Metals TMDL.

Based on the RPA, pollutants that demonstrate reasonable potential are cadmium (dry-weather), selenium, and cyanide. Refer to Attachment J for a summary of the RPA and associated effluent limitation calculations.

The Regional Water Board has developed WQBELs for cadmium (wet-weather only) copper, lead, and zinc that have available WLAs under a TMDL. The effluent limitations for these pollutants were established regardless of whether or not there is reasonable potential for the pollutants to be present in the discharge at levels that would cause or contribute to a violation of water quality standards. The Regional Water Board developed WQBELs for these pollutants pursuant to section 122.44(d)(1)(vii), which does not require an RPA. Similarly, Section 1.3 of the SIP recognizes that an RPA is not appropriate if a TMDL has been established for a pollutant.

4. WQBEL Calculations

- **a.** If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in Section 1.4 of the SIP. These procedures include:
 - i. If applicable and available, use of the WLA established as part of a TMDL.
 - ii. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).
 - iii. Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.

- **b.** The dry-weather WQBELs for copper, lead, and zinc and wet-weather WQBELs for cadmium, copper, lead, and zinc are based on the WLAs established in the Metals TMDL and the procedures specified in Section 1.4 of the SIP. The Metals TMDL states that dry-weather limits are applicable when the maximum daily flow of the Los Angeles River is less than 500 cubic feet per second (cfs) and the wetweather limits are applicable when the maximum daily flow of the Los Angeles River is 500 cfs or more.
- **c.** The TMDL does not establish dry-weather WLAs for cadmium. Dry-weather limitations for cadmium are based on a reasonable potential determination, CTR criteria, and are calculated according to Section 1.4 of the SIP.
- **d.** Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this Order, no dilution credit is being allowed. However, in accordance with the reopener provision in Section VI.C.1.e in the Order, this Order may be reopened upon the submission by the Discharger of adequate information to establish appropriate dilution credits or a mixing zone, as determined by the Regional Water Board.
- e. WQBELs Calculation Example

Using copper (wet-weather and dry-weather) and cyanide (all year) as examples, the following demonstrates how WQBELs were established for this Order.

The process for developing these limits is in accordance with section 1.4 of the SIP. Two sets of AMEL and MDEL values are calculated separately, one set for the protection of aquatic life and the other for the protection of human health. The AMEL and MDEL limitations for aquatic life and human health are compared, and the most restrictive AMEL and the most restrictive MDEL are selected as the WQBEL. Attachment J summarizes the development and calculation of all WQBELs for this Order using the process described below.

Calculation of aquatic life AMEL and MDEL:

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

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

Where C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. In this Order a hardness value of 141 mg/L (as CaCO₃) was the median hardness in the Rio Hondo Channel determined in the Metals TMDL. This value was used for development of hardness-dependent criteria for Discharge Point No. 001. D = The dilution credit, and

B = The ambient background concentration

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

ECA = C

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

For cyanide the applicable ECAs are (reference Table F-8)

 $ECA_{acute} = 22 \mu g/L$ $ECA_{chronic} = 5.2 \mu g/L$

For copper (total recoverable), where both wet-weather and dry-weather WLAs have been established through a TMDL, the wet-weather WLA is set equal to the ECA_{wet} and the dry-weather WLA is set equal to the ECA_{dry} (reference Table F-8).

 $ECA_{wet} = 17 \ \mu g/L \ (TMDL wet-weather WLA)$

ECA_{dry}= 13 μ g/L (TMDL dry-weather WLA)

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

LTA_{acute} = ECA_{acute} x Multiplier_{acute 99}

LTA_{chronic} = ECA_{chronic} x Multiplier_{chronic 99}

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6. The data set for cyanide had less than 10 samples, therefore the default CV equal to 0.6 was selected. For copper, the calculated CV of 1.97 was used.

For cyanide, the following data were 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 _{acute}	ECA Multiplier _{chronic}
3	0.60	0.321	0.527

 $LTA_{acute} = 22 \ \mu g/L \ x \ 0.321 = 7.06 \ \mu g/L$

 $LTA_{chronic} = 5.2 \ \mu g/L \ x \ 0.527 = 2.74 \ \mu g/L$

For copper (wet-and dry-weather), the following data were 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 _{acute}	ECA Multiplier _{chronic}
18	1.97	0.118	0.207

LTA _{wet, acute} =	17 μg/L x 0.118 = 2.00 μg/L
LTA _{wet, chronic =}	17 μg/L x 0.207 = 3.51 μg/L
LTA _{dry, acute} =	13 μg/L x 0.118 = 1.54 μg/L
LTA _{dry, chronic}	13 μg/L x 0.207 = 2.69 μg/L

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

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

For cyanide, the most limiting LTA was the LTA_{chronic}

 $LTA_{cyanide} = LTA_{chronic} = 2.74 \ \mu g/L$

For wet-weather copper, the most limiting LTA was the LTA_{acute}

 $LTA_{wet, copper} = LTA_{acute} = 2.00 \ \mu g/L$

For dry-weather copper, the most limiting LTA was the LTA_{acute}

 $LTA_{dry, copper} = LTA_{acute} = 1.54 \ \mu g/L$

For copper, two receiving water conditions exist for the parameters listed in the Metals TMDL, thus the most stringent LTA for both wet-and dry-weather conditions will be used.

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

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

MDEL_{aquatic life} = LTA x MDEL_{multiplier 99}

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

For cyanide, the following data were used to develop the AMEL and MDEL for effluent limitations using equations provided in Section 1.4, Step 5 of the SIP (Table 2 of the SIP also provides this data up to two decimals):

No. of Samples Per Month	CV	Multiplier _{MDEL 99}	Multiplier _{AMEL 95}
4	1.97	3.11	1.55

<u>Cyanide</u>

AMEL = $2.74 \ \mu g/L \ x \ 1.55 = 4.3 \ \mu g/L$

MDEL= 2.74 µg/L x 3.11 = 8.5 µg/L

For copper, the following data were used to develop the AMEL and MDEL for dryand wet-weather effluent limitations 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 _{MDEL 99}	Multiplier _{AMEL 95}
4	0.60	8.46	2.76

<u>Copper_{wet}</u>

 $AMEL_{wet} = 2.00 \ \mu g/L \ x \ 2.76 = 5.5 \ \mu g/L$

 $MDEL_{wet} = 2.00 \ \mu g/L \ x \ 8.46 = 17.0 \ \mu g/L$

Copper_{dry}

 $AMEL_{drv} = 1.54 \ \mu g/L \ x \ 2.76 = 4.24 \ \mu g/L$

 $MDEL_{dry} = 1.54 \ \mu g/L \ x \ 8.46 = 13.0 \ \mu g/L$

Step 5: Excluding parameters addressed in the TMDL, for the ECA based on human health, set the AMEL equal to the ECA_{human health}

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

For cyanide,

 $AMEL_{human health} = 220,000 \ \mu g/L$

Step 6: For parameters not addressed in the TMDL, calculate the MDEL for human health by multiplying the AMEL by the ratio of the Multiplier_{MDEL} to the Multiplier_{AMEL}. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

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

For cyanide, the following data were used to develop the MDEL_{human health}:

No. of Samples Per Month	CV	Multiplier _{MDEL 99}	Multiplier _{AMEL 95}	Ratio
4	0.6	3.11	1.55	2.01

For cyanide:

 $MDEL_{human health} = 220,000 \ \mu g/L \ x \ 2.01 = 442,000 \ \mu g/L$

Step 7: For parameters not addressed in the TMDL, select the lower of the AMEL and MDEL based on aquatic life and human health as the WQBEL for the Order.

AMELaquatic life	MDEL _{aquatic life}	AMELhuman health	MDELhuman health
4.3	8.5	220,000	442,000

For cyanide, the lowest (most restrictive) effluent limits are based on aquatic toxicity and are incorporated into this Order. For cadmium, the Metals TMDL does not provide a dry-weather WLA, and there are no human health criteria; therefore, the established dry-weather effluent limitations are based on aquatic life criteria. For selenium, there are no human health criteria, therefore the established effluent limitations are based on aquatic toxicity. These limitations are expected to be protective of beneficial uses.

5. WQBELS based on Basin Plan Objectives

The Basin Plan Objectives applicable to the Discharger are identified in Table F-10. These objectives were evaluated with respect to effluent monitoring data and Facility operations when considering effluent limitations to be included in this Order.

Constituent	Units	Water Quality Objectives			
рН	s.u.	The pH of inland surface water shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of waste discharges.			
Temperature	⁰F	Receiving water shall not be altered by more than 5°F above the natural temperature.			
Bacteria	MPN/100ml	Fresh Waters Designated for Water Contact Recreation (REC-1) Geometric Means Limits i. E. Coli density shall not exceed 126/100 ml ii. Fecal coliform density shall not exceed 200/100 ml Single Sample Limits i. i. E. Coli density shall not exceed 235/100 ml ii. Fecal coliform density shall not exceed 400/100 ml			
Dissolved Oxygen	mg/L	For all waters, the mean annual dissolved oxygen concentration shall be greater than 7 mg/L, and no single determination shall be less than 5.0 mg/L, except when natural conditions cause lesser concentrations.			
Turbidity	NTU	Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%. Where natural turbidity is greater than 50 NTU increases shall not exceed 10%.			
Chemical Constituen	ts	Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use. Water designated for use as domestic or municipal supply shall not contain concentrations of chemical constituents in excess of the limits specified in the provisions of Title 22 of the California Code of Regulations. ¹			
Cadmium, Total Recoverable	μg/L	5.0			
Copper, Total Recoverable	μg/L	1,300 ² /1,000 ³			
Chromium, Total Recoverable	μg/L	50 ²			
Cyanide, Total (as CN)	μg/L	150 ²			
Selenium, Total Recoverable	μg/L	50 ²			
Benzene	μg/L	1.0 ²			
Toluene	μg/L	150 ² /40 ⁴			

 Table F-10.
 Applicable Basin Plan Numeric Water Quality Objectives

1

Constituent	Units	Water Quality Objectives			
Ethylbenzene	μg/L	300 ²			
Xylene(s)	μg/L	1,750 ² /1,000 ³			
Bis (2-ethylhexyl) Phthalate	μg/L	4.0 ²			

As discussed in III.A. of the Fact Sheet, Title 22 primary MCLs have been used as the basis for effluent limitations in WDRs and NPDES permits to protect the groundwater recharge beneficial use when that receiving groundwater is designated as MUN.

² Title 22 Primary MCL

³ Title 22 Secondary MCL

⁴ USEPA Secondary MCL

- **a. pH.** This Order includes effluent and receiving water limitations for pH to ensure compliance with Basin Plan Objectives for pH.
- b. Bacteria. The Discharger does not engage in activities that are likely to contribute bacteria to the effluent. Although a TMDL is currently proposed to address bacteria in the receiving water, it will not be effective until approved by the State Water Board, the OAL, and USEPA. Furthermore, since the Rio Hondo Channel is identified as a High Flow Suspension water, bacteria objectives do not apply during and within 24 hours following a ½ inch rain event, which coincides with many storm water discharge events. In lieu of effluent limitations, this Order establishes new effluent monitoring requirements for bacteria as specified in the MRP.
- **c. Dissolved Oxygen.** This Order applies the water quality objective for dissolved oxygen as a receiving water limitation.
- d. Turbidity. The Basin Plan requirements for turbidity are as follows:
 - i. Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%.
 - **ii.** Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.

This Order applies the water quality objective for turbidity as a receiving water limitation in addition to the technology-based effluent limitation.

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

- f. Ammonia. As stated previously, Resolution No. R4-2003-009 and subsequent amendments incorporate the Nutrients TMDL into the Basin Plan. The Basin Plan amendment establishes TMDLs for the Los Angeles River for nitrogen compounds (including ammonia-nitrogen, nitrate-nitrogen, nitrite-nitrogen, and nitrite plus nitrate-nitrogen). The TMDL includes concentration-based WLAs for minor point sources. The implementation portion of the TMDL states that WLAs shall be applied to minor point source dischargers on the effective date of the TMDL (September 27, 2004). The following WLAs are applicable to this discharge:
 - 1-hour average ammonia, total (as N): 10.1 mg/L
 - 30-day average ammonia, total (as N): 2.3 mg/L
 - 30-day average nitrate-nitrogen: 8.0 mg/L
 - 30-day average nitrite-nitrogen: 1.0 mg/L
 - 30-day nitrite-nitrogen plus nitrate nitrogen: 8.0 mg/L

Based on the Nutrients TMDL, Order No. R4-2006-0065 established an ammonia MDEL equal to the 1-hour average WLA concentration and an ammonia AMEL equal to the 30-day average WLA concentration. This Order carries over the ammonia effluent limitations. Order No. R4-2006-0065 also established limitations for nitrate-nitrogen, nitrite-nitrogen, and nitrite plus nitrate-nitrogen based on the WLA concentrations; however, these limitations were established as MDELs. In contrast, the Nutrients TMDL expresses the WLA concentrations for nitrate-nitrogen, and nitrate plus nitrite-nitrogen as 30-day average effluent limitations. To be consistent with the Nutrients TMDL, this Order establishes effluent limitations for nitrate-nitrogen, and nitrate-nitrogen, nitrite-nitrogen, and nitrate-nitrogen, nitrite-nitrogen, and nitrate-nitrogen, nitrite-nitrogen, and nitrate-nitrogen, nitrite-nitrogen as 30-day average effluent limitations. To be consistent with the Nutrients TMDL, this Order establishes effluent limitations for nitrate-nitrogen, nitrite-nitrogen as AMELs. For this Discharge, AMELs are a practical application of the 30-day average and are consistent with the Nutrients TMDL.

- **g. Benzene.** Title 22 of the CCR identifies a primary MCL for benzene equal to 1 μ g/L. Effluent monitoring conducted from January 2006 through December 2010, resulted in a detected concentration of benzene in 1 out of 12 samples. On September 22, 2007, the detected concentration was equal to 10.6 μ g/L. Benzene is a component of petroleum products. It is commonly found in storm water from sites that store or process petroleum products. Due to its presence in the effluent and the potential for storm water coming into contact with petroleum products, this Order includes increased monitoring for benzene, in order to obtain additional data to fully characterize the effluent. An effluent limitation for benzene is not required at this time.
- **h. Total Chromium.** Title 22 of the CCR identifies a primary MCL for total chromium equal to 50 μ g/L. Effluent monitoring conducted from January 2006 through December 2010, resulted in a detected concentration of total chromium in 1 out of 12 samples. On December 6, 2010, the detected concentration of total chromium was equal to 110 μ g/L and chromium VI was non-detect (less than 0.2 μ g/L). Due to its presence in the effluent, this Order includes increased monitoring for total chromium; in order to obtain additional data to fully

characterize the effluent. An effluent limitation for total chromium is not required at this time.

i. Toluene, Ethylbenzene, Xylenes, and Bis(2-ethylhexyl)phthalate. Effluent monitoring data, collected from January 2006 through December 2010, were evaluated with respect to Title 22 MCLs for toluene, ethylbenzene, xylenes, and bis(2-ethylhexyl)phthalate. The data set from this time period includes 12 sampling events for toluene, ethylbenzene, and xylenes; and 3 sampling events for bis(2-ethylhexyl)phthalate. Ethylbenzene, xylenes and bis(2-ethylhexyl)phthalate. Ethylbenzene, xylenes and bis(2-ethylhexyl)phthalate were not detected in the samples. Toluene was detected on one occasion at a concentration of 24.2 μg/L, which is below the secondary MCL of 40 μg/L. Since effluent concentrations of toluene, ethylbenzene, xylenes, and bis-(2-ethylhexyl)phthalate are less than Title 22 MCLs, effluent limitations for these constituents are not required at this time.

6. Whole Effluent Toxicity

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

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses by aquatic organisms. Detrimental response includes, but is not limited to, decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. This Order contains acute toxicity limitations and monitoring requirements in accordance with the Basin Plan, in which the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. In addition, the Order establishes thresholds that when exceeded requires the Discharger to conduct accelerated toxicity testing and/or conduct toxicity reduction evaluation (TRE) and toxicity identification evaluation (TIE) studies.

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 discharges from the Facility are infrequent and typically short-term. The discharges at the Facility are not expected to contribute to long-term effects, therefore no chronic toxicity limitations or monitoring requirements are included in this Order. Intermittent discharges are likely to have short-term effects; therefore the

Discharger will be required to comply with acute toxicity effluent limitations in accordance with the Basin Plan.

7. Numeric criterion for TCDD equivalents:

Numerous dioxin and furan compounds (congeners) have chemical structures, physico-chemical properties and toxic responses similar to 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD). Because of their hydrophobic nature and resistance towards metabolism, these chemicals persist and bioaccumulate in fatty tissues of animals and humans. Dioxin-TEQ values reflect the combined effect of numerous dioxin and furan compounds (congeners) in a given media.

The CTR establishes a numeric water quality objectives for 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) for the protection of human health for the consumption of aquatic organisms only, and the consumption of water and aquatic organisms, respectively. When the CTR was promulgated, USEPA stated its support of the regulation of other dioxin and dioxin-like compounds through the use of toxicity equivalencies (TEQs) in NPDES permits. For California waters, USEPA stated specifically, "if the discharge of dioxin or dioxin-like compounds has reasonable potential to cause or contribute to a violation of a narrative criterion, numeric water quality-based effluent limitations for dioxin or dioxin-like compounds should be included in NPDES permits and should be expressed using a TEQ scheme" [65 Fed. Reg. 31682, 31695 (2000)]. This procedure, developed by the World Health Organization (WHO) in 1988, uses a set of toxicity equivalency factors (TEFs) to convert the concentration of any congener of dioxin or furan into an equivalent concentration of 2,3,7,8-TCDD. When the CTR was promulgated, USEPA also stated that the Agency will continue to assess the risks posed by dioxin to public health and the water quality criteria for dioxin that it had promulgated. To determine if the discharge of dioxin or dioxin-like compounds from the Facility has reasonable potential to cause or contribute to a violation of the Basin Plan's narrative water quality objective regarding bioaccumulation. Regional Water Board staff have therefore used TEFs to express the measured concentrations of 17 dioxin congeners in effluent and background samples as 2,3,7,8-TCDD. These "equivalent" concentrations are then compared to the numeric criterion, established by the CTR for 2.3.7.8-TCDD of $1.4 \times 10^{-8} \mu a/L$.

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

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

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

limitations in the permit are numeric translations of the Basin Plan narrative bioaccumulation objective.

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

In February 2008, the San Francisco Estuary Institute convened an expert panel to provide an unbiased review and analysis of available information regarding San Francisco Bay dioxins and furans. Representatives of the Regional Water Board, the USEPA, the Bay Area Clean Water Agencies, and others with expertise in the field participated. The panel's recommendations included the following:

- Apply TEFs to dioxin and furan concentrations when calculating dioxin-TEQ;
- Do not use dioxin and furan congener concentrations reported below MLs when computing dioxin-TEQ.

So that compliance with the water quality objective for bioaccumulation, with respect to dioxins, can be ascertained through future RPAs, the MRP of this Order requires the Discharger to calculate and report dioxin-TEQ using the following formula, where the TEFs are as listed in Table F-11:

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

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

 Table F-11.
 Toxicity Equivalency Factors

Dioxin or Furan Congener	Toxicity Equivalency Factor (TEF)
1,2,3,4,7,8-HxCDF	0.1
1,2,3,6,7,8-HxCDF	0.1
1,2,3,7,8,9-HxCDF	0.1
2,3,4,6,7,8-HxCDF	0.1
1,2,3,4,6,7,8-HpCDF	0.01
1,2,3,4,7,8,9-HpCDF	0.01

8. Final WQBELs

Table F-12. Summary of Final WQBELs for Discharge Point No. 001

				nt Limitations	
Parameter	Units	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
рН	s.u.			6.5	8.5
Temperature	۴				86
Ammonia, Total (as	mg/L	2.3	10.1		
N)	lbs/day1	4.9	22		
Nitrate Nitrogen,	mg/L	8.0			
Total (as N)	lbs/day1	17			
Nitrite Nitrogen,	mg/L	1.0			
Total (as N)	lbs/day1	2.2			
Nitrate plus Nitrite	mg/L	8.0			
Nitrogen (as N)	lbs/day1	17			
Acute Toxicity	% Survival			2	
Cadmium, Total Recoverable (Dry-	μg/L		5.3		
Weather) ³	lbs/day ¹		0.011		
Cadmium, Total Recoverable (Wet-	μg/L		3.1		
Weather) 4	lbs/day ¹		0.0067		
Copper, Total Recoverable (Dry-	μg/L		13		
Weather) ³	lbs/day1		0.028		
Copper, Total Recoverable (Wet-	μg/L		17		
Weather) ⁴	lbs/day1		0.037		
Lead, Total	μg/L		5.0		

		Effluent Limitations				
Parameter	Units	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Recoverable (Dry- Weather) ³	lbs/day1		0.011			
Lead, Total Recoverable (Wet-	μg/L		62			
Weather) ⁴	lbs/day1		0.13			
Selenium, Total	μg/L		8.2			
Recoverable	lbs/day ¹		0.018			
Zinc, Total	μg/L		130			
Recoverable Dry- Weather) ³	lbs/day1		0.28			
Zinc, Total Recoverable (Wet-	μg/L		160			
Weather) ⁴	lbs/day1		0.34			
Cyanide, Total (as	μg/L		8.5			
CN)	lbs/day1		0.018			

^{1.} The mass emissions rate is based on a maximum flow of 0.258 MGD and is calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

^{2.} The acute toxicity of the effluent shall be such that:

- i. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay test shall be at least 90%, and
- ii. No single test shall produce less than 70% survival. Compliance with the toxicity objectives will be determined by the method described in section V of the MRP (Attachment E).
- ^{3.} Dry-Weather effluent limitations are applicable when the maximum daily flow in the Los Angeles River, measured at the Wardlow gage station F319-R, located 900 feet below Wardlow Road, Long Beach, is less than 500 cubic feet per second (cfs). The daily flow data at F319-R station may be obtained by contacting the Department of Public Works, Los Angeles County at 626-458-6379.
- ^{4.} Wet-Weather effluent limitations are applicable when the maximum daily flow in the Los Angeles River, measured at the Wardlow gage station F319-R, is equal to or greater than 500 cfs.

D. Final Effluent Limitations

Section 402(o) of the CWA and section 122.44(l) require that effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders based on the submitted sampling data. Most effluent limitations are being carried over from the previous Order No. R4-2005-0054. 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. The effluent limitations for cadmium, copper, lead, zinc, nitrate-nitrogen, nitrite-nitrogen, and nitrite plus nitrate-nitrogen have been modified from Order No. R4-2006-0065 to be consistent with the Metals TMDL.

This Order includes new effluent limitations for cyanide and selenium, based on the SIP, and Basin Plan, as discussed in Section IV.C.5 of this Fact Sheet.

1. Satisfaction of Anti-Backsliding Requirements

Effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with some exceptions. As discussed below this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

Order No. R4-2006-0065 established effluent limitations for nitrate-nitrogen, nitritenitrogen, and nitrite plus nitrate-nitrogen based on the Nutrients TMDL. The limitations were specified as maximum daily limitations. This Order expresses the nutrient limitations as average monthly effluent limitations, consistent with the Nutrients TMDL. Because the discharges are intermittent and of short duration, sample events are limited, and the change is not likely to affect compliance determination or effluent quality.

Order No. R4-2006-0065 established effluent limitations for zinc based on the Metals TMDL. Specifically, the effluent limitations were based on WLAs established for the category of dischargers enrolled in the industrial general permit. The metals TMDL states that the category of "Other NPDES permits" refers to "minor NPDES permits, general non-storm water NDPES permits, and major permits other than the Tillman, LA-Glendale, and Burbank POTWs." Since the Discharger is a minor permit and is not enrolled in the general industrial storm water permit, it is more appropriately addressed by WLAs assigned to the "Other NPDES permits" category. Furthermore, 40 CFR 122.44(I), allows for relaxation of effluent limitations when technical mistakes or mistaken interpretations of law were made in issuing the permit. The effluent limitations for nitrate-nitrogen, nitrite-nitrogen, nitrite plus nitrate-nitrogen, and zinc are corrections of mistaken interpretations.

2. Satisfaction of Antidegradation Policy

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

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

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD, oil and grease, TSS, phenols, TPH, settleable solids, and turbidity at Discharge Point No. 001. Restrictions on these parameters are discussed in section IV.B.2 of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. These limitations are not more stringent than required by the CWA.

This Order includes WQBELs for pH, temperature, acute toxicity, ammonia-nitrogen, nitrate-nitrogen, nitrite-nitrogen, nitrite plus nitrate-nitrogen, cadmium, copper, lead, selenium, zinc, and cyanide at Discharge Point No. 001. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. 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 part 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.

		Effluent Limitations					
Parameter	Units	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Basis ¹	
Conventional Pollutants							
рН	s.u.			6.5	8.5	E, BP	
BOD (5-day @ 20	mg/L		30				
deg. C)	lbs/day ²		65			E, BPJ	
Oil and Grease	mg/L		15			E, BPJ	
Oil and Grease	lbs/day ²		32				
TSS	mg/L		75			E, BPJ	
100	lbs/day ²		160				
Non-Conventional Poll	utants						
Temperature	۴				86	E, BP, TP, WP	
Settleable Solids	ml/L		0.3			BPJ	
Ammonia Total (as NI)	mg/L	2.3	10.1				
Ammonia, Total (as N)	lbs/day ²	4.9	22			TMDL	
Nitrate Nitrogen, Total	mg/L	8.0				TMDL	
(as N)	lbs/day ²	17				TIVIDL	

Table F-13. Summary of Final Effluent Limitations for Discharge Point No. 001

Parameter		Effluent Limitations				
	Units	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Basis ¹
Nitrite Nitrogen, Total (as N)	mg/L	1.0				TMDL
	lbs/day ²	2.2				
Nitrate plus Nitrite Nitrogen (as N)	mg/L	8.0				TMDL
	lbs/day ²	17				
Phenols	mg/L		1.0			E, BPJ
	lbs/day ²		2.2			
TPH ³	μg/L		100			BPJ
	lbs/day ²		0.22			
Turbidity	NTU		75			E, BPJ
Acute Toxicity	% Survival			4		E, BP
Priority Pollutants						
Cadmium, Total Recoverable (Dry- Weather) ⁵	μg/L		5.3			CTR
	lbs/day ²		0.011			
Cadmium, Total Recoverable (Wet- Weather) ⁶	μg/L		3.1			TMDL
	lbs/day ²		0.0067			
Copper, Total Recoverable (Dry- Weather) ⁵	μg/L		13			TMDL
	lbs/day ²		0.028			
Copper, Total Recoverable (Wet- Weather) ⁶	μg/L		17			TMDL
	lbs/day ²		0.037			
Lead, Total Recoverable (Dry- Weather) ⁵	μg/L		5.0			TMDL
	lbs/day ²		0.011			
Lead, Total Recoverable (Wet- Weather) ⁶	μg/L		62			TMDL
	lbs/day ²		0.13			
Selenium, Total Recoverable	μg/L		8.2			CTR
	lbs/day ²		0.018			
Zinc, Total Recoverable Dry- Weather) ⁵	μg/L		130			TMDL
	lbs/day ²		0.28			
Zinc, Total Recoverable (Wet- Weather) ⁶	μg/L		160			TMDL
	lbs/day ²		0.34			
Cyanide, Total (as CN)	μg/L		8.5			CTR
	lbs/day ²		0.018			

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

 $^{2.}$ The mass emissions rate is based on a maximum flow of 0.258 MGD and is calculated as follows: Flow (MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day.

- ^{3.} TPH equals the sum of TPH gasoline (C_4 - C_{12}), TPH diesel (C_{13} - C_{22}), and TPH oil (C_{23+}).
- ^{4.} The acute toxicity of the effluent shall be such that:
 - i. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay test shall be at least 90%, and
 - ii. No single test shall produce less than 70% survival. Compliance with the toxicity objectives will be determined by the method described in section V of the MRP (Attachment E).
- ^{5.} Dry-Weather effluent limitations are applicable when the maximum daily flow in the Los Angeles River, measured at the Wardlow gage station F319-R, located 900 feet below Wardlow Road, Long Beach, is less than 500 cfs. The daily flow data at F319-R station may be obtained by contacting the Department of Public Works, Los Angeles County at 626-458-6379.
- ^{6.} Wet-Weather effluent limitations are applicable when the maximum daily flow in the Los Angeles River, measured at the Wardlow gage station F319-R, is equal to or greater than 500 cfs.

4. Mass-based Effluent Limitations

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

Mass (lbs/day) = flow rate (MGD) x 8.34 x effluent limitation (mg/L) where: Mass = mass limitation for a pollutant (lbs/day) Effluent limitation = concentration limit for a pollutant (mg/L) Flow rate = discharge flow rate (MGD)

E. Interim Effluent Limitations

Not Applicable

F. Land Discharge Specifications

Not Applicable

G. Reclamation Specifications

Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

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

B. Groundwater

Limitations in this Order must protect not only surface receiving water beneficial uses, but also the beneficial uses of underlying groundwater where there is a recharge beneficial use of the surface water. The Rio Hondo Channel, below the spreading grounds, has an intermittent beneficial use of GWR. Surface water from the Rio Hondo Channel may percolate into the Los Angeles Coastal Plain, Central Groundwater Basin. Since groundwater from this Basin may be used to provide drinking water to the community, the groundwater aquifers should be protected. Therefore, Title 22-based limitations are considered to protect that drinking water supply. Title 22-based drinking water MCLs for pollutants of concern were incorporated into the RPA. This permit includes a narrative receiving water limitation that the discharge shall not cause the underlying groundwater to be degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The 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 pollutants expected to be present in the discharge will be required as established in the MRP (Attachment E) and as required in the SIP.

To demonstrate compliance with established effluent limitations, the Order establishes monitoring at a frequency of once per discharge event, with a maximum of once per month at Discharge Point No. 001 for pollutants which have effluent limitations. In addition, this Order contains a new monitoring requirement for bis(2-ethylhexyl)-phthalate at Discharge Point No. 001. As indicated in the SWPPP, the Facility stores this chemical in barrels on site. The use of this chemical on site poses potential risk for storm water contamination. To ensure that the discharge does not contain bis(2-ethylhexyl)phthalate at concentrations exceeding Basin Plan and CTR criteria, this Order establishes a monitoring frequency of once per discharge event, with a maximum required frequency of once per month.

Total chromium was detected in elevated concentrations for the sample date of December 6, 2010. Analyses for chromium III were not required or performed on this date. Under Order No. R4-2006-0065, chromium III monitoring was required once per year as part of the priority pollutant analyses. As chromium III may represent a portion of the total chromium, this Order establishes monitoring requirement for chromium III at a frequency of once per discharge. This frequency is consistent with requirements for chromium VI and total chromium and will ensure chromium III concentrations do not result in impairments of beneficial uses.

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

C. Whole Effluent Toxicity Testing Requirements

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

Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. The discharges from the Facility are intermittent and short in nature; therefore, chronic toxicity testing will not be required

D. Receiving Water Monitoring

1. Surface Water

According to the SIP, the Discharger is required to monitor the upstream receiving water for the CTR priority pollutants, to determine reasonable potential. Accordingly, the Regional Water Board is requiring that the Discharger conduct upstream receiving water monitoring of the CTR priority pollutants and TCDD equivalents at Monitoring Location RSW-001 (renamed from R-001). Additionally, the Discharger must analyze pH and hardness of the upstream receiving water at the same time as the samples are collected for priority pollutants analysis. To adjust the ammonia water quality objective, expressed as un-ionized ammonia, to total ammonia, this Order establishes receiving water monitoring for pH, temperature and ammonia within the Rio Hondo Channel.

2. Groundwater

Not Applicable

E. Other Monitoring Requirements

Not Applicable

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

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

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

B. Special Provisions

1. Reopener Provisions

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

2. Special Studies and Additional Monitoring Requirements

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

3. Best Management Practices and Pollution Prevention

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

As part of the SWPPP, the Discharger must evaluate and implement BMPs. Interim effluent wet-weather limitations for copper, lead, and zinc in Order No.

R4-2006-0065 stipulated that the Discharger was required to evaluate existing and potential BMPs and implement any necessary improvements if effluent monitoring indicated that metals were present at concentrations greater than the interim limits. This requirement stems from the implementation section of the Metals TMDL that addresses wet-weather WLAs for general industrial storm water permittees. As discussed in Section IV.C.2.a, the Discharger is classified as "non-storm water NPDES permits (including POTWs, other major, minor, and general permits)," for which the Metals TMDL does not specifically address source specific BMPs. The SWPPP requirements in Attachment G include identification, implementation, and evaluation and monitoring of BMPs, consistent with the metals source specific BMP requirements in Order No. R4-2006-0065; except that Attachment G does not limit BMPs to specific constituents. Special Provision VI.C.3.a of this Order requires that the SWPPP address site-specific BMPs for all pollutants which have the potential to contaminate storm water at the Facility, as provided in Attachment G. The BMPs address specific areas that are considered sources of pollutants and shall include measures to minimize the amount of pollutants entering the discharge.

b. Spill Prevention Control and Countermeasures (SPCC) Plan. Federal Regulations at 40 CFR 112, require the owner or operator of a facility which stores oil, with aboveground storage tank capacity of more 1,320 gallons, to submit an SPCC Plan. The purpose of the SPCC Plan is to report on preventive and contingency (cleanup) procedures for controlling accidental discharges of oil and for minimizing the adverse effects of such events. The Discharger shall review and update, if necessary, the SPCC Plan after each incident and make it available for the facility personnel at all times.

4. Construction, Operation, and Maintenance Specifications

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

5. Special Provisions for Municipal Facilities (POTWs Only)

Not Applicable

6. Other Special Provisions

Not Applicable

7. Compliance Schedules

Not Applicable

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for Lubricating

Specialties Company, Pico Rivera Facility. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

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

B. Written Comments

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

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 12:00 p.m. (noon) on **September 20, 2011**.

C. Public Hearing

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

Date: November 10, 2011 Time: 9:00 a.m. Location: Metropolitan Water District of Southern California 700 North Alameda Street Los Angeles, California

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

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

D. Nature of Hearing

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

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

E. Parties to the Hearing

The following are the parties to this proceeding:

1. Lubrication Specialties Company

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

Regional Water Board staff is not a party to the proceeding; their participation in this proceeding exists for the purpose of advising and assisting the Regional Board.

F. Public Comments and Submittal of Evidence

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to the above address. To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments must be received no later than 12:00 p.m. (noon) on **September 20, 2011**. 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 oral testimony.

G. Hearing Procedure

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

Parties or persons with special procedural requests should contact Rebecca Christmann. Any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of the California Code of Regulations. Objections to any procedure to be used during this hearing must be submitted in writing not later than

close of 15 business days prior to the date of the hearing. Procedural objections will not be entertained at the hearing.

H. Waste Discharge Requirements Petitions

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

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

I. Information and Copying

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

J. Register of Interested Persons

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

K. Additional Information

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

ATTACHMENT G - STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

I. Implementation Schedule

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

II. Objectives

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

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

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

III. Planning and Organization

A. Pollution Prevention Team

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

B. Review Other Requirements and Existing Facility Plans

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

IV. Site Map

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

TABLE A

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

PLANNING AND ORGANIZATION

Form Pollution Prevention Team Review other plans

ASSESSMENT PHASE

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

BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE

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

IMPLEMENTATION PHASE

Train employees Implement BMPs Conduct recordkeeping and reporting

EVALUATION / MONITORING

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

The following information shall be included on the site map:

- A. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, and ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.
- **B.** The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.
- **C.** An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.
- **D.** Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section A.6.a.iv. below have occurred.
- **E.** Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

V. List of Significant Materials

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials

shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

VI. Description of Potential Pollutant Sources

- A. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section A.4.e above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:
 - 1. Industrial Processes. Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.
 - 2. Material Handling and Storage Areas. Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.
 - **3.** Dust and Particulate Generating Activities. Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.
 - 4. Significant Spills and Leaks. Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges since April 17, 1994. Include toxic chemicals (listed in 40 CFR, Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (USEPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 Code of Federal Regulations [CFR], Parts 110, 117, and 302).

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

5. Non-Storm Water Discharges. Facility operators shall investigate the facility to identify all non-storm water discharges and their sources. As part of this

investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

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

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

- 6. Soil Erosion. Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.
- **B.** The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. This information should be summarized similar to Table B. The last column of Table B, "Control Practices", should be completed in accordance with Section A.8. below.

VII. Assessment of Potential Pollutant Sources

- **A.** The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in A.6. above to determine:
 - 1. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and
 - 2. Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. Facility operators shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.
- **B.** Facility operators shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be present in storm water discharges and authorized non-storm water discharges.

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

VIII. Storm Water Best Management Practices

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

TABLE B

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

Area Activity Pollutant Source	Pollutant Best Management Practices
	PollutantBest Management Practicesfuel oilUse spill and overflow protection.fuel oilUse spill and overflow protection.Minimize run-on of storm water into the fueling area.Cover fueling area.Cover fueling area.Use dry cleanup methods rather than hosing down area.Implement proper spill prevention control program.Implement adequate preventative maintenance program to preventive tank and line leaks.Inspect fueling areas regularly to detect problems before they occur.Train employees on proper fueling, cleanup, and spill response techniques.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.

The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

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

A. Non-Structural BMPs

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

- **1. Good Housekeeping.** Good housekeeping generally consists of practical procedures to maintain a clean and orderly facility.
- 2. Preventive Maintenance. Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.
- **3. Spill Response.** This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.
- 4. Material Handling and Storage. This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.
- 5. Employee Training. This includes training of personnel who are responsible for (1) implementing activities identified in the SWPPP, (2) conducting inspections, sampling, and visual observations, and (3) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.
- 6. Waste Handling/Recycling. This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.
- **7. Recordkeeping and Internal Reporting.** This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.
- 8. Erosion Control and Site Stabilization. This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of

vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.

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

B. Structural BMPs.

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

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

IX. Annual Comprehensive Site Compliance Evaluation

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

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

- **B.** A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
- **C.** A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.
- **D.** An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in Section A.10.e, for implementing SWPPP revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that the facility operator is in compliance with this Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this General Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions V.D.5 of Attachment D.

X. SWPPP General Requirements

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

and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.

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

ATTACHMENT H - STATE WATER BOARD MINIMUM LEVELS

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

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

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

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

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
Benzo (b) Fluoranthene		10	10	
3-Methyl-Chlorophenol	5	1	10	
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether	10	5	+	
Acenaphthene	1	<u> </u>	0.5	
	1	10	0.5	
Acenaphthylene				
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	
Hexachloro-cyclopentadiene	5	5		
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene	-	10	0.05	
Isophorone	10	1	0.00	
N-Nitroso diphenyl amine	10	1	+	
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
	10	1	0.2	
Naphthalene Nitrobenzene	10	1	0.2	
Pentachlorophenol	1	5	0.05	
Phenanthrene	 	5	0.05	50
Phenol **	1	1	0.05	50
Pyrene		10	0.05	

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

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

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

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

Table 2d – PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
alpha-BHC	0.01
Aldrin	0.005
b-Endosulfan	0.01
Beta-BHC	0.005
Chlordane	0.1
Delta-BHC	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Gamma-BHC (Lindane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5

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

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

Techniques:

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

ATTACHMENT I – LIST OF PRIORITY POLLUTANTS

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

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

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

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

ATTACHMENT J - RPA ANALYSIS FOR CTR CONSTITUENTS FOR DISCHARGE POINT NO. 001

							CTR Water G	uality Criteria (ug/L)						
	1								Human H	lealth for					Are all B
CTR#					Fres	hwater	Salt	water	consum	ption of:					data
														_	points
														В	non-
	Demonstrate	11	01	MEO	C acute =	C chronic =			Water &			MEC >=	Tier 1 -	Available	detects
-	Parameters	Units	CV	MEC	CMC tot	CCC tot	CMC tot	= CCC tot	organisms	Organisms only		Lowest C	Need limit?	(Y/N)?	(Y/N)?
1	Antimony	ug/L		2	240.00	150.00			6.00 10.00	4300.00	6.00 10.00	Nie	Ne	N N	
2	Arsenic Bervllium	ug/L		2	340.00	150.00			4.00	Narrative		INO	No	N	
4	Cadmium	ug/L	0.6	20	6.66	3.22			4.00	Narrative		Vaa	Yes	N	
		ug/L	0.6	20		-						res	res		
5a 5b	Chromium (III)			0.2	2300.85	274.25			50.00 50.00	Narrative		Nie	Ne	N N	
	Chromium (VI)	ug/L	0.040	-	16.29	11.43				Narrative	-	-	No		
6	Copper	ug/L	2.049	800	19.35	12.51			1000.00	Newsters	12.51		Yes	N	
7	Lead	ug/L	0.6	20	126.44	4.93			15.00	Narrative		Yes	Yes	N	
8	Mercury	ug/L		50	Res	Res			2.00	0.05				N	
9	Nickel	ug/L	0.0	50	627.44	69.76			100.00	4600.00			No	N	
10	Selenium	ug/L	0.6	80	20.00	5.00			50.00	Narrative		Yes	Yes	N	
11	Silver	ug/L			7.33				100.00		7.33	-	-	N	
12	Thallium	ug/L	1 05 1		100.01				2.00	6.30				N	
13	Zinc	ug/L	1.354	2440	160.31	160.31			5000.00		160.31		Yes	N	
14	Cyanide	ug/L	0.6	90	22.00	5.20			150.00	220000.00		Yes	Yes	N	
15	Asbestos	Fibers/L							7.00		7.00			N	
16	2,3,7,8 TCDD	ug/L							0.000030000	0.00000014	0.00000014			N	
	TCDD Equivalents	ug/L	0							0.00000014				N	
17	Acrolein	ug/L	0	0.0						780			No	N	
18	Acrylonitrile	ug/L		0.5						0.66			No	N	
19	Benzene	ug/L	0.6	10.6					1.0	71			No	N	
20	Bromoform	ug/L		0.5						360		-	No	Ν	
21	Carbon Tetrachloride	ug/L		0.5						4.4			No	N	
22	Chlorobenzene	ug/L		0.5						21000	21000		No	N	
23	Chlorodibromomethane	ug/L		0.5						34			No	N	
24	Chloroethane	ug/L		No Criteria									No Criteria	N	
25	2-Chloroethylvinyl ether	ug/L		No Criteria									No Criteria	N	
26	Chloroform	ug/L		No Criteria									No Criteria	N	
27	Dichlorobromomethane	ug/L		0.5						46			No	N	
28	1,1-Dichloroethane	ug/L		No Criteria										N	
29	1,2-Dichloroethane	ug/L		0.5						99			No	N	
30	1,1-Dichloroethylene	ug/L		0.5						3.2			No	Ν	
31	1,2-Dichloropropane	ug/L		0.5						39			No	N	
32	1,3-Dichloropropylene	ug/L		0.5						1700			No	N	
33	Ethylbenzene	ug/L		0.5					300	29000			No	N	
34	Methyl Bromide	ug/L		0.5						4000	4000	-	No	N	
35	Methyl Chloride	ug/L		No Criteria									No Criteria	N	
36	Methylene Chloride	ug/L		1						1600			No	N	
37	1,1,2,2-Tetrachloroethane	ug/L		0.5						11	11.00		No	N	
38	Tetrachloroethylene	ug/L		0.5						8.85			No	Ν	
39	Toluene	ug/L		24.2					40	200000		No	No	Ν	
40	1,2-Trans-Dichloroethylene	ug/L		0.5						140000			No	Ν	
41	1,1,1-Trichloroethane	ug/L		No Criteria									No Criteria	Ν	
42	1,1,2-Trichloroethane	ug/L		0.5						42	42.0	No	No	N	

ATTACHMENT J - RPA ANALYSIS FOR

		REASONABLE POTENTIAL ANALYSIS (RPA)							HUMAN H			
		If all data	Enter the									
CTR#		points ND							Organisms only			
		Enter the	В			-	RPA					
		min	detected	If all B is		Tier 3 -	Result -		AMEL hh =			ECA acute
		detection	max conc		If B>C, effluent limit	other info.	Need		ECA = C hh			multiplier
	Parameters	limit (MDL)	(ug/L)	MDL>C?	required	?	Limit?	Reason	O only	multiplier	MDEL hh	(p.7)
1	Antimony		-		No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B	-			-
2	Arsenic				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td>-</td><td></td><td></td><td>_</td></c>	-			_
3	Beryllium		-		No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B	-	0.01		
4	Cadmium		-		No detected value of B, Step 7		Yes	MEC>=C	-	2.01		0.32
5a	Chromium (III)		-		No detected value of B, Step 7		Ud	No effluent data & no B	-			-
5b	Chromium (VI)				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
6	Copper				No detected value of B, Step 7		Yes	MEC>=C		3.09		0.12
7	Lead				No detected value of B, Step 7		Yes	MEC>=C		2.01		0.32
8	Mercury				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
9	Nickel				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
10	Selenium				No detected value of B, Step 7		Yes	MEC>=C		2.01		0.32
11	Silver				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
12	Thallium				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
13	Zinc				No detected value of B, Step 7		Yes	MEC>=C		2.80		0.16
14	Cyanide				No detected value of B, Step 7		Yes	MEC>=C	220000	2.01	441361.61457	0.32
15	Asbestos				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
16	2,3,7,8 TCDD				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
	TCDD Equivalents				No detected value of B, Step 7		Ud	No effluent data & no B				
17	Acrolein				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
18	Acrylonitrile				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
19	Benzene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
20	Bromoform				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
21	Carbon Tetrachloride				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
22	Chlorobenzene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
23	Chlorodibromomethane				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
24	Chloroethane				No Criteria	No Criteria	Uc	No Criteria				
25	2-Chloroethylvinyl ether				No Criteria	No Criteria	Uc	No Criteria				
26	Chloroform				No Criteria	No Criteria	Uc	No Criteria				
27	Dichlorobromomethane				No detected value of B, Step 7		No	Ud:MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
28	1,1-Dichloroethane				No Criteria	No Criteria	Uc	No Criteria				
29	1,2-Dichloroethane				No detected value of B, Step 7			Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
30	1,1-Dichloroethylene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
31	1,2-Dichloropropane				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
32	1,3-Dichloropropylene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
33	Ethylbenzene		1		No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
34	Methyl Bromide	1	1	İ	No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
35	Methyl Chloride	1			No Criteria	No Criteria	Uc	No Criteria				
36	Methylene Chloride	1			No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
37	1,1,2,2-Tetrachloroethane	1			No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
38	Tetrachloroethylene	1	1	1	No detected value of B, Step 7	1	No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
39	Toluene	1	1	1	No detected value of B, Step 7	1	No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
40	1,2-Trans-Dichloroethylene	1			No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
41	1,1,1-Trichloroethane	1			No Criteria	No Criteria	Uc	No Criteria				
42	1,1,2-Trichloroethane	1	1		No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td>1</td><td></td><td></td></c>		1		

ATTACHMENT J - RPA ANALYSIS FOR

			A		LIFE CAL	CULATION	5						
CTR#			Sa	ltwater / F	reshwate	er / Basin Pl	an			LIN	NITS		
	Parameters	LTA acute	ECA chronic multiplier	LTA	Lowest	AMEL		MDEL multiplier 99	MDEL aq life	Lowest AMEL	Lowest MDEL	Recommend ation	Comment
1	Antimony	uouto	manaphor	0111 01110			uq mo			/		No Limit	
2	Arsenic											No Limit	
3	Beryllium											No Limit	
4	Cadmium	2.14	0.53	1.70	1.70	1.55	2.64	3.11	5.296725	2.64019	5.29672	110 2	TMDL wet weather limit will be established in permit
	Chromium (III)		0.00					0	0.2007.20		0.20072	No Limit	
5b	Chromium (VI)											No Limit	
6	Copper	2.23	0.20	2.50	2.23	2.81	6.27	8.69	19.35056	6.26732	19.35056		TMDL dry and wet weather limit will be established in permi
7	Lead	40.60											TMDL dry and wet weather limit will be established in permi
	Mercury	40.00	0.55	2.00	2.00	1.55	4.03	5.11	0.093702	4.03440	0.09370	No Limit	TNDE dry and wet weather minit will be established in permi
9	Nickel											No Limit	
10	Selenium	6.42	0.53	2.64	2.64	1.55	4.09	3.11	8.213345	4.09400	8.21335		
11	Silver	0.42	0.55	2.04	2.04	1.55	4.03	5.11	0.215545	4.03400	0.21555	No Limit	
12	Thallium											No Limit	
12	Zinc	25.12	0.29	46.37	25.12	2.27	57.16	6.38	160.306	57.16	160.31		TMDL dry and wet weather limit will be established in permi
13	Cyanide	7.06											TNDE dry and wel weather minit will be established in permi
	Asbestos	7.00	0.55	2.74	2.74	1.55	4.20	3.11	0.541079	4.25770	0.04100	No Limit	
	2,3,7,8 TCDD											No Limit	
10	TCDD Equivalents											No Limit	
17												No Limit	
	Acrolein Acrylonitrile											No Limit	
	Benzene											No Limit	
	Bromoform											No Limit	
	Carbon Tetrachloride											No Limit	
22	Chlorobenzene				-							No Limit	
	Chlorodibromomethane											No Limit	
24	Chloroethane				-							No Limit	
	2-Chloroethylvinyl ether				-							No Limit	
	Chloroform				-							No Limit	
	Dichlorobromomethane				-							No Limit	
28	1,1-Dichloroethane											No Limit	
	1,2-Dichloroethane				-							No Limit	
	1,1-Dichloroethylene				-							No Limit	
	1,2-Dichloropropane			<u> </u>								No Limit	
	1,3-Dichloropropylene		-									No Limit	
33	Ethylbenzene Methyl Dremide			<u> </u>								No Limit	
	Methyl Bromide			<u> </u>								No Limit	
	Methyl Chloride			<u> </u>								No Limit	
	Methylene Chloride				<u> </u>							No Limit	
	1,1,2,2-Tetrachloroethane		+			I					<u> </u>	No Limit	
38	Tetrachloroethylene				<u> </u>							No Limit	
39	Toluene	-			-							No Limit	
40	1,2-Trans-Dichloroethylene	-			-							No Limit	
41	1,1,1-Trichloroethane	-			-							No Limit	
42	1,1,2-Trichloroethane	1	<u> </u>	I	L						<u> </u>	No Limit	

							CTR Water Q	uality Criteria (ıg/L)						
	1								Human H	lealth for					Are all B
CTR#					Fres	hwater	Saltv	water	consum	ption of:					data
	Parameters	Units	сѵ	MEC	C acute = CMC tot	C chronic = CCC tot		C chronic = CCC tot	Water & organisms	Organisms only			Tier 1 - Need limit?	B Available (Y/N)?	points non- detects (Y/N)?
43	Trichloroethylene	ug/L		0.5						81	81.0		No	N	
44	Vinyl Chloride	ug/L		0.5						525	525		No	Ν	
45	2-Chlorophenol	ug/L		10						400	400		No	N	
46	2,4-Dichlorophenol	ug/L		10						790			No	N	
47	2,4-Dimethylphenol	ug/L		10						2300	2300	No	No	N	
	4,6-dinitro-o-resol (aka2-														
48	methyl-4,6-Dinitrophenol)	ug/L		10						765			No	N	
49	2,4-Dinitrophenol	ug/L		10						14000	14000		No	N	
	2-Nitrophenol	ug/L		No Criteria										N	
51	4-Nitrophenol	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	N	L
_	3-Methyl-4-Chlorophenol												L		1
52	(aka P-chloro-m-resol)	ug/L		No Criteria								No Criteria	No Criteria		ļ'
53	Pentachlorophenol	ug/L			5.28	4.05				8.2	4.05			N	ļ'
54	Phenol	ug/L		10						4600000	4600000	No	No	Ν	ļ'
55	2,4,6-Trichlorophenol	ug/L								6.5				N	ļ'
56	Acenaphthene	ug/L		10						2700			No	N	ļ'
57	Acenaphthylene	ug/L		No Criteria								No Criteria		N	ļ!
58	Anthracene	ug/L		10						110000	110000	-	No	N	ļ'
59	Benzidine	ug/L								0.00054	0.00054			N	ļ!
60	Benzo(a)Anthracene	ug/L								0.049	0.0490			N	ļ'
61	Benzo(a)Pyrene	ug/L								0.049	0.0490			Ν	ļ'
62	Benzo(b)Fluoranthene	ug/L	_							0.049				N	ļ!
63	Benzo(ghi)Perylene	ug/L	_	No Criteria								No Criteria	No Criteria	N	ļ!
64	Benzo(k)Fluoranthene	ug/L								0.049	0.0490			N	
65		ug/L	_	No Criteria								No Criteria	No Criteria	N	ļ'
66	Bis(2-Chloroethyl)Ether	ug/L								1.4	1.400			N	
67	Bis(2-Chloroisopropyl)Ether	ug/L		10						170000	170000		No	N	ļ!
68	Bis(2-Ethylhexyl)Phthalate	ug/L							4.0	5.9	-			N	
69		ug/L		No Criteria						5000		No Criteria		N	l
70	Butylbenzyl Phthalate	ug/L		10						5200	5200		No	N	l
71	2-Chloronaphthalene	ug/L	_	10						4300	4300		No	N	ł
72	4-Chlorophenyl Phenyl Ether			No Criteria						0.040		No Criteria	No Criteria	N	
73	Chrysene	ug/L								0.049			-	N	ł
74	Dibenzo(a,h)Anthracene	ug/L	-	0.5						0.049	0.0490		N	N	ł
75	1,2-Dichlorobenzene	ug/L	-	0.5						17000	17000		No	N	ļ'
76	1,3-Dichlorobenzene	ug/L	-	0.5						2600	2600		No	N	
77 78		ug/L	-	0.5						2600 0.077	2600 0.08	INO	No	N N	
-	3,3 Dichlorobenzidine	ug/L	-	5.04								Ne	Nie		
	Diethyl Phthalate	ug/L		5.04						120000	120000		No	N	
80	Dimethyl Phthalate	ug/L	-	10						2900000	2900000		No	N	
81	Di-n-Butyl Phthalate	ug/L	-	10						12000			No	N	
82	2,4-Dinitrotoluene	ug/L	-	No Oritoria						9.10			Ne Oriteri-	N	
83	2,6-Dinitrotoluene	ug/L		No Criteria								No Criteria		N	
84	Di-n-Octyl Phthalate	ug/L		No Criteria						0.54		No Criteria	INO Uriteria	N	l
85	1,2-Diphenylhydrazine	ug/L		10						0.54			NI-	N	
86	Fluoranthene	ug/L		10						370	370	INO	No	Ν	Ļ!

			REASONA	BLE POTE	NTIAL ANALYSIS (RPA)				HUMAN H	EALTH CA	LCULATIONS	
		If all data	Enter the									
CTR#		points ND	pollutant							Organisms	only	
		Enter the	В				RPA					
		min	detected	If all B is		Tier 3 -	Result -		AMEL hh =	MDEL/AM		ECA acute
		detection	max conc	ND, is	If B>C, effluent limit	other info.	Need		ECA = C hh	EL		multiplier
	Parameters	limit (MDL)	(ug/L)	MDL>C?	required	?	Limit?	Reason	O only	multiplier	MDEL hh	(p.7)
43	Trichloroethylene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td>· ·</td><td>•</td><td></td><td></td></c>	· ·	•		
44	Vinyl Chloride				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
45	2-Chlorophenol				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
	2,4-Dichlorophenol				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
	2,4-Dimethylphenol				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
	4,6-dinitro-o-resol (aka2-											
48	methyl-4,6-Dinitrophenol)				No detected value of B, Step 7		No	Ud:MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
49	2,4-Dinitrophenol				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
	2-Nitrophenol				No Criteria		Uc	No Criteria				
	4-Nitrophenol		1	-	No Criteria	No Criteria		No Criteria		1		
	3-Methyl-4-Chlorophenol		1	-			-			1		
	(aka P-chloro-m-resol)				No Criteria	No Criteria	Uc	No Criteria				
	Pentachlorophenol				No detected value of B, Step 7		No	UD:Effluent ND.MDL>C & No B				
	Phenol				No detected value of B, Step 7		No	Ud:MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
55	2,4,6-Trichlorophenol				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
	Acenaphthene				No detected value of B, Step 7		No	Ud:MEC <c &="" b<="" no="" td=""><td></td><td>1</td><td></td><td></td></c>		1		
	Acenaphthylene				No Criteria	No Criteria	Uc	No Criteria				
	Anthracene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
	Benzidine				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
	Benzo(a)Anthracene				No detected value of B, Step 7		No	UD:Effluent ND,MDL>C & No B				
	Benzo(a)Pyrene				No detected value of B, Step 7		No	UD:Effluent ND,MDL>C & No B				
	Benzo(b)Fluoranthene				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
	Benzo(ghi)Perylene				No Criteria		Uc	No Criteria				
	Benzo(k)Fluoranthene				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
-	Bis(2-Chloroethoxy)Methane				No Criteria		Uc	No Criteria				
	Bis(2-Chloroethyl)Ether				No detected value of B, Step 7		No	UD:Effluent ND,MDL>C & No B				
	Bis(2-Chloroisopropyl)Ether				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
	Bis(2-Ethylhexyl)Phthalate				No detected value of B, Step 7		No	UD:Effluent ND,MDL>C & No B				
	4-Bromophenyl Phenyl Ether				No Criteria	No Criteria	Uc	No Criteria				
	Butylbenzyl Phthalate				No detected value of B, Step 7	NO Onteria	No	Ud;MEC <c &="" b<="" no="" td=""><td>-</td><td></td><td></td><td></td></c>	-			
	2-Chloronaphthalene				No detected value of B, Step 7			Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
	4-Chlorophenyl Phenyl Ether				No Criteria	No Criteria	Uc	No Criteria				
	Chrysene				No detected value of B, Step 7	NO Ontena	No	UD;Effluent ND,MDL>C & No B				
	Dibenzo(a,h)Anthracene				No detected value of B, Step 7		No	UD:Effluent ND,MDL>C & No B	-			
74	1,2-Dichlorobenzene				No detected value of B, Step 7		No	Ud:MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
76	1,3-Dichlorobenzene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
70	1,4-Dichlorobenzene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td>-</td><td></td><td></td><td></td></c>	-			
	3,3 Dichlorobenzidine				No detected value of B, Step 7	1	No	UD;Effluent ND,MDL>C & No B		+		╉─────
	Diethyl Phthalate				No detected value of B, Step 7		No	Ud:MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
	Dimethyl Phthalate				No detected value of B, Step 7		No	Ud:MEC <c &="" b<="" no="" td=""><td></td><td>+</td><td></td><td>╉─────</td></c>		+		╉─────
	Dinetry Philade Di-n-Butyl Phthalate				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
	2,4-Dinitrotoluene				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B	-			
	2,6-Dinitrotoluene				No Criteria	No Criteria	Uc	No Criteria	-			
	Di-n-Octyl Phthalate				No Criteria	No Criteria		No Criteria		+		╉─────
85	1,2-Diphenylhydrazine				No detected value of B, Step 7	NO Onlend	No	UD;Effluent ND,MDL>C & No B		+		╉─────
	Fluoranthene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				

-			P		LIFE CAL	CULATIONS	5				
CTR#			Sa	ltwator / F	rochwate	er / Basin Pl	an		 NITS		
UTN#	Parameters	LTA acute	ECA chronic multiplier	LTA	Lowest	AMEL multiplier		MDEL aq life	Lowest MDEL	Recommend ation	Comment
43	Trichloroethylene									No Limit	
44	Vinyl Chloride									No Limit	
45	2-Chlorophenol									No Limit	
46	2,4-Dichlorophenol									No Limit	
47	2,4-Dimethylphenol									No Limit	
	4,6-dinitro-o-resol (aka2-										
48	methyl-4,6-Dinitrophenol)									No Limit	
49	2,4-Dinitrophenol									No Limit	
50	2-Nitrophenol									No Limit	
51	4-Nitrophenol									No Limit	
	3-Methyl-4-Chlorophenol										
52	(aka P-chloro-m-resol)									No Limit	
53	Pentachlorophenol									No Limit	
54	Phenol									No Limit	
55	2,4,6-Trichlorophenol									No Limit	
56	Acenaphthene									No Limit	
57	Acenaphthylene									No Limit	
58	Anthracene									No Limit	
59	Benzidine									No Limit	
60	Benzo(a)Anthracene									No Limit	
61	Benzo(a)Pyrene									No Limit	
62	Benzo(b)Fluoranthene									No Limit	
63	Benzo(ghi)Perylene									No Limit	
64	Benzo(k)Fluoranthene									No Limit	
65	Bis(2-Chloroethoxy)Methane									No Limit	
66	Bis(2-Chloroethyl)Ether									No Limit	
67	Bis(2-Chloroisopropyl)Ether									No Limit	
68	Bis(2-Ethylhexyl)Phthalate									No Limit	
69	4-Bromophenyl Phenyl Ether									No Limit	
70	Butylbenzyl Phthalate									No Limit	
71	2-Chloronaphthalene									No Limit	
72	4-Chlorophenyl Phenyl Ether									No Limit	
73	Chrysene									No Limit	
74	Dibenzo(a,h)Anthracene									No Limit	
75	1,2-Dichlorobenzene									No Limit	
76	1,3-Dichlorobenzene									No Limit	
77	1,4-Dichlorobenzene									No Limit	
78	3,3 Dichlorobenzidine									No Limit	
79	Diethyl Phthalate									No Limit	
80	Dimethyl Phthalate									No Limit	
81	Di-n-Butyl Phthalate									No Limit	
82	2,4-Dinitrotoluene									No Limit	
83	2,6-Dinitrotoluene									No Limit	
84	Di-n-Octyl Phthalate									No Limit	
85	1,2-Diphenylhydrazine									No Limit	
86	Fluoranthene									No Limit	

							CTR Water Q	uality Criteria (ug/L)						
										Health for					Are all B
CTR#					Fres	hwater	Salty	vater		ption of:					data
	Parameters	Units	сѵ	MEC	C acute = CMC tot	C chronic =		C chronic	Water & organisms	Organisms only	Lowest C		Tier 1 - Need limit?	B Available (Y/N)?	points non- detects (Y/N)?
87	Fluorene	ug/L		10						14000	14000	No	No	N	
	Hexachlorobenzene	ug/L								0.00077	0.00077			N	
	Hexachlorobutadiene	ug/L		0.5						50			No	N	
	Hexachlorocyclopentadiene	ug/L		10						17000	17000	No	No	Ν	
91	Hexachloroethane	ug/L								8.9				Ν	
92	Indeno(1,2,3-cd)Pyrene	ug/L								0.049				Ν	
93	Isophorone	ug/L		10						600	600.0		No	Ν	
94	Naphthalene	ug/L		No Criteria									No Criteria	Ν	
95	Nitrobenzene	ug/L		10						1900	1900	No	No	Ν	
	N-Nitrosodimethylamine	ug/L								8.10	8.10000			Ν	
97	N-Nitrosodi-n-Propylamine	ug/L								1.40	1.400			Ν	
98	N-Nitrosodiphenylamine	ug/L		10						16			No	Ν	
99	Phenanthrene	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Ν	
100	Pyrene	ug/L		10						11000		-	No	Ν	
101	1,2,4-Trichlorobenzene	ug/L		No Criteria								No Criteria	No Criteria	Ν	
102	Aldrin	ug/L			3.00					0.00014	0.00014			Ν	
	alpha-BHC	ug/L								0.013				Ν	
-	beta-BHC	ug/L								0.046				Ν	
	gamma-BHC	ug/L			0.95					0.063	0.063			Ν	
106	delta-BHC	ug/L		No Criteria							No Criteria	No Criteria	No Criteria	Ν	
107	Chlordane	ug/L			2.4	0.0043				0.00059	0.00059			Ν	
108	4,4'-DDT	ug/L			1.1	0.001				0.00059	0.00059			Ν	
109	4,4'-DDE (linked to DDT)	ug/L								0.00059	0.00059			Ν	
110	4,4'-DDD	ug/L								0.00084	0.00084			Ν	
111	Dieldrin	ug/L			0.24	0.056				0.00014	0.00014			Ν	
	alpha-Endosulfan	ug/L			0.22	0.056				240				Ν	
113	beta-Endolsulfan	ug/L			0.22	0.056				240	0.0560			N	
114	Endosulfan Sulfate	ug/L		0.5						240	240	No	No	N	
115	Endrin	ug/L			0.086	0.036				0.81	0.0360			N	
116	Endrin Aldehyde	ug/L								0.81	0.81			Ν	
117	Heptachlor	ug/L			0.52	0.0038				0.00021	0.00021			N	
118	Heptachlor Epoxide	ug/L			0.52	0.0038				0.00011	0.00011			N	
119-125	PCBs sum	ug/L				0.014				0.00017	0.00017			N	
126	Toxaphene	ug/L			0.73	0.0002				0.00075	0.0002			N	İ

Notes:

Ud = Undetermined due to lack of data

Uc = Undetermined due to lack of CTR Water Quality Criteria

C = Water Quality Criteria

			REASONA	BLE POTE	NTIAL ANALYSIS (RPA)				HUMAN H	EALTH CAI	CULATIONS	
	1	If all data	Enter the									
CTR#		points ND	pollutant							Organisms (only	
		Enter the	В				RPA				_	
		min	detected	If all B is		Tier 3 -	Result -		AMEL hh =	MDEL/AM		ECA acute
		detection	max conc	ND. is	If B>C, effluent limit	other info.	Need		ECA = C hh	EL		multiplier
	Parameters	limit (MDL)	(ug/L)	MDL>C?	required	?	Limit?	Reason	O only	multiplier	MDEL hh	(p.7)
87	Fluorene				No detected value of B, Step 7			Ud;MEC <c &="" b<="" no="" td=""><td>í í</td><td></td><td></td><td></td></c>	í í			
88	Hexachlorobenzene				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
89	Hexachlorobutadiene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
90	Hexachlorocyclopentadiene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
91	Hexachloroethane				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
92	Indeno(1,2,3-cd)Pyrene				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
93	Isophorone				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
94	Naphthalene				No Criteria			No Criteria				
95	Nitrobenzene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
96	N-Nitrosodimethylamine				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
97	N-Nitrosodi-n-Propylamine				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
98	N-Nitrosodiphenylamine				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
	Phenanthrene				No Criteria	No Criteria	Uc	No Criteria				
100	Pyrene				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td></td><td></td><td></td></c>				
101	1,2,4-Trichlorobenzene				No Criteria	No Criteria	Uc	No Criteria				
102	Aldrin				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
103	alpha-BHC				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
104	beta-BHC				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
105	gamma-BHC				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
106	delta-BHC				No Criteria	No Criteria	Uc	No Criteria				
107	Chlordane				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
108	4,4'-DDT				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
109	4,4'-DDE (linked to DDT)				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
110	4,4'-DDD				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
111	Dieldrin				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
112	alpha-Endosulfan				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
113	beta-Endolsulfan				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
114	Endosulfan Sulfate				No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td>1</td><td></td><td></td></c>		1		
115	Endrin				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
116	Endrin Aldehyde				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
117	Heptachlor				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
118	Heptachlor Epoxide				No detected value of B, Step 7			UD;Effluent ND,MDL>C & No B				
119-125	PCBs sum				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				
126	Toxaphene				No detected value of B, Step 7		No	UD;Effluent ND,MDL>C & No B				

Notes:

Ud = Undetermined due to lack of data

Uc = Undetermined due to lack of CTR W

C = Water Quality Criteria

		A		LIFE CAL	CULATIONS	S					
]										
CTR#		Sa	Itwater / F	reshwate	er / Basin Pl	an	1	LIN	AITS	-	
		ECA chronic multiplier		Lowest	AMEL multiplier 95	AMEL aq life	MDEL aq life		Lowest MDEL	Recommend ation	Comment
87	Fluorene	 					 			No Limit	
88	Hexachlorobenzene									No Limit	
89	Hexachlorobutadiene									No Limit	
90	Hexachlorocyclopentadiene									No Limit	
91	Hexachloroethane									No Limit	
92	Indeno(1,2,3-cd)Pyrene									No Limit	
93	Isophorone									No Limit	
94	Naphthalene									No Limit	
95	Nitrobenzene									No Limit	
96	N-Nitrosodimethylamine									No Limit	
97	N-Nitrosodi-n-Propylamine									No Limit	
98	N-Nitrosodiphenylamine									No Limit	
99	Phenanthrene									No Limit	
100	Pyrene									No Limit	
101	1,2,4-Trichlorobenzene									No Limit	
102	Aldrin									No Limit	
103	alpha-BHC									No Limit	
104	beta-BHC									No Limit	
	gamma-BHC									No Limit	
106	delta-BHC									No Limit	
107	Chlordane									No Limit	
108	4,4'-DDT									No Limit	
	4,4'-DDE (linked to DDT)									No Limit	
	4,4'-DDD									No Limit	
111	Dieldrin									No Limit	
112	alpha-Endosulfan									No Limit	
113	beta-Endolsulfan									No Limit	
114	Endosulfan Sulfate									No Limit	
115	Endrin									No Limit	
116	Endrin Aldehyde									No Limit	
117	Heptachlor									No Limit	
118	Heptachlor Epoxide									No Limit	
	PCBs sum									No Limit	
126	Toxaphene									No Limit	

Notes:

Ud = Undetermined due to lack of data

Uc = Undetermined due to lack of CTR W

C = Water Quality Criteria

ATTACHMENT J - RPA ANALYSIS FOR LOS ANGELES RIVER METALS TMDL (DRY WEATHER)

						C	TR Water Qual	ity Criteria (ug/L)								RE
CTR#					Fresh	nwater	Salt	water		lealth for ption of:						If all data
																points ND Enter the
															Are all B	min
													Tier 1 -		data points	detection
					C acute =	C chronic =	C acute =	C chronic =	Water &	Organisms		MEC >=	Need	B Available	non-detects	limit (MDL)
	Parameters	Units	CV	MEC	CMC tot	CCC tot	CMC tot	CCC tot	organisms	only	Lowest C	Lowest C	limit?	(Y/N)?	(Y/N)?	(ug/L)
6	Copper	ug/L	1.97	800	13.00	13.00					13.00	Yes	Yes	N		
7	Lead	ug/L	0.6	34	5.00	5.00					5.00	Yes	Yes	Ν		
13	Zinc	ug/L	1.246	2440	131.00	131.00					131.00	Yes	Yes	N		

Notes:

Ud = Undetermined due to lack of data

Uc = Undetermined due to lack of CTR Water Quality Criteria

C = Water Quality Criteria

ATTACHMENT J - RPA ANA

		ASONABLE P	OTENTIAL A	ANALYSIS (RPA)	-			HUMAN HEAL	TH CALCULATIO	ONS		
CTR#								Orga	nisms only	1		
		Enter the pollutant B detected max conc	If all B is ND, is		Tier 3 - other info.	RPA Result -		AMEL hh = ECA = C	MDEL/AMEL		ECA acute multiplier	LTA
	Parameters	(ug/L)	MDL>C?	If B>C, effluent limit required	?	Need Limit?	Reason	hh O only	multiplier	MDEL hh	(p.7)	acute
6	Copper			No detected value of B, Step 7		Yes	MEC>=C		3.07		0.12	1.54
7	Lead			No detected value of B, Step 7		Yes	MEC>=C		2.01		0.32	1.61
13	Zinc			No detected value of B, Step 7		Yes	MEC>=C		2.73		0.17	22.02

Notes:

Ud = Undetermined due to lac

Uc = Undetermined due to lac

C = Water Quality Criteria

B = Background receiving wat

ATTACHMENT J - RPA ANA

		A		IFE CALC	ULATIONS							
CTR#		Sa	ltwater / F	reshwater	/ Basin Plan	1			LIN	NITS		
		ECA			AMEL		MDEL					
		chronic	LTA	Lowest	multiplier	AMEL aq	multiplier	MDEL aq	Lowest	Lowest	Recommendati	
	Parameters	multiplier	chronic	LTA	95	life	99	life	AMEL	MDEL	on	Comment
6	Copper	0.21	2.69	1.54	2.76	4.24	8.46	13	4.23999	13.00000		TMDL dry and wet weather limit will be established in permit
7	Lead	0.53	2.64	1.61	1.55	2.49	3.11	5	2.49229	5.00000		TMDL dry and wet weather limit will be established in permit
13	Zinc	0.31	40.73	22.02	2.18	47.95	5.95	131	47.95	131.00		TMDL dry and wet weather limit will be established in permit

Notes:

Ud = Undetermined due to lac

Uc = Undetermined due to lac

C = Water Quality Criteria

B = Background receiving wat

ATTACHMENT J - RPA ANALYSIS FOR LOS ANGELES RIVER METALS TMDL (WET WEATHER)

						(CTR Water Qua	lity Criteria (ug/L)								
CTR#					Fresh	nwater	Salt	water		lealth for ption of:						If all data
																points ND Enter the
															Are all B	min
					C acute -	C chronic =	C acute -	C chronic =	Water &	Organisms		MEC >=	Tier 1 -	B Available	data points non-detects	detection limit (MDL)
	Parameters	Units	cv	MEC	CMC tot			CCC tot	organisms		Lowest C		Need limit?	(Y/N)?	(Y/N)?	(ug/L)
4	Cadmium	ug/L	0.6	20	3.10	3.10					3.10	Yes	Yes	Ν		
6	Copper	ug/L	1.97	800	17.00	17.00					17.00	Yes	Yes	Ν		
7	Lead	ug/L	0.6	34	62.00	62.00					62.00	No	No	N		
13	Zinc	ug/L	1.246	2440	159.00	159.00					159.00	Yes	Yes	N		

Notes:

Ud = Undetermined due to lack of data

Uc = Undetermined due to lack of CTR Water Quality Criteria

C = Water Quality Criteria

ATTACHMENT J - RPA AN

		REASONABL	E POTENTIA	L ANALYSIS (RPA)	_	-		HUMAN H	EALTH CALCUL	ATIONS		
CTR#									Organisms only			
	Parameters	Enter the pollutant B detected max conc (ug/L)	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?		AMEL hh = ECA = C hh O only			ECA acute multiplier (p.7)	LTA acute
4	Cadmium	(3,,		No detected value of B, Step 7			MEC>=C	.,	2.01		0.32	
6	Copper			No detected value of B, Step 7		Yes	MEC>=C		3.07		0.12	
7	Lead			No detected value of B, Step 7		No	Ud;MEC <c &="" b<="" no="" td=""><td></td><td>2.01</td><td></td><td>0.32</td><td>19.91</td></c>		2.01		0.32	19.91
13	Zinc			No detected value of B, Step 7		Yes	MEC>=C		2.73		0.17	26.73

Notes:

Ud = Undetermined due to Ia

Uc = Undetermined due to la

C = Water Quality Criteria

B = Background receiving wa

ATTACHMENT J - RPA AN

		AQUATIC LIFE CALCULATIONS										
CTR#		Saltwater / Freshwater / Basin Plan							LIMITS			
		ECA			AMEL		MDEL					
		chronic	LTA	Lowest	multiplier	AMEL aq	multiplier	MDEL aq	Lowest	Lowest	Recommen	
	Parameters	multiplier	chronic	LTA	95	life	99	life	AMEL	MDEL	dation	Comment
4	Cadmium	0.53	1.64	1.00	1.55	1.55	3.11	3.1	1.54522	3.10000		TMDL wet weather limit will be established in permit
6	Copper	0.21	3.51	2.01	2.76	5.54	8.46	17	5.54461	17.00000		TMDL dry and wet weather limit will be established in permit
7	Lead	0.53	32.70	19.91	1.55	30.90	3.11	62	30.90436	62.00000		TMDL dry and wet weather limit will be established in permit
13	Zinc	0.31	49.44	26.73	2.18	58.20	5.95	159	58.20	159.00		TMDL dry and wet weather limit will be established in permit

Notes:

Ud = Undetermined due to la

Uc = Undetermined due to la

C = Water Quality Criteria

B = Background receiving wa