



# California Regional Water Quality Control Board

## Los Angeles Region



Linda S. Adams  
Cal/EPA Secretary

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Arnold Schwarzenegger  
Governor

June 10, 2010

VIA CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
NO. 7001 2510 0000 4661 0571

Mr. Dean A. Harris  
Plant Manager  
Owens-Illinois, Incorporated  
Owens-Brockway Glass Container  
2901 Fruitland Avenue  
Vernon, CA 90058

**TRANSMITTAL OF THE WASTE DISCHARGE REQUIREMENTS (WDRs) AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT (NPDES) (ORDER NO. R4-2010-0087) FOR OWENS-ILLINOIS, INCORPORATED, OWENS-BROCKWAY GLASS CONTAINER FACILITY, VERNON, CA. (NPDES NO. CA0056464, CI NO. 6079)**

Our letter dated April 7, 2010, transmitted the tentative Order for renewal of your permit to discharge wastes under the National Pollutant Discharge Elimination System (NPDES) Program.

Pursuant to Division 7 of the California Water Code, this Regional Water Board at a public hearing held on June 3, 2010, reviewed the tentative requirements, considered all factors in the case, and adopted the proposed NPDES permit.

The adopted Order (Order R4-2010-0087) serves as an NPDES permit, and expires on May 10, 2015. Section 13376 of the California Water Code requires that an application/Report of Waste Discharge for a new permit must be filed at least 180 days before the expiration date.

The "Monitoring and Reporting Program" requires you to implement the monitoring program on the effective date of this Order (July 3, 2010). Your first monitoring report for the period of July 2010 through September 2010 is due by November 1, 2010. Monitoring reports should be sent to the Regional Water Board, ATTN: Information Technology Unit.

When submitting monitoring or technical reports to the Regional Water Board per these requirements, please include a reference to Compliance File CI-6079 and NPDES No. CA0056464, which will assure that the reports, are directed to the appropriate file and staff. Please do not combine your discharge monitoring reports with other reports, such as progress reports. Submit each type of report as a separate document.

We are sending the paper copy of the permit to the Discharger only. For those on the mailing list or other interested parties who would like access to a copy of the order, please go to the Regional Water Board's website at:  
[http://www.waterboards.ca.gov/losangeles/board\\_decisions/adopted\\_orders/by\\_permits\\_tools.shtml](http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/by_permits_tools.shtml).

*California Environmental Protection Agency*



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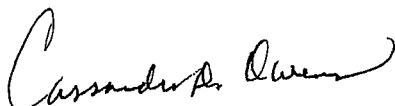
Mr. Dean A. Harris  
Owens-Illinois, Inc.  
Owens-Brockway Glass Container

- 2 -

June 10, 2010

If you have any questions please contact Rosario Aston at (213) 576-6653.

Sincerely,



Cassandra D. Owens, Chief  
Industrial Permitting Unit

Enclosures: Order No. R4-2010-0087 - Waste Discharge Requirements  
Attachment E - Monitoring and Reporting Program (MRP No. 6079)  
Attachment F - Fact Sheet

cc: Environmental Protection Agency, Region 9, Permits Branch (WTR-5)  
Mr. Roger Vann, Environmental Protection Agency, Region 9  
U.S. Army Corps of Engineers  
NOAA, National Marine Fisheries Service  
Department of Interior, U.S. Fish and Wildlife Service  
NPDES Wastewater Unit, State Water Resources Control Board, Division of Water Quality  
Mr. William Paznokas, Department of Fish and Game, Region 5  
Mr. Gary Yamamoto, California Department of Public Health  
California Coastal Commission, South Coast District  
Water Replenishment District of Southern California  
Los Angeles County, Department of Public Works, Environmental Programs Division  
Los Angeles County, Department of Public Health  
City of Vernon  
Dr. Mark Gold, Heal the Bay  
Mr. David Beckman, Natural Resources Defense Council  
Mr. Tom Ford, Santa Monica Baykeeper  
Mr. Daniel Cooper, Lawyers for Clean Water  
Mr. Jae Kim, TetraTech  
Mr. Jim Storms, Storms Engineering  
Ms. Sandra Guzman, Owens-Illinois, Inc.

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**

**LOS ANGELES REGION**

320 W. 4<sup>th</sup> Street, Suite 200, Los Angeles, California 90013  
 Phone (213) 576 - 6600 • Fax (213) 576 - 6640  
<http://www.waterboards.ca.gov>

**ORDER NO. R4-2010-0087**

**NPDES NO. CA0056464**

**WASTE DISCHARGE REQUIREMENTS  
 FOR  
 OWENS-ILLINOIS, INCORPORATED  
 OWENS-BROCKWAY GLASS CONTAINER**

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

**Table 1. Discharger Information**

<b>Discharger</b>	Owens-Illinois, Incorporated
<b>Name of Facility</b>	Owens-Brockway Glass Container
<b>Facility Address</b>	2901 Fruitland Avenue
	Vernon, CA 90058
	Los Angeles County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by Owens-Illinois, Incorporated from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

**Table 2. Discharge Location**

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001 (Fruitland Avenue)	Furnace drain glass flume and cooling water; fire protection system test water; oxygen pump seal water; and storm water	33° 59' 47" N	118° 13' 02" W	Los Angeles River
002 (Soto Street)	Storm water	33° 59' 50.36" N	118° 13' 10" W	Los Angeles River

**Table 3. Administrative Information**

This Order was adopted by the Regional Water Quality Control Board on:	<b>June 3, 2010</b>
This Order shall become effective on:	<b>July 3, 2010</b>
This Order shall expire on:	<b>May 10, 2015</b>
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:	<b>180 days prior to the Order expiration date</b>

IT IS HEREBY ORDERED, that Order No. R4-2004-0171 is terminated upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted pursuant thereto, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted pursuant thereto, the Discharger shall comply with the requirements in this Order.

I, Sam Unger, Interim 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 June 3, 2010.

  
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Sam Unger, Interim Executive Officer

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**I. FACILITY INFORMATION**

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

**Table 4. Facility Information**

<b>Discharger</b>	Owens-Illinois, Incorporated
<b>Name of Facility</b>	Owens-Brockway Glass Container
<b>Facility Address</b>	2901 Fruitland Avenue
	Vernon, CA 90058
	Los Angeles County
<b>Facility Contact, Title, and Phone</b>	Sandra Guzman, Environmental Manager, (323) 586-4207
<b>Mailing Address</b>	2901 Fruitland Avenue Vernon, CA 90058
<b>Type of Facility</b>	Glass Container Manufacturer
<b>Facility Design Flow</b>	1.0 million gallons per day (MGD) (furnace drain water) 0.04 MGD (oxygen plant vacuum pump seal water) 0.0053 MGD (fire protection system test water) 1.566 MGD (storm water)

## II. FINDINGS

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

**A. Background.** Owens-Illinois, Incorporated (hereinafter Discharger), is currently discharging pursuant to Order No. R4-2004-0171 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0056464. The Owens-Brockway Glass Container facility (hereinafter Facility) is owned by Owens-Illinois, Incorporated. The Discharger submitted a Report of Waste Discharge (ROWD), dated June 2, 2009, and applied for an NPDES permit renewal to discharge up to 1.0 million gallons per day (MGD) of furnace drain water, 0.04 MGD oxygen plant vacuum pump seal water, 0.0053 MGD fire protection system test water, and 1.566 MGD storm water when rainfall exceeds 0.1 inch from the Facility. Supplemental information were submitted on January 11, 2020, February 22, 2010, and March 30, 2010.

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

**B. Facility Description.** The Discharger operates a glass container manufacturing facility, located at 2901 Fruitland Avenue in Vernon. The Discharger manufactures glass containers, primarily for the food and beverage industries. Glass production uses both new materials, consisting primarily of silica sand and soda ash, and recycled glass. While water is not a component of the product itself, it is used throughout the manufacturing process for supporting equipment and plant operations. The ROWD, permit renewal application, and self-monitoring reports submitted, indicate that since November 2004, all routinely-generated plant wastewater has been discharged to the sanitary sewer under a joint permit issued by the City of Vernon and Los Angeles County Sanitation Districts of (Permit No. 1029). This NPDES permit regulates infrequent discharges to surface waters when discharge to the sanitary sewer is not possible (i.e., under emergency conditions).

Order R4-2004-0171 included only one outfall (Discharge Point 001). The supplemental information submitted by the Discharger on January 11, 2010, identified a second outfall (Discharge Point 002). Therefore, this permit includes two outfalls (Discharge Points 001 and 002). The Discharger proposes to discharge up to 1.045 MGD of wastewater and up to 0.504 MGD of storm water (from the central yard/production area including cullet bins, silos, and cooling tower areas) through Discharge Point 001 to the Los Angeles River, a water of the United States. Up to 1.062 MGD of storm water (from the main yard including cullet bins, cooling tower and silos areas) will be discharged through Discharge Point 002 to the Los Angeles River. The wastewater discharged through Outfall 001 consists of 1.0 MGD furnace drain water, 0.04 MGD oxygen plant vacuum pump seal water, and 0.0053 MGD fire protection system test water. Discharge Point 001 is located at Fruitland Avenue and Discharge Point 002 is located at Soto Street. Attachment B provides a map of the area around the Facility. Attachment C provides a flow schematic of the Facility.

Storm water is collected in a rain water diversion system that is connected to the sanitary sewer. However, the sewer discharge pump in the diversion system shuts off whenever 0.1 inch of rain is detected and the storm water collects in the surrounding areas (main yard, central yard/production area, cullet bins, silos, and cooling tower), and it is eventually discharged to the storm drain.

- C. Legal Authorities.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G through I are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.
- F. Technology-based Effluent Limitations.** Section 301(b) of the CWA and implementing USEPA permit regulations at part 122.44, title 40 of the Code of Federal Regulations<sup>1</sup> (40 CFR), require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with Part 125.3. 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 part 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

40 CFR part 22.44(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,

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<sup>1</sup> 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 part 122.44(d)(1)(vi).

Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2006 303(d) list and have been scheduled for total maximum daily load (TMDL) development. The USEPA approved the State's 2006 303(d) list of impaired water bodies on June 28, 2007. The Owens-Brockway facility discharges into the Los Angeles River. The 2006 State Water Resources Control Board's (State Water Board) California 303(d) List classifies the Los Angeles River, Reach 2, as impaired. The pollutants of concern in this reach include coliform bacteria, oil, and trash. Following are summaries of the TMDLs for the Los Angeles River:

**Trash TMDL:** The Los Angeles River Trash TMDL was adopted by the Regional Water Board on September 19, 2001. The TMDL established a numeric target of zero trash in the Los Angeles River. The TMDL was to be implemented via storm water permits in a phased reduction for a period of 10 years. The Los Angeles River Trash TMDL was approved by the State Water Board on February 19, 2002, and Office of Administrative Law (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 a resolution to set aside the adopted TMDL. On July 17, 2006, the State Water Board adopted Resolution 2006-0051, setting the TMDL aside. An amendment to the Los Angeles River Trash TMDL was adopted by the Regional Water Board on August 9, 2007. The State Water Board approved the 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. This TMDL will be implemented through the Municipal Separate Storm Sewer Systems (MS4) NPDES Permit Program.

**Nutrient TMDL for Los Angeles River:** The Regional Water Board adopted Resolution No. 03-009 on July 10, 2003, that amended the Basin Plan to incorporate a TMDL for Nutrients (Nitrogen Compounds and related effects) in the Los Angeles River. The TMDL was approved by the State Water Board and Office of Administrative Law on November 19, 2003, and February 27, 2004, respectively. The Nutrients 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.

This permit includes effluent limitations based on the nutrient TMDL established for the Los Angeles River.

**Metals TMDL for Los Angeles River:** The Regional Water Board adopted Resolution No. 2005-006 on June 2, 2005, that amended the Basin Plan to incorporate a TMDL for metals in the Los Angeles River. The State Water Board approved the metals TMDL on October 20, 2005, and OAL approved the 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. 2007-014) was adopted by the Regional Water Board on September 6, 2007. The State Water Board and OAL approved the metals TMDL, on June 17, 2008, and October 17, 2008, respectively. USEPA approved the metals TMDL on October 14, 2008, and it became effective on October 29, 2008. This permit includes dry weather limits for copper and lead, and wet weather limits for cadmium, copper, lead, and zinc based on the metals TMDL for the Los Angeles River.

The effluent limitations in the permit for constituents with reasonable potential are established to protect the beneficial uses of the Los Angeles River and to ensure the discharge does not degrade its water quality. This permit requires receiving water monitoring for priority pollutants, when there is a discharge from the Facility. This information will be used to complete a reasonable potential analysis (RPA) of all priority pollutants. This permit also includes a Reopener Provision which allows revision of effluent limitations for toxic pollutants based on the results of a new RPA or the adoption of other TMDLs.

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

**Table 5. Basin Plan Beneficial Uses**

Discharge Points	Receiving Water Name	Beneficial Use(s)
001, 002	Los Angeles River (Hydrologic Unit No. 405.12)	<p><u>Existing:</u>                      Ground Water Recharge (GWR); Contact (REC-1) and Non-Contact (REC-2) Water Recreation; Warm Freshwater Habitat (WARM); Marine Habitat (MAR); Wildlife Habitat (WILD); and Rare, Threatened, or Endangered Species (RARE)</p> <p><u>Potential:</u>                      Municipal and Domestic Supply (MUN); Industrial Service Supply (IND); Industrial Process Supply (PROC); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); and Shellfish Harvesting (SHELL)</p>

Requirements of this Order implement the Basin 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.

**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. Also, the Basin Plan specifies that “Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.” Therefore, the secondary MCL’s, are also incorporated into this permit to protect groundwater quality.

**Groundwater Recharge (GWR).** Sections of the Los Angeles River, Los Angeles River Reach 2 (Carson to Figueroa Street), are designated as GWR. Surface water from the Los Angeles River percolates into the Central Los Angeles Coastal Plain Groundwater Basins. Since groundwater from these Basins is used to provide drinking water to the community, the groundwater aquifers should be protected. Therefore, Title 22-based limits are needed to protect that drinking water supply. This permit includes effluent limitations based on the MCLs.

- I. **Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Table 3-1 through Table 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Water Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control*

*Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Life.* The amendment reflects the revised water quality criteria developed by USEPA in the “1999 Update of Ambient Water Quality Criteria for Ammonia,” December 1999. The 1999 Update contains USEPA’s most recent freshwater aquatic life criteria for ammonia and supersedes all previous freshwater aquatic life criteria for ammonia. The ammonia Basin Plan amendment was approved by the State Water Board, the Office of Administrative Law, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with USEPA’s 1999 ammonia criteria update.

- J. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- K. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- L. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a Discharger’s request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Water Quality Control Plan Los Angeles Region, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does not include compliance schedules or interim effluent limitations.

- M. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. [40 C.F.R. § 131.21; 65 Fed. Reg. 24641 (April 27, 2000)]. Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- N. Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on 5-day biochemical oxygen demand at 20°C (BOD<sub>5</sub> 20°C), settleable solids, turbidity, phenols, sulfides, and fluoride. In addition, this Order establishes technology-based effluent limitations for oil and grease and TSS based on ELGs contained in Part 426. Restrictions on BOD<sub>5</sub>, TSS, oil and grease, turbidity, phenols, sulfides, and fluoride are discussed in Section IV.B of the Fact Sheet (Attachment F). This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.
- O. Antidegradation Policy.** 40 CFR part 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.
- P. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations part 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Some effluent limitations in this Order are less stringent than those in the previous Order. As discussed in detail in the Fact Sheet, this revision of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- Q. 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.
- R. Monitoring and Reporting.** 40 CFR § 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.

- S. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with part 122.41, and additional conditions applicable to specified categories of permits in accordance with part 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under part 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.
- T. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections VI.C.2 and VI.C.3. 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.
- U. 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.
- V. 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 supercedes Order No. R4-2004-0171 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 thereto, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereto, the Discharger shall comply with the requirements in this Order.

### III. DISCHARGE PROHIBITIONS

- A. Wastes discharged shall be limited to the following:**
1. Up to 1.549 MGD of wastewater and storm water through Discharge Point 001. The wastewater consists of 1 MGD furnace drain water, 0.04 MGD oxygen plant vacuum pump seal water, and 0.0053 MGD fire protection system test water, and 0.504 MGD storm water from the central yard/production areas (cullet bins, silos, and cooling tower areas).
  2. Up to 1.062 MGD of storm water from the main yard (cullet bins, cooling towers, and silos areas) through Discharge Point 002.

The discharge of wastes from accidental spills or other sources is prohibited.

- B.** Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, the Los Angeles River, or other waters of the State, are prohibited.
- C.** Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or a nuisance as defined by Section 13050 of the Water Code.
- D.** Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.
- E.** The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or the State Water Resources Control Board 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 – Internal Discharge Point 01A**

**1. Final Effluent Limitations – Internal Discharge Point 01A (Furnace Drain Wastewater)**

- a.** The Discharger shall maintain compliance with the following effluent limitations at Internal Discharge Point 01A, with compliance measured at Monitoring Location INT-01A, as described in the attached MRP (Attachment E):

**Table 6. Effluent Limitations – Internal Discharge Point 01A**

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	S.U.	—	—	6.0 <sup>1</sup>	9.0 <sup>1</sup>
Total Suspended Solids (TSS)	mg/L <sup>2</sup>	6.12	12.23	—	—
	lbs/day <sup>1</sup>	51	102	—	—
Oil and Grease	mg/L <sup>2</sup>	2.64	5.28	—	—
	lbs/day <sup>1</sup>	22	44	—	—

<sup>1</sup> The effluent limitations for pH, and the mass-based (lbs/day) effluent limitations for TSS and oil and grease are based on 40 CFR part 426.82 and are applicable to furnace drain wastewater only.

- 2 The concentration-based (mg/L) effluent limitations for TSS, and oil and grease are based on the furnace drain maximum discharge flow rate of 1 MGD, using the formula:

$$C = m \div (8.34 \times Q)$$

where:

m = mass-based effluent limitation in lbs/day

C = concentration for a pollutant in mg/L

Q = discharge flow rate of 1 MGD

## B. Effluent Limitations – Discharge Point 001 and Discharge Point 002

### 1. Final Effluent Limitations – Discharge Point 001 and Discharge Point 002

- a. **Discharge Point 001** - The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Locations EFF-001, as described in the attached MRP (Attachment E):

**Table 7. Effluent Limitations – Discharge Point 001**

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	S.U.	—	—	6.5	8.5
BOD <sub>5</sub> @ 20 °C	mg/L	20	30	—	—
	lbs/day <sup>1</sup>	258	388	—	—
Total Suspended Solids (TSS)	mg/L	50	75	—	—
	lbs/day <sup>1</sup>	646	969	—	—
Oil and Grease	mg/L	10	15	—	—
	lbs/day <sup>1</sup>	129	194	—	—
Temperature	°F	—	—	—	86
Settleable Solids	mL/L	0.1	0.3	—	—
Turbidity	NTU	50	75	—	—
Residual Chlorine	mg/L	—	0.1	—	—
	lbs/day <sup>1</sup>	—	1.3	—	—
Total Dissolved Solids	mg/L	—	1,500	—	—
	lbs/day <sup>1</sup>	—	19,378	—	—
Sulfate	mg/L	—	350	—	—
	lbs/day <sup>1</sup>	—	4,522	—	—
Chloride	mg/L	—	150	—	—
	lbs/day <sup>1</sup>	—	1,938	—	—
Total Ammonia – N	mg/L	2.4 <sup>1a</sup>	8.7 <sup>1a</sup>	—	—
	lbs/day <sup>1</sup>	31	112	—	—
Nitrate – N	mg/L	8.0 <sup>1a</sup>	—	—	—
	lbs/day <sup>1</sup>	103	—	—	—
Nitrite – N	mg/L	1.0 <sup>1a</sup>	—	—	—
	lbs/day <sup>1</sup>	13	—	—	—



Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Nitrate+Nitrite – N	mg/L	8.0 <sup>1a</sup>	—	—	—
	lbs/day <sup>1</sup>	103	—	—	—
Phenols	mg/L	---	1.0	—	—
	lbs/day <sup>1</sup>	---	13	—	—
Sulfides	mg/L	—	0.1	—	—
	lbs/day <sup>1</sup>	—	1.3	—	—
Fluoride	mg/L	—	1.0	—	—
	lbs/day <sup>1</sup>	—	13	—	—
Arsenic, Total Recoverable	µg/L	—	10	—	—
	lbs/day <sup>1</sup>	—	0.13	—	—
Cadmium, Total Recoverable (Wet Weather)	µg/L	3 <sup>2</sup>	5 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	0.04	0.07	—	—
Chromium, Total	µg/L	—	50	—	—
	lbs/day <sup>1</sup>	—	0.65	—	—
Copper, Total Recoverable (Wet Weather)	µg/L	14 <sup>2</sup>	28 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	0.18	0.36	—	—
Copper, Total Recoverable (Dry Weather)	µg/L	18 <sup>3</sup>	36 <sup>3</sup>	—	—
	lbs/day <sup>1</sup>	0.23	0.47	—	—
Lead, Total Recoverable (Wet Weather)	µg/L	51 <sup>2</sup>	102 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	0.66	1.32	—	—
Lead, Total Recoverable (Dry Weather)	µg/L	9 <sup>3</sup>	18 <sup>3</sup>	—	—
	lbs/day <sup>1</sup>	0.12	0.23	—	—
Mercury	µg/L	—	2	—	—
	lbs/day <sup>1</sup>	—	0.03	—	—
Selenium, Total Recoverable	µg/L	—	10	—	—
	lbs/day <sup>1</sup>	—	0.13	—	—
Silver, Total Recoverable	µg/L	—	50	—	—
	lbs/day <sup>1</sup>	—	0.65	—	—
Thallium	µg/L	6	13	—	—
	lbs/day <sup>1</sup>	0.08	0.17	—	—
Zinc, Total Recoverable (Wet Weather)	µg/L	130 <sup>2</sup>	261 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	1.68	3.37	—	—
Cyanide	µg/L	4	8	—	—
	lbs/day <sup>1</sup>	0.05	0.10	—	—
2,3,7,8-TCDD <sup>4</sup> (as Equivalents)	µg/L	1.4E-08	2.8E-08	—	—
	lbs/day <sup>1</sup>	1.81E-10	3.62E-10	—	—
Bis(2-ethylhexyl)phthalate	µg/L	6	12	—	—
	lbs/day <sup>1</sup>	0.08	0.16	—	—
Acute Toxicity	% survival	5		—	—

For Footnotes, see Pages 17 and 18 of this Order.

**b. Discharge Point 002** - The Discharger shall maintain compliance with the following effluent limitations at Discharge Point 002, with compliance measured at Monitoring Locations EFF-002, as described in the attached MRP (Attachment E):

**Table 8. Effluent Limitations – Discharge Point 002**

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	S.U.	—	—	6.5	8.5
BOD <sub>5</sub> @ 20 °C	mg/L	20	30	—	—
	lbs/day <sup>1</sup>	177	266	—	—
Total Suspended Solids (TSS)	mg/L	50	75	—	—
	lbs/day <sup>1</sup>	443	664	—	—
Oil and Grease	mg/L	10	15	—	—
	lbs/day <sup>1</sup>	89	133	—	—
Temperature	°F	—	—	—	86
Settleable Solids	mL/L	0.1	0.3	—	—
Turbidity	NTU	50	75	—	—
Residual Chlorine	mg/L	—	0.1	—	—
	lbs/day <sup>1</sup>	—	0.9	—	—
Total Dissolved Solids	mg/L	—	1,500	—	—
	lbs/day <sup>1</sup>	—	13,286	—	—
Sulfate	mg/L	—	350	—	—
	lbs/day <sup>1</sup>	—	3,100	—	—
Chloride	mg/L	—	150	—	—
	lbs/day <sup>1</sup>	—	1,329	—	—
Total Ammonia – N	mg/L	2.4 <sup>1a</sup>	8.7 <sup>1a</sup>	—	—
	lbs/day <sup>1</sup>	21	77	—	—
Nitrate – N	mg/L	8.0 <sup>1a</sup>	—	—	—
	lbs/day <sup>1</sup>	71	—	—	—
Nitrite – N	mg/L	1.0 <sup>1a</sup>	—	—	—
	lbs/day <sup>1</sup>	9	—	—	—
Nitrate+Nitrite – N	mg/L	8.0 <sup>1a</sup>	—	—	—
	lbs/day <sup>1</sup>	71	—	—	—
Phenols	mg/L	---	1.0	—	—
	lbs/day <sup>1</sup>	---	9	—	—
Sulfides	mg/L	—	0.1	—	—
	lbs/day <sup>1</sup>	—	0.9	—	—
Fluoride	mg/L	—	1.0	—	—
	lbs/day <sup>1</sup>	—	9	—	—
Arsenic, Total Recoverable	µg/L	—	10	—	—
	lbs/day <sup>1</sup>	—	0.09	—	—
Cadmium, Total Recoverable (Wet Weather)	µg/L	3 <sup>2</sup>	5 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	0.03	0.04	—	—

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Chromium, Total	µg/L	—	50	—	—
	lbs/day <sup>1</sup>	—	0.44	—	—
Copper, Total Recoverable (Wet Weather)	µg/L	14 <sup>2</sup>	28 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	0.12	0.25	—	—
Copper, Total Recoverable (Dry Weather)	µg/L	18 <sup>3</sup>	36 <sup>3</sup>	—	—
	lbs/day <sup>1</sup>	0.16	0.32	—	—
Lead, Total Recoverable (Wet Weather)	µg/L	51 <sup>2</sup>	102 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	0.45	0.9	—	—
Lead, Total Recoverable (Dry Weather)	µg/L	9 <sup>3</sup>	18 <sup>3</sup>	—	—
	lbs/day <sup>1</sup>	0.08	0.16	—	—
Mercury	µg/L	—	2	—	—
	lbs/day <sup>1</sup>	—	0.02	—	—
Selenium, Total Recoverable	µg/L	—	10	—	—
	lbs/day <sup>1</sup>	—	0.09	—	—
Silver, Total Recoverable	µg/L	—	50	—	—
	lbs/day <sup>1</sup>	—	0.44	—	—
Thallium	µg/L	6	13	—	—
	lbs/day <sup>1</sup>	0.05	0.12	—	—
Zinc, Total Recoverable (Wet Weather)	µg/L	130 <sup>2</sup>	261 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	1.15	2.3	—	—
Cyanide	µg/L	4	8	—	—
	lbs/day <sup>1</sup>	0.04	0.07	—	—
2,3,7,8-TCDD <sup>4</sup> (as Equivalents)	µg/L	1.4E-08	2.8E-08	—	—
	lbs/day <sup>1</sup>	1.2E-10	2.5E-10	—	—
Bis(2-ethylhexyl)phthalate	µg/L	6	12	—	—
	lbs/day <sup>1</sup>	0.05	0.11	—	—
Acute Toxicity	% survival	5		—	—

Footnotes for Discharge Points 001 and 002:

- 1 Mass-based (lbs/day) effluent limitations are based on a maximum discharge flow rate of 1.549 MGD (Discharge Point 001) and 1.062 MGD (Discharge Point 002). The mass-based effluent limitation shall be calculated, using the formula:

$$\text{Mass (lbs/day)} = 8.34 \times C \times Q$$

where:

C = actual measured concentration for a pollutant, in mg/L

Q = maximum discharge flow rate in MGD

- 1a Effluent limitations are based on the Los Angeles River Nutrients TMDL (Resolution No. 2003-009).
- 2 Effluent limitations are based on the Los Angeles River Metals TMDL (Resolution No. 2007-014). **The wet weather TMDL limits apply when the maximum daily flow at Reach 1 of the Los Angeles River at Willow Street gage station at Wardlow is equal to or greater than 500 cubic feet per second (approx. 320 million gallons per day). The daily flow data at Wardlow station is posted on the Department of Public Works, Los Angeles County web site at <http://ladpw.org/wrd/report/0506/runoff/>.**

- 3 Effluent limitations are based on the Los Angeles River Metals TMDL (Resolution No. 2007-014). **The dry weather TMDL limits apply when the maximum daily flow at Reach 1 of the Los Angeles River at Willow Street gage station at Wardlow (See footnote 2 above for web address) is less than 500 cubic feet per second.**
- 4 To determine compliance with effluent limitations or to conduct Reasonable Potential Analysis (RPA), this Order requires the Discharger to calculate and report dioxin-toxicity equivalencies (TEQs) using the following formula, where the toxicity equivalency factors (TEFs) and bioaccumulation equivalency factor (BEF). BEFs are as listed in Table below:

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

where:  
 $C_x$  = concentration of dioxin or furan congener x  
 $\text{TEF}_x$  = TEF for congener x  
 $\text{BEF}_x$  = BEF for congener x

**Table: Toxicity Equivalency Factors and Bioaccumulation Equivalency Factors**

Congeners	Toxicity Equivalent Factor (TEF)	Bioaccumulation Equivalency Factor (BEF)
2,3,7,8-tetra CDD	1.0	1.0
1,2,3,7,8-penta CDD	1.0	0.9
1,2,3,4,7-hexa CDD	0.1	0.3
1,2,3,6,7,8-hexa CDD	0.1	0.1
1,2,3,7,8,9-hexa CDD	0.1	0.1
1,2,3,4,6,7,8-hepta CDD	0.01	0.05
Octa CDD	0.0001	0.01
2,3,7,8-tetra CDF	0.1	0.8
1,2,3,7,8 penta CDF	0.05	0.2
2,3,4,7,8-penta CDF	0.5	1.6
1,2,3,4,7,8-hexa CDF	0.1	0.08
1,2,3,6,7,8-hexa CDF	0.1	0.2
1,2,3,7,8,9-hexa CDF	0.1	0.6
2,3,4,6,7,8-hexa CDF	0.01	0.7
1,2,3,4,6,7,8-hepta CDF	0.01	0.01
1,2,3,4,7,8,9-hepta CDF	0.01	0.4
Octa CDF	0.0001	0.02

- 5 **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 of undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and
  - ii. No single test producing less than 70% survival. Compliance with the toxicity objectives will be determined by the method described in section V of the MRP.

**2. Interim Effluent Limitations – Not Applicable**

**C. Land Discharge Specifications – Not Applicable**

**D. Reclamation Specifications – Not Applicable**

**V. RECEIVING WATER LIMITATIONS**

**A. Surface Water Limitations**

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the Los Angeles River:

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

**a. State/Regional Water Board Water Contact Standards**

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

- i. Geometric Mean Limits
  - (a) E. coli density shall not exceed 126/100 ml.
  - (b) Fecal coliform density shall not exceed 200/100 ml.
- ii. Single Sample Maximum (SSM) Limits
  - (a) E. coli density shall not exceed 235/100 ml.
  - (b) 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 28, 2002, Resolution No. 2002-011 was approved

by State Water Board, Office of Administrative Law (OAL) and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively and is now in effect.

6. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
7. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.
8. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
9. Toxic or other deleterious substances in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
10. Accumulation of bottom deposits or aquatic growths.
11. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
12. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
13. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.
14. Alteration of turbidity, or apparent color beyond present natural background levels.
15. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.
16. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.
17. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
18. Create nuisance, or adversely effect 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 parts 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
  - b. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Water Board to local agencies.
  - c. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.
  - d. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to sections 301, 302, 303(d), 304, 306, 307, 316, 318, 405, and 423 of the Federal CWA and amendments thereto.
  - e. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

- f.** Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- g.** A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.
- h.** After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

  - i.** Violation of any term or condition contained in this Order;
  - ii.** Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
  - iii.** A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- i.** If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- j.** The Discharger shall notify the Regional Water Board not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.
- k.** The Discharger shall file with the Regional Water Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.
- l.** All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Water Board as soon as they know or have reason to believe that they have begun or expect to begin to use or manufacture intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.
- m.** In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Regional Water Board.



- n.** The Water Code provides that any person who violates a waste discharge requirement or a provision of the Water Code is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

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

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

- s. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, average monthly effluent limitation, maximum daily effluent limitation, instantaneous minimum effluent limitation, instantaneous maximum effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (213) 576-6600 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.
- t. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Water Code § 1211.)

## **B. Monitoring and Reporting Program (MRP) Requirements**

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

## **C. Special Provisions**

### **1. Reopener Provisions**

- a. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal CWA, and amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.
- b. This Order may be reopened to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.
- c. This Order may be reopened and modified, in accordance with the provisions set forth in 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 Los Angeles River.
- 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 Toxicity Reduction Evaluation (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 toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor) (Section V of the MRP, Attachment E, provides references for the guidance manuals that should be used for performing TIEs).

## 3. Best Management Practices and Pollution Prevention

- a. The Discharger shall submit, within 90 days of the effective date of this Order:
  - i. An updated SWPPP that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The updated SWPPP shall accurately reflect current facility conditions and incorporate changes in discharge practice. The SWPPP shall be developed in accordance with the requirements in Attachment G.
  - ii. An updated Best Management Practice Plan (BMPP) that entail site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material from being discharged to waters of the State. The BMPP shall be consistent with the general guidance contained in the USEPA *Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004). In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material discharge to surface waters.

Each plan 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., equipment wash pad area); 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 their SWPPP and BMPP within 10 days of the approval by the Executive Officer. The plans shall be reviewed annually and at the same time. Updated information shall be submitted within 30 days of revision.

#### **4. 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. 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.

#### **E. 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.

**F. Maximum Daily Effluent Limitations (MDEL).**

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

**G. Instantaneous Minimum Effluent Limitation.**

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

**H. Instantaneous Maximum Effluent Limitation.**

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

## **ATTACHMENT A – DEFINITIONS**

### **Arithmetic Mean ( $\mu$ )**

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:  $\Sigma x$  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 maxima 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 ( $\sigma$ )**

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;
- $\mu$  is the arithmetic mean of the observed values; and
- n is the number of samples.

### **Toxicity Reduction Evaluation (TRE)**

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

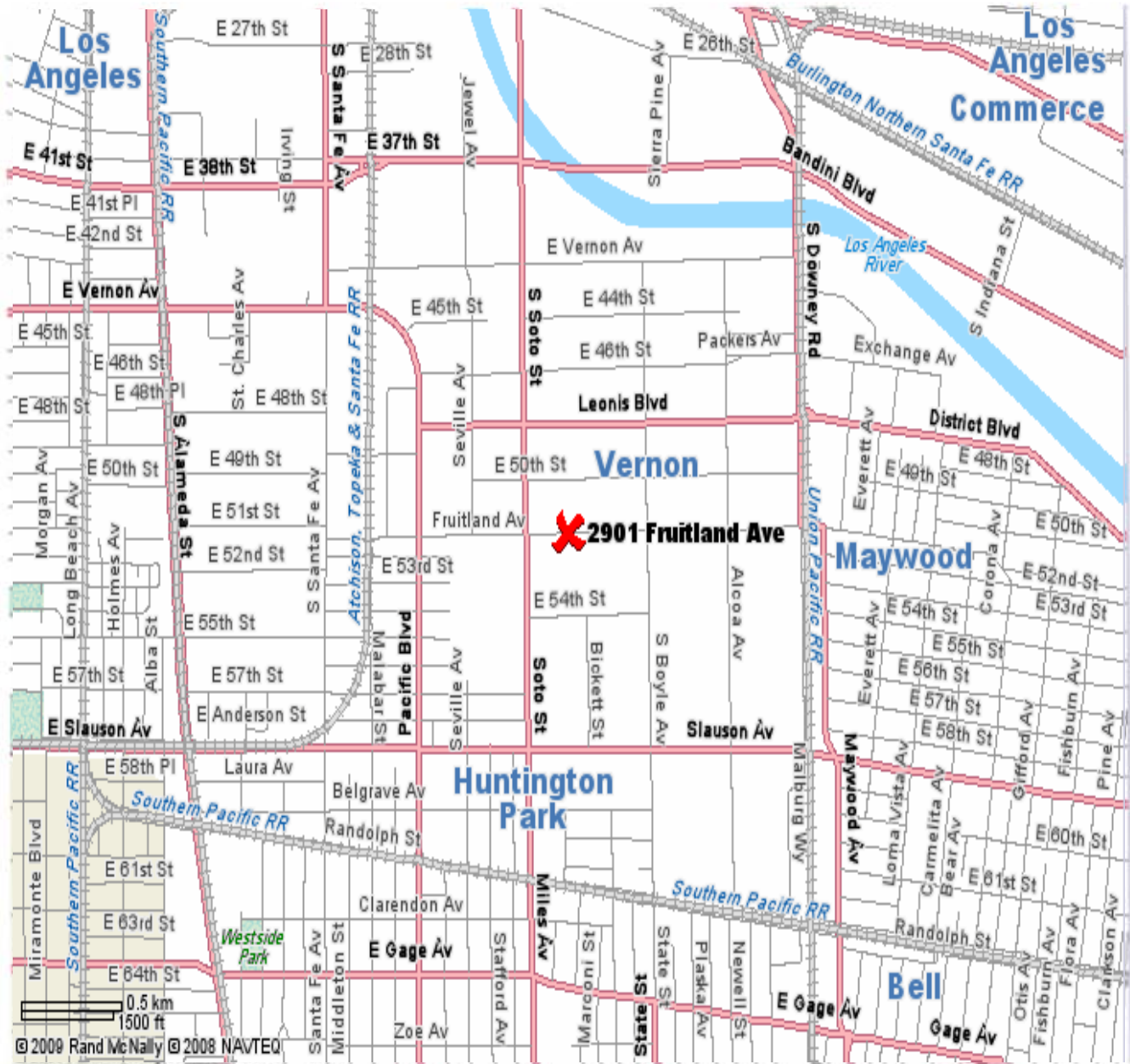
## ACRONYMS AND ABBREVIATIONS

AMEL.....	Average Monthly Effluent Limitation
B.....	Background Concentration
BAT.....	Best Available Technology Economically Achievable
Basin Plan .....	Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties
BCT .....	Best Conventional Pollutant Control Technology
BMP.....	Best Management Practices
BMPP .....	Best Management Practices Plan
BPJ .....	Best Professional Judgment
BOD.....	Biochemical Oxygen Demand 5-day @ 20 °C
BPT .....	Best Practicable Treatment Control Technology
C.....	Water Quality Objective
CCR .....	California Code of Regulations
CEQA .....	California Environmental Quality Act
CFR .....	Code of Federal Regulations
CTR.....	California Toxics Rule
CV .....	Coefficient of Variation
CWA.....	Clean Water Act
CWC .....	California Water Code
Discharger .....	Owens-Illinois, Incorporated
DMR .....	Discharge Monitoring Report
DNQ.....	Detected But Not Quantified
ELAP .....	California Department of Health Services Environmental Laboratory Accreditation Program
ELG .....	Effluent Limitations, Guidelines and Standards
Facility .....	Owens-Brockway Glass Container
g/kg.....	grams per kilogram
gpd .....	gallons per day
IC.....	Inhibition Coefficient
IC <sub>15</sub> .....	Concentration at which the organism is 15% inhibited
IC <sub>25</sub> .....	Concentration at which the organism is 25% inhibited
IC <sub>40</sub> .....	Concentration at which the organism is 40% inhibited
IC <sub>50</sub> .....	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
ng/L .....	nanograms per liter
NOEC .....	No Observable Effect Concentration

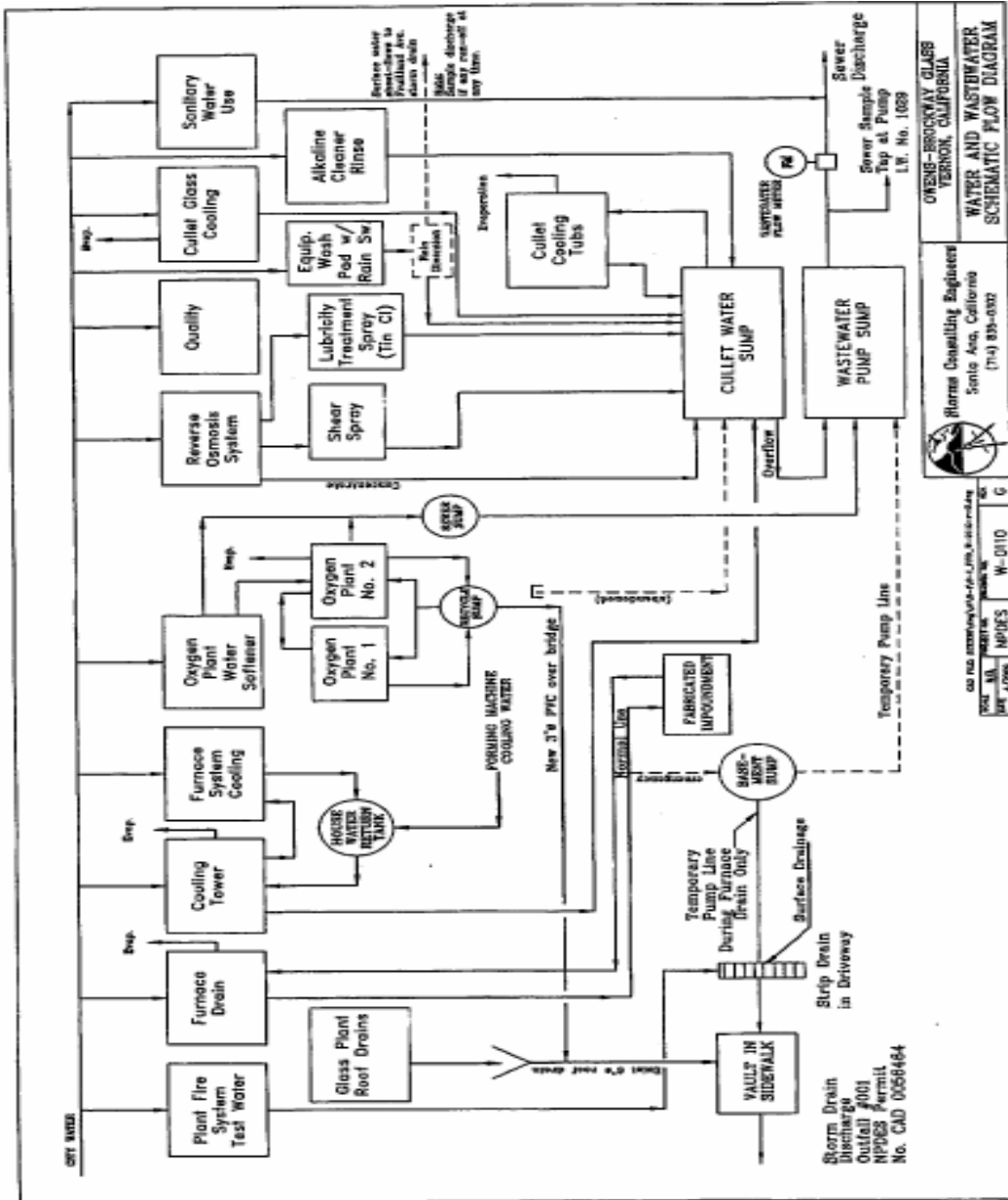
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
OAL	Office of Administrative Law
PAHs	Polynuclear Aromatic Hydrocarbons
pg/L	picograms per liter
PMEL	Proposed Maximum Daily Effluent Limitation
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
ppm	parts per million
ppb	parts per billion
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
Ocean Plan	Water Quality Control Plan for Ocean Waters of California
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
SIP	State Implementation Policy (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California)
SMR	Self Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	Test Acceptability Criteria
Thermal Plan	Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TSS	Total Suspended Solid
TU <sub>c</sub>	Chronic Toxicity Unit
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WET	Whole Effluent Toxicity
WLA	Waste Load Allocations
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
%	Percent

**ATTACHMENT B – MAP**

Owens-Brockway Glass Container  
2901 Fruitland Avenue  
Vernon, CA 90058



**ATTACHMENT C – FLOW SCHEMATIC**







## **ATTACHMENT D – STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [part 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 [part 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 [part 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 [part 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 [part 122.41(e)].

#### **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges [part 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 [part 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 [part 122.41(i)] [Water Code section 13383]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [part 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 [part 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 [part 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 [part 122.41(i)(4)].

## **G. Bypass**

### **1. Definitions**

- i. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [part 122.41(m)(1)(i)].
  - ii. "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 [part 122.41(m)(1)(ii)].
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below [part 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 [part 122.41(m)(4)(i)]:
    - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [part 122.41(m)(4)(i)(A)];





period of at least five years (or longer as required by section 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 [part 122.41(j)(2)].

**B. Records of monitoring information shall include:**

1. The date, exact place, and time of sampling or measurements [part 122.41(j)(3)(i)];
2. The individual(s) who performed the sampling or measurements [part 122.41(j)(3)(ii)];
3. The date(s) analyses were performed [part 122.41(j)(3)(iii)];
4. The individual(s) who performed the analyses [part 122.41(j)(3)(iv)];
5. The analytical techniques or methods used [part 122.41(j)(3)(v)]; and
6. The results of such analyses [part 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 [part 122.7(b)(1)]; and
2. Permit applications and attachments, permits and effluent data [part 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 [part 122.41(h)] [Water Code section 13267].

**B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below [part 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. [part 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 [part 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.) [part 122.22(b)(2)]; and
  - c.** The written authorization is submitted to the Regional Water Board and State Water Board [part 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 [part 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.” [part 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 [part 122.22(l)(4)].
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices [part 122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board [part 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 [part 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 [part 122.41(l)(5)].

### **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [part 122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [part 122.41(l)(6)(ii)]:

- a. Any unanticipated bypass that exceeds any effluent limitation in this Order [part 122.41(l)(6)(ii)(A)].
  - b. Any upset that exceeds any effluent limitation in this Order [part 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 [part 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 [part 122.41(l)(1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) [part 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) [part 122.41(l)(1)(ii)].
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [part 122.41(l)(1)(iii)].

#### **G. Anticipated Noncompliance**

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

#### **H. Other Noncompliance**

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



## I. Other Information

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

## VI. STANDARD PROVISIONS – ENFORCEMENT

- A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.
- B.** The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [part 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 [part 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 [part 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 [part 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 [part 122.42(a)]:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [part 122.42(a)(1)]:
  - a. 100 micrograms per liter ( $\mu\text{g/L}$ ) [part 122.42(a)(1)(i)];
  - b. 200  $\mu\text{g/L}$  for acrolein and acrylonitrile; 500  $\mu\text{g/L}$  for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [part 122.42(a)(1)(ii)];
  - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [part 122.42(a)(1)(iii)]; or
  - d. The level established by the Regional Water Board in accordance with part 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" [part 122.42(a)(2)]:

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

## ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP NO. 6079)

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## **ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) NO. 6079**

The Code of Federal Regulations (CFR) part 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 the point of discharge (Discharge Point 001, Latitude 33° 59' 47" N, Longitude 118° 13' 02" W; and Discharge Point 002, Latitude 33° 59' 50.36" N, Longitude 118° 13' 10" W) and shall be located where representative samples of the final effluent can be obtained.

A sampling station shall be established for the furnace drain water internal discharge point (Discharge Point 01A), collected in the basement sump prior to entry into the temporary pump line that directs water to the junction vault in the sidewalk and then to Discharge Point 001. The monitoring location shall ensure collection of a representative sample of furnace drain water.

- B.** Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.
- C.** The Regional Water Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
- D.** Pollutants shall be analyzed using the analytical methods described in parts 136.3, 136.4, and 136.5 (revised May 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 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, March 24, 2005.

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

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

1. When the pollutant under consideration is not included in Attachment H;
2. When the Discharger and Regional Water Board agree to include in the permit a test method that is more sensitive than that specified in Part 136 (revised March 12, 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 part 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Water Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.
  - J. All analyses shall be accompanied by the chain of custody, including but not limited to data and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.
  - K. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.
  - L. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. The annual monitoring report required in Section X.D shall also summarize the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per sampling period, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples.
  - M. When requested by the Regional Water Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.
  - N. For parameters that both average monthly and daily maximum limits are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the average monthly limit, the Discharger shall collect four additional samples at approximately equal intervals during the month, until compliance with the average monthly limit has been demonstrated. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. In the event of noncompliance with an average monthly effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the average monthly effluent limitation has been demonstrated. The Discharger shall provide for the approval of the Executive Officer a program to ensure future compliance with the average monthly limit.

- O. In the event wastes are transported to a different disposal site during the report period, the following shall be reported in the monitoring report:
  1. Types of wastes and quantity of each type;
  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:

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

Discharge Point Name	Monitoring Location Name	Monitoring Location Description (include Latitude and Longitude when available)
01A	INT-001	At the discharge point to the basement sump, prior to entry into the temporary pump line that directs water to the junction vault for final discharge, where representative samples of the furnace drain water can be obtained.
001	EFF-001	At the discharge point located where representative samples of the treated effluent can be obtained [Latitude 33° 59' 47" N, Longitude 118° 13' 02" W]
002	EFF-002	At a location representative of storm water flow at a point prior to the discharge entering the storm drain [Latitude 34° 59' 50.36" N, Longitude 118° 13' 10" W]
—	RSW-001	At a location in the receiving water (Los Angeles River) at least 50 feet upstream of the discharge point of the storm drain into the receiving water
----	RSW-002	At Los Angeles River Wardlow Station



### III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE

### IV. EFFLUENT MONITORING REQUIREMENTS

#### A. Monitoring Locations EFF-001 and EFF-002

1. The Discharger shall monitor storm water from the central yard/production area, and wastewater (i.e., furnace drain water, fire protection system test water, and oxygen plant vacuum pump seal water) at Monitoring Location EFF-001 during discharge events. The Discharger shall also monitor storm water from the main yard at Monitoring Location EFF-002, a location representative of storm water flow at a point prior to entering the storm drain. Table E-2 shows the effluent monitoring requirements. 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 such that the analysis provides the basis for compliance determination:

**Table E-2. Effluent Monitoring - Monitoring Locations EFF-001 and EFF-002**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	S.U.	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Flow	Gpd	Metered	1/ Discharge Event <sup>2</sup>	--
BOD <sub>5</sub> 20°C <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Total Suspended Solids <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Oil & Grease <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Temperature	°F	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Total Dissolved Solids <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Settleable Solids	mL/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Turbidity	NTU	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Sulfate <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Chloride <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Nitrate (as N) <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Nitrite (as N) <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Nitrate-N + Nitrite-N <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Ammonia – N <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Fluoride <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Phenols <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Sulfides <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Residual Chlorine <sup>4</sup>	mg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Methyl-ethyl-ketone (MEK) <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Arsenic, Total Recoverable <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Cadmium, Total Recoverable <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Chromium, Hexavalent <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Total Chromium <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Copper, Total Recoverable <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Lead, Total Recoverable <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Mercury, Total Recoverable <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Selenium, Total Recoverable <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Silver, Total Recoverable <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Thallium, Total Recoverable <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Zinc, Total Recoverable <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
Cyanide <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
TCDD Equivalents <sup>4,5</sup>	µg/L	Grab	1 / Year	<sup>3</sup>
Bis(2-ethylhexyl)phthalate <sup>4</sup>	µg/L	Grab	1 / Discharge Event <sup>1</sup>	<sup>3</sup>
E. Coli	MPN/100 ml	Grab	1/Discharge Event <sup>1</sup>	<sup>3</sup>
Fecal Coliform	MPN/100 ml	Grab	1/Discharge Event <sup>1</sup>	<sup>3</sup>
Acute Toxicity <sup>6</sup>	% survival	Grab	1 / Year <sup>8</sup>	<sup>3</sup>
Remaining Priority Pollutants <sup>4,7</sup>	µg/L	Grab	1 / Year <sup>8</sup>	<sup>3</sup>

<sup>1</sup> During periods of extended discharge, no more than one sample per month needs to be taken. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, then a sample shall be obtained, at first safe opportunity within 12 hours of the beginning of discharge.

<sup>2</sup> Flow shall be recorded daily during each period of discharge. Periods of no flow shall also be reported.

<sup>3</sup> Pollutants shall be analyzed using the analytical methods described in Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.

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

$$\text{Mass (lbs/day)} = 8.34 \times C \times Q$$

where:

C = actual measured concentration for a pollutant, in mg/L

Q = actual discharge flow rate in MGD.

<sup>5</sup> To determine compliance with effluent limitations or to conduct Reasonable Potential Analysis (RPA), this Order requires the Discharger to calculate and report dioxin-toxicity equivalencies (TEQs) using the following formula, where the toxicity equivalency factors (TEFs) and bioaccumulation equivalency factor (BEF). BEFs are as listed in Table below:

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

where:

C<sub>x</sub> = concentration of dioxin or furan congener x

TEF<sub>x</sub> = TEF for congener x

BEF<sub>x</sub> = BEF for congener x

**Table: Toxicity Equivalency Factors and Bioaccumulation Equivalency Factors**

Dioxin or Furan Congener	Toxicity Equivalency Factor (TEF)	Bioaccumulation Equivalency Factor (BEF)
2,3,7,8-tetra CDD	1.0	1.0
1,2,3,7,8-penta CDD	1.0	0.9
1,2,3,4,7,8-hexa CDD	0.1	0.3
1,2,3,6,7,8-hexa CDD	0.1	0.1
1,2,3,7,8,9-hexa CDD	0.1	0.1

Dioxin or Furan Congener	Toxicity Equivalency Factor (TEF)	Bioaccumulation Equivalency Factor (BEF)
1,2,3,4,6,7,8-hepta CDD	0.01	0.05
Octa CDD	0.0001	0.01
2,3,7,8-tetra CDF	0.1	0.8
1,2,3,7,8-penta CDF	0.05	0.2
2,3,4,7,8-penta CDF	0.5	1.6
1,2,3,4,7,8-hexa CDF	0.1	0.08
1,2,3,6,7,8-hexa CDF	0.1	0.2
1,2,3,7,8,9-hexa CDF	0.1	0.6
2,3,4,6,7,8-hexa CDF	0.1	0.7
1,2,3,4,6,7,8-hepta CDF	0.01	0.01
1,2,3,4,7,8,9-hepta CDF	0.01	0.4
Octa CDF	0.0001	0.02

<sup>6</sup> Refer to Section V, Whole Effluent Toxicity Testing Requirements.

<sup>7</sup> Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.J of the Limitations and Discharge Requirements of this Order, and included as Attachment I.

<sup>8</sup> Annual samples for shall be collected during the first hour of discharge, from the first storm event of the wet season (October 1 – May 30). If, for safety reasons, a sample cannot be obtained during the first hour of discharge, then a sample shall be obtained, at first safe opportunity within 12 hours of the beginning of discharge.

## V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

### A. Definition of Toxicity

#### 1. Acute 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. Accelerated Monitoring.

If either of the above requirements [sections V.A.1.(a) and 1(b)] is not met, the Discharger shall conduct six additional tests over a 6-week period, if possible. The Discharger shall ensure that they receive results of a failing toxicity test within

24 hours of the close of the test and the additional tests shall begin within 3 business days of the receipt of the result. If the additional tests indicate compliance with the toxicity limitation, the Discharger may resume regular testing. However, if the results of any two of the six accelerated tests are less than the stipulated requirements, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.

If the initial test and any of the additional six acute toxicity bioassay tests result in less than 70% survival, including the initial test, the Discharger shall immediately begin a TIE.

## **B. Acute Toxicity Effluent Monitoring Program**

- 1. Method.** The Discharger shall conduct acute toxicity tests on effluent grab samples by methods specified in 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 in 100% effluent.
- 2. Test Species.** The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish effluent. However, if the salinity of the receiving water is between 1 to 32 part per trillion (ppt), the Discharger may have the option of using the inland silverside, *Menidia beryllina*, instead of the topsmelt. The method for topsmelt is found in USEPA's *Method 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.
- 3. Alternate Reporting.** In lieu of conducting the standard acute toxicity testing with the fathead minnow, the Discharger may elect to report the results or endpoint from the first 96 hours of the chronic toxicity test as the results of the acute toxicity test using USEPA's August 1995 method ((EPA/600-1/R-95/136).
- 4.** Effluent samples shall be collected after all treatment processes and before discharge to the receiving water.

## **C. 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 or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

#### **D. Accelerated Monitoring and Initial Investigation TRE Trigger**

1. If toxicity exceeds the limitations (as defined in section V.A.1, above), then, the Discharger shall immediately implement accelerated testing, as specified in section V.A.2, above. The Discharger shall ensure that they receive results of a failing toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 3 business days of the receipt of the results or at the first opportunity of discharge. If the accelerated testing shows consistent toxicity, the Discharger shall immediately implement the Initial Investigation of the TRE Workplan.
2. If implementation of the Initial Investigation TRE Workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger may discontinue the TIE.
3. The first step in the Initial Investigation TRE Workplan for downstream receiving water toxicity can be a toxicity test protocol designed to determine if the effluent from Discharge Point 001 causes or contributes to the measured downstream toxicity. If this first step TRE testing shows that the Discharge Point 001 effluent does not cause or contribute to downstream toxicity, using USEPA's *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, Fourth Edition, October 2002, USEPA, Office of Water, Washington D.C. (EPA/821-R-02-014). Then a report on this testing shall be submitted to the Regional Water Board and the Initial Investigation TRE will be considered to be completed. Routine testing in accordance with the MRP shall be continued thereafter.

#### **E. Toxicity Reduction Evaluation (TRE)/Toxicity Identification Evaluation (TIE) Trigger**

1. If the accelerated testing shows consistent toxicity as defined below:
  - a. If the results of any two of the six accelerated tests are less than 90% survival,  
or
  - b. If the initial test and any of the additional six acute toxicity bioassay tests result in less than 70% survival

then, the Discharger shall immediately implement the Toxicity Reduction Evaluation (TRE) as described below.

## **F. Steps in TRE and TIE Procedures**

1. Following a TRE trigger, the Discharger shall initiate a TRE in accordance with the facility's Initial Investigation TRE workplan. At a minimum, the Discharger shall use USEPA manual EPA/600/2-88/070 (industrial) as guidance. The Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 30 days of the trigger, which will include, but not be limited to:
  - a. Further actions to investigate and identify the cause of toxicity;
  - b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity;
  - c. Standards the Discharger will apply to consider the TRE complete and to return to normal sampling frequency; and,
  - d. A schedule for these actions.
2. The following is a stepwise approach in conducting the TRE:
  - a. Step 1 – Basic data collection. Data collected for the accelerated monitoring requirements may be used to conduct the TRE;
  - 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 Toxicity Identification Evaluation (TIE) by employing all reasonable efforts and using currently available TIE methodologies. The Discharger shall use the USEPA acute and chronic manuals, EPA/600/6-91/005F (Phase I), EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) as guidance. The objective of the TIE is 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 implementation of these control measures may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there

is no longer toxicity (or six consecutive acute toxicity test results are greater than 90% survival).

3. The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute and chronic manuals, EPA/600/6-91/005F (Phase I), EPA/600/R-96-054 (for marine), EPA/600/R-92-080 (Phase II), and EPA/600/R-92/081 (Phase III) as guidance.
4. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required by this permit, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.
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.

## **G. Reporting**

1. 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 month in which the test is conducted.
2. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, then those results also shall be submitted with the SMR for the period in which the investigation occurred.
  - a. The full report shall be submitted on or before the end of the month in which the SMR is submitted.
  - b. 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; and (4) 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. NOEC value(s) in percent effluent;
  - f. IC<sub>15</sub>, IC<sub>25</sub>, IC<sub>40</sub> and IC<sub>50</sub> values in percent effluent;
  - g. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable);
  - h. NOEC and LOEC values for reference toxicant test(s);
  - i. IC<sub>25</sub> value for reference toxicant test(s);
  - j. Any applicable charts; and
  - k. 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.

The Discharger shall notify by telephone or electronically, this Regional Water Board of any toxicity exceedance of the limit 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 AND GROUNDWATER**

**A. Monitoring Location RSW-001**

- 1. The Discharger shall monitor the Los Angeles River at Monitoring Location RSW-001 as follows:



**Table E-4. Receiving Water Monitoring Requirements – RSW-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pH	S.U.	Grab	1 / Year	1, 2
Temperature	°F	Grab	1 / Year	1, 2
Salinity	mg/L	Grab	1 / Year	1, 2
Hardness	mg/L	Grab	1 / Year	1, 2
E. Coli	MPN/100 ml	Grab	1 / Year	1
Fecal Coliform	MPN/100 ml	Grab	1 / Year	1
Priority Pollutants <sup>3</sup>	µg/L	Grab	1 / Year	1, 2
TCDD – Equivalents <sup>4</sup>	µg/L	Grab	1/Permit Term	1

<sup>1</sup> Pollutants shall be analyzed using the analytical methods described in Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, provided as Attachment H. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.

<sup>2</sup> Receiving water pH, hardness, and temperature shall be analyzed at the same time the samples are collected for Priority Pollutants analysis.

<sup>3</sup> Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.J of the Limitations and Discharge Requirements of this Order, and included as Attachment I. Annual samples shall be collected during the discharge from the first storm event of the wet season (October 1 – May 30). If, for safety reasons, a sample cannot be obtained during the first hour of discharge, then a sample shall be obtained, at first safe opportunity within 12 hours of the beginning of discharge.

<sup>4</sup> The Discharger must monitor the receiving water for the presence of the 17 congeners of 2,3,7,8-TCDD listed below, once over the term of the permit, as early as practical (i.e., discharge occurs). To determining compliance with effluent limits or for conduction of Reasonable Potential Analysis, this Order requires the Discharger to calculate and report dioxin-toxicity equivalencies (TEQs) using the following formula, where the toxicity equivalency factors (TEFs) and bioaccumulation equivalency factor (BEF). BEFs are as listed in Table below:

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

where:

$C_x$  = concentration of dioxin or furan congener x

$\text{TEF}_x$  = TEF for congener x

$\text{BEF}_x$  = BEF for congener x

**Table: Toxicity Equivalency Factors and Bioaccumulation Equivalency Factors**

Dioxin or Furan Congener	Toxicity Equivalency Factor (TEF)	Bioaccumulation Equivalency Factor (BEF)
2,3,7,8-tetra CDD	1.0	1.0
1,2,3,7,8-penta CDD	1.0	0.9
1,2,3,4,7,8-hexa CDD	0.1	0.3
1,2,3,6,7,8-hexa CDD	0.1	0.1
1,2,3,7,8,9-hexa CDD	0.1	0.1
1,2,3,4,6,7,8-hepta CDD	0.01	0.05
Octa CDD	0.0001	0.01
2,3,7,8-tetra CDF	0.1	0.8
1,2,3,7,8-penta CDF	0.05	0.2
1,2,3,4,7,8-hexa CDF	0.1	0.08

Dioxin or Furan Congener	Toxicity Equivalency Factor (TEF)	Bioaccumulation Equivalency Factor (BEF)
1,2,3,6,7,8-hexa CDF	0.1	0.2
1,2,3,7,8,9-hexa CDF	0.1	0.6
2,3,4,6,7,8-hexa CDF	0.1	0.7
1,2,3,4,6,7,8-hepta CDF	0.01	0.01
1,2,3,4,7,8,9-hepta CDF	0.01	0.4
Octa CDF	0.0001	0.02

**B. Monitoring Location RSW-002**

- The Discharger shall report the maximum daily flow in the Los Angeles River, at the Los Angeles County Department of Public Works’ Willow Street Gage Station at Wardlow. For the purposes of this permit, this station is also known as RSW-002. The daily flow data at Wardlow station is posted on the Department of Public Works, Los Angeles County web site at <http://ladpw.org/wrd/report/0506/runoff/>. This information is necessary to determine the wet-weather and dry weather condition of the river, as defined in the Los Angeles River Metals TMDL. If the gauging station is not operational, an estimated maximum daily flow may be submitted.

**Table E-5. Receiving Water Monitoring Requirements – RSW-002**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>1</sup>	Required Analytical Test Method
Flow	cfs	recorder	daily	N/A

<sup>1</sup> Concurrent with effluent sampling for cadmium, copper, lead, and zinc.

**IX. OTHER MONITORING REQUIREMENTS**

**A. Internal Outfall (01A) Monitoring – Internal Monitoring Location INT-001**

- The Discharger shall monitor furnace drain water, prior to mixing with other waste streams at the discharge point to the basement sump, prior to entry into the temporary pump line that directs water to the junction vault for final discharge, as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

**Table E-6. Internal Outfall (01A) Monitoring, Monitoring Location INT-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>1</sup>	Required Analytical Test Method
Flow	gpd	Metered	1/Discharge Event	--
pH	S.U.	Grab	1 / Discharge Event	<sup>2</sup>
BOD <sub>5</sub> 20°C <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Total Suspended Solids <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Oil & Grease <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>1</sup>	Required Analytical Test Method
Temperature	°F	Grab	1 / Discharge Event	<sup>2</sup>
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Dissolved Solids, Total <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Settleable Solids	mL/L	Grab	1 / Discharge Event	<sup>2</sup>
Turbidity	NTU	Grab	1 / Discharge Event	<sup>2</sup>
Sulfate <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Chloride <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Nitrate (as N) <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Nitrite (as N) <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Nitrate-N + Nitrite-N <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Ammonia <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Fluoride <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Phenols <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Sulfides <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Residual Chlorine <sup>3</sup>	mg/L	Grab	1 / Discharge Event	<sup>2</sup>
Methyl-ethyl-ketone (MEK) <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Arsenic, Total Recoverable <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Cadmium, Total Recoverable <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Chromium, Hexavalent <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Chromium, Total <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Copper, Total Recoverable <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Lead, Total Recoverable <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Mercury, Total Recoverable <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Selenium, Total Recoverable <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Silver, Total Recoverable <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Thallium, Total Recoverable <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Zinc, Total Recoverable <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Cyanide <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
TCDD Equivalents <sup>3,4</sup>	µg/L	Grab	1 / Year	<sup>2</sup>
Bis(2-ethylhexyl)phthalate <sup>3</sup>	µg/L	Grab	1 / Discharge Event	<sup>2</sup>
Acute Toxicity <sup>5</sup>	% survival	Grab	1 / Year	<sup>2</sup>
Remaining Priority Pollutants <sup>3,6</sup>	µg/L	Grab	1 / Year	<sup>2</sup>

<sup>1</sup> During periods of extended discharge, no more than one sample per month needs to be taken.

<sup>2</sup> Pollutants shall be analyzed using the analytical methods described in Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.

<sup>3</sup> The mass emission (in lbs/day) for the discharge shall be calculated and reported using the reported concentration and the actual flow rate measured at the time of the discharge, using the formula:

$$\text{Mass (lbs/day)} = 8.34 \times C \times Q$$

where: C = actual measured concentration for a pollutant, in mg/L  
Q = actual discharge flow rate in MGD.

<sup>4</sup> The Discharger must monitor the effluent for the presence of the 17 congeners of 2,3,7,8-TCDD listed below, once per year. To determining compliance with effluent limits or for conduction of Reasonable Potential Analysis, this Order requires the Discharger to calculate and report dioxin-toxicity equivalencies (TEQs) using

the following formula, where the toxicity equivalency factors (TEFs) and bioaccumulation equivalency factor (BEF). BEFs are as listed in Table below:

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

where:  $C_x$  = Concentration of,dioxin or furan congener x  
 $\text{TEF}_x$  = TEF for congener x  
 $\text{BEF}_x$  = BEF for congener x

**Table: Toxicity Equivalency Factors and Bioaccumulation Equivalency Factors**

Dioxin or Furan Congener	Toxicity Equvalency Factor (TEF)	Bioaccumulation Equivalency Factor (BEF)
2,3,7,8-tetra CDD	1.0	1.0
1,2,3,7,8-penta CDD	1.0	0.9
1,2,3,4,7,8-hexa CDD	0.1	0.3
1,2,3,6,7,8-hexa CDD	0.1	0.1
1,2,3,7,8,9-hexa CDD	0.1	0.1
1,2,3,4,6,7,8-hepta CDD	0.01	0.05
Octa CDD	0.0001	0.01
2,3,7,8-tetra CDF	0.1	0.8
1,2,3,7,8-penta CDF	0.05	0.2
1,2,3,4,7,8-hexa CDF	0.1	0.08
1,2,3,6,7,8-hexa CDF	0.1	0.2
1,2,3,7,8,9-hexa CDF	0.1	0.6
2,3,4,6,7,8-hexa CDF	0.1	0.7
1,2,3,4,6,7,8-hepta CDF	0.01	0.01
1,2,3,4,7,8,9-hepta CDF	0.01	0.4
Octa CDF	0.0001	0.02

<sup>5</sup> Refer to Section V, Whole Effluent Toxicity Testing Requirements.

<sup>6</sup> Priority Pollutants as defined by the California Toxics Rule (CTR) defined in Finding II.J of the Limitations and Discharge Requirements of this Order, and included as Attachment I.

## B. Storm Water Monitoring

- 1. 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.

### **C. SWPPP and BMPP Status and Effectiveness Report**

1. As required under Special Provision VI.C.3 of this Order, the Discharger shall submit an updated SWPPP and BMPP to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this permit.
2. Annually the Discharger shall report the status of the implementation and the effectiveness of the SWPPP and BMPP required under Special Provision VI.C.3 of this Order. The SWPPP and BMPP shall be reviewed at a minimum once per year and updated as needed to ensure all actual or potential sources of pollutants in wastewater and storm water discharged from the facility are addressed in the SWPPP and BMPP. All changes or revisions to the SWPPP and BMPP 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:

**Table E-7. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
1 / Day	July 3, 2010	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	May 1 August 1 November 1 February 1
1/ Discharge Event	July 3, 2010	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
1 / Year	July 3, 2010	January 1 through December 31	February 1

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

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.



- 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. 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013**

**C. Discharge Monitoring Reports (DMRs) – Not Applicable**

**D. Other Reports**

1. The Discharger shall report the results of any special studies, acute toxicity testing, TRE/TIE, SWPPP, and BMPP required by Special Provisions – VI.C.2 and 3 of this Order. The Discharger shall report the progress in satisfaction of compliance schedule dates specified in Special Provisions – VI.C.7 of this Order. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.
2. Within 90 days of the effective date of this permit, the Discharger is required to submit the following to the Regional Water Board:
  - a. Initial Investigation TRE workplan
  - b. Updated SWPPP
  - c. Updated BMPP
3. By March 1 of each year, the Discharger shall submit an annual report to the Regional Water Board. The report shall contain the following:
  - a. Both tabular and graphical summaries of the monitoring data obtained during the previous year,
  - b. A discussion on the compliance record and the corrective actions taken or planned to bring the discharge into full compliance with the waste discharge requirements,
  - c. A report discussing the following: 1) operation/maintenance problems; 2) changes to the facility operations and activities; 3) potential discharge of the pollutants associated with the changes and how these changes are addressed in the BMPP; 3) calibration of flow meters or other equipment/device used to demonstrate compliance with effluent limitations of this Order.
  - d. A report summarizing the quantities of all chemicals, listed by both trade and chemical names, which are used at the facility and which are discharged or



have the potential to be discharged (See Section IX.C of the MRP, Attachment E).

- e. A report on the status of the implementation and the effectiveness of the SWPPP and BMPP.
4. If the Discharger wishes to participate in a coordinated receiving water, biomonitoring, and sediment monitoring program with other dischargers to Los Angeles River, then, as discussed in Section VIII.A of the MRP, Attachment E, the Discharger shall submit a report seeking approval of the Regional Water Board.

## 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.

**Table F-1. Facility Information**

<b>WDID</b>	4B192085002
<b>Discharger</b>	Owens-Illinois, Incorporated
<b>Name of Facility</b>	Owens-Brockway Glass Container
<b>Facility Address</b>	2901 Fruitland Avenue
	Vernon, CA 90058
	Los Angeles County
<b>Facility Contact, Title and Phone</b>	Sandra Guzman, Environmental Manager, (323) 586-4207
<b>Authorized Person to Sign and Submit Reports</b>	Same as above
<b>Mailing Address</b>	2901 Fruitland Avenue, Vernon, CA 90058
<b>Billing Address</b>	Same as above
<b>Type of Facility</b>	Glass Container Manufacturer
<b>Major or Minor Facility</b>	Major <sup>1</sup>
<b>Threat to Water Quality</b>	2
<b>Complexity</b>	C
<b>Pretreatment Program</b>	No
<b>Reclamation Requirements</b>	No
<b>Facility Permitted Flow</b>	1.0 MGD (furnace drain water) 0.04 MGD (oxygen plant vacuum pump seal water) 0.0053 MGD (fire protection system test water) 1.566 MGD (storm water)
<b>Facility Design Flow</b>	1.0 MGD (furnace drain water) 0.04 MGD (oxygen plant vacuum pump seal water) 0.0053 MGD (fire protection system test water) 1.566 MGD (storm water)
<b>Watershed</b>	Los Angeles River Watershed
<b>Receiving Water</b>	Los Angeles River
<b>Receiving Water Type</b>	Inland Surface Water

<sup>1</sup> Previously, the Owens-Brockway Facility was classified as a minor discharge. Based on the ROWD and new information (1.045 MGD of wastewater and 1.566 MGD of storm water discharge) submitted by Owens-Brockway, the maximum flow is now 2.611 MGD, therefore, Facility has been classified as a major discharge.

- A.** Owens-Illinois, Incorporated is the owner and operator of the Owens-Brockway Glass Container Facility, a glass container manufacturing facility. Owens-Illinois, Incorporated is hereinafter referred to as Discharger.

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 furnace drain water, oxygen plant vacuum pump seal water, fire protection system test water, and storm water to the Los Angeles River, a water of the United States. The Facility is currently regulated by Order No. R4-2004-0171, which was adopted on December 13, 2004. Order No. R4-2004-0171 expired on November 10, 2009. The terms and conditions of the current Order have been automatically continued and remain in effect until Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order.
- C.** The Discharger filed a Report of Waste Discharge (ROWD) and submitted an application for renewal of its WDRs and an NPDES permit on May 12, 2009. Supplemental information were submitted on January 11, 2010, February 22, 2010, March 30, 2010.

A site visit was conducted on February 25, 2009, to observe operations and collect additional data to develop permit limitations and conditions.

## **II. FACILITY DESCRIPTION**

The Discharger operates the Owens-Brockway Glass Container facility located at 2901 Fruitland Avenue, Vernon, California. Owens-Brockway manufactures glass containers from raw materials and recycled glass, primarily for the food and beverage industries. The Facility manufactures flint (clear), amber (brown), and emerald (green) bottles from both new materials – consisting primarily of silica sand and soda ash, and recycled glass. While water is not a component of the product itself, it is used throughout the manufacturing process for supporting equipment and plant operations.

### **A. Description of Wastewater and Biosolids Treatment or Controls**

This NPDES permit allows the discharge of up to 1 million gallons per day (MGD) of furnace drain water, 0.04 MGD oxygen plant vacuum pump seal water, 0.0053 MGD fire protection system test water and 1.566 MGD storm water when rainfall exceeds 0.1 inch from the Owens-Brockway Glass Container facility. The ROWD, permit renewal application, and self-monitoring reports submitted, indicate that since November 2004, all routinely-generated plant wastewater is discharged to the sanitary sewer under a joint permit issued by the City of Vernon and Los Angeles County Sanitation Districts of (Permit No. 1029). This NPDES permit regulates infrequent discharges to surface waters when discharge to the sanitary sewer is not possible (i.e., under emergency

conditions). Storm water discharges from the Facility are regulated under the State Water Board General NPDES Storm Water Permit No. CAS000001.

Periodically, a furnace is drained of glass for maintenance or color change purposes. During a furnace drain, glass is discharged into a flume of water flowing into a holding area in the basement or slab outside the furnace building. No chemicals are added to the water. Furnace drain water is generated infrequently; furnace drains may occur less than once per year.

The Discharger collects furnace drain flume water in a fabricated “pond” for re-circulation during furnace drains. Excess water is hauled off-site for disposal or discharged into the sanitary sewer. However, during emergency, furnace drain water is discharged to the storm drain.

Pure oxygen is used for combustion with natural gas in the furnaces to reduce the formation of oxides of nitrogen. Two “molecular sieve” oxygen regeneration plants provide this oxygen. Air flow through each plant is provided by two roots-type positive-displacement vacuum pumps. To increase the vacuum, the pump inlet air is saturated with a fresh water spray. A thin film of water is formed between the rotors, providing an improved seal. Wet silencers are also used. In the past, untreated City-supplied water evaporated from the pump rotors, leaving a scale layer. A sodium-cycle zeolite water softener is currently added to the system. This unit replaced calcium and magnesium in the feed water with sodium, reducing the formation of scale and allowing water to be recycled. The vacuum pump seal water from Oxygen Plant Nos. 1 and 2 are combined into a recirculating system. Bleed water from this seal water recirculation system was previously pumped to the front driveway strip drain and storm drain vault in the sidewalk. As of November 2004, the bleed water is discharged to the sanitary sewer through the basement sump. In the event of an emergency (e.g., loss of sewer system pumps), oxygen plant seal water may still need to be discharged to the storm drain. The Discharger proposes to discharge up to 0.04 MGD of oxygen plant vacuum pump seal water to the storm drain.

The fire protection system is tested approximately once every 2 months. The water is City-supplied water, without the addition of any chemicals. Depending on the system tested, fire protection system test water may flow to the strip drain in the driveway or other catch basins which discharge to the storm drain. Test water will be dechlorinated or otherwise treated, to assure compliance with discharge requirements. The Discharger proposes to discharge up to 0.0053 MGD of fire protection system test water to the storm drain.

Owens-Brockway’s equipment is cleaned with a hot water pressure washer on a concrete pad (wash pad) located adjacent to the covered cullet bins. The water on the wash pad is collected in a sump and it is pumped to a yard sump which flows by gravity to the furnace basement sump and sanitary sewer. The wash pad includes a rain water diversion system, as required by the Los Angeles County Sanitation Districts. This system shuts off the sewer discharge pump whenever 0.1 inch of rain is detected. The collection sump then overflows to the surrounding areas (central and main yard, production area, cullet bins, silos, and cooling tower), and up to 1.566 MGD of storm

water is discharged to the storm drain. The Discharger stated in the ROWD that a water sample is collected from the diverted flow whenever there is a discharge.

**B. Discharge Points and Receiving Waters**

Order R4-2004-0171 included only one outfall (Discharge Point 001). The supplemental information submitted by the Discharger identified a second outfall (Discharge Point 002). Therefore, this permit included two outfalls (Discharge Points 001 and 002).

The Facility discharges up to 1.045 wastewater and up to 1.566 storm water through two discharge points (Discharge Points 001 and 002), to the Los Angeles River, a Water of the United States.

1. Discharge Point 001 – (Latitude 33° 59' 47" North; Longitude 118° 13' 02" West)

The discharge through Discharge Point 001 consist of up to 1 MGD furnace drain water, 0.04 MGD oxygen plant vacuum pump seal water, 0.0053 MGD fire protection system test water, and 0.504 MGD storm water run off from the central yard/production area (including cullet bins, cooling tower, and silos areas), when the rain diversion system detects 0.1 inch of rain.

2. Discharge Point 002 - (Latitude 33° 59' 50.36" North; Longitude 118° 13' 10" West)

Up to 1.062 MGD storm water runoff from the main yard (cullet bins, cooling tower, and silos areas) which includes portion of the runoff resulting from the overflows of the rain diversion system.

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

Effluent limitations contained in the existing Order for discharges from Discharge Point No. 001 (Monitoring Location EFF-001) are as follows:

**Table F-2. Historic Effluent Limitations for Discharge Point 001**

Parameter	Units	Effluent Limitation			
		Instant-aneous Minimum	Instant-aneous Maximum	Average Monthly	Maximum Daily
<i>Internal Outfall 01A</i>					
Oil and Grease	mg/L	—	—	6	12
	lbs/day	—	—	24	49
Total Suspended Solids (TSS)	mg/L	—	—	13	28
	lbs/day	—	—	55	115
pH	s.u.	6.5	8.5	—	—
<i>Discharge Point 001</i>					
pH	s.u.	6.5	8.5	—	—
Temperature	°F	—	86	—	—
Biochemical Oxygen Demand (BOD) (5-day @ 20°C)	mg/L	—	—	20	30

Parameter	Units	Effluent Limitation			
		Instant- aneous Minimum	Instant- aneous Maximum	Average Monthly	Maximum Daily
Oil & Grease	mg/L	—	—	10	15
TSS	mg/L	—	—	50	75
Settleable Solids	mL/L	—	—	0.1	0.2
Residual Chlorine	mg/L	—	—	—	0.1
Phenols	mg/L	—	—	—	1.0
Sulfides	mg/L	—	—	—	0.1
Fluoride	mg/L	—	—	—	1.0
Total Dissolved Solids	mg/L	—	—	—	1,500
Chloride	mg/L	—	—	—	150
Sulfate	mg/L	—	—	—	350
Nitrate Nitrogen + Nitrite Nitrogen (as Nitrogen)	mg/L	—	—	—	8
Turbidity	NTU	—	—	50	75
Arsenic, Total Recoverable	µg/L	—	—	—	50
Cadmium, Total Recoverable	µg/L	—	—	—	10
Chromium, Total	µg/L	—	—	—	50
Chromium, Hexavalent	µg/L	—	—	—	50
Copper, Total Recoverable	µg/L	—	—	15	30
Lead, Total Recoverable	µg/L	—	—	—	50
Mercury	µg/L	—	—	—	2
Selenium, Total Recoverable	µg/L	—	—	—	10
Silver, Total Recoverable	µg/L	—	—	—	50
Thallium	µg/L	—	—	6	13
Cyanide	µg/L	—	—	3	8
Bis(2- ethylhexyl)phthalate	µg/L	—	—	6	12
2,3,7,8-TCDD	µg/L	—	—	0.00000014	0.00000028

The Facility has not discharged to surface waters during the permit term; therefore, there are no historical monitoring data to present.

#### D. Compliance Summary

There have been no enforcement actions against this Facility during the permit term.

#### E. Planned Changes

There has been no indication of planned changes at the Facility.



### III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

#### A. Legal Authorities

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

#### B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the 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 Quality Control Board (Regional Water Board) adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the Los Angeles River are as follows:

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

Discharge Point	Receiving Water Name	Beneficial Uses
001, 002	Los Angeles River, Reach 2 (Hydrologic Unit No. 405.12)	<p><u>Existing:</u>                      Ground Water Recharge (GWR); Contact (REC-1) and Non-Contact (REC-2) Water Recreation; Warm Freshwater Habitat (WARM); Marine Habitat (MAR); Wildlife Habitat (WILD); and Rare, Threatened, or Endangered Species (RARE)</p> <p><u>Potential:</u>                      Municipal and Domestic Supply (MUN); Industrial Service Supply (IND); Industrial Process Supply (PROC); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); and Shellfish Harvesting (SHELL)</p>

Requirements of this Order implement the Basin Plan.

**Title 22 of the California Code of Regulations.** The California Department of Health Services 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 bases for effluent limitations in WDRs and NPDES permits to protect the groundwater recharge beneficial use when that receiving groundwater is designated as MUN. Also, the Basin Plan specifies that “Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.” Therefore, the secondary MCL’s, are also incorporated into this permit to protect groundwater quality.

- 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 and a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*. The white paper evaluated the optimum temperatures for 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 it 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 aquatic life criteria for ammonia and supersedes all previous freshwater aquatic life criteria for ammonia. The ammonia Basin Plan amendment was approved by the State Water Board, the Office of Administrative Law, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with USEPA’s 1999 ammonia criteria update.
- 4. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About forty criteria in the NTR applied in California. On

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

- 5. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- 6. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes [40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)]. Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- 7. Antidegradation Policy.** 40 CFR part 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 part 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 Regulations<sup>1</sup> 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. The NPDES regulations at 40 CFR 122.44(l), section 402(o)(2) provided that the establishment of less stringent limits may be allowed where:

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

- a. There have been material and substantial alternations or additions to the permitted facility which justify relaxation,
- b. New information (other than revised regulations, guidance, or test methods) is available that was not available at the time of permit issuance which would have justified a less stringent effluent limitation.
- c. Technical mistakes or mistaken interpretations of the law were made in issuing the permit under Section 402(a)(1)(b).
- d. Good cause exists due to events beyond the permittee's control (e.g., acts of God) and for which there is no reasonably available remedy.
- e. The permit has been modified under 40 CFR § 122.62, or a variance has been granted.
- f. The permittee has installed and properly operated and maintained regulated treatment facilities but still has been unable to meet the permit limitations (relaxation may only be allowed to the treatment levels actually achieved).

Order No. R4-2004-0171 contains a typographical error in the average monthly effluent limitation (AMEL) for cyanide and maximum daily effluent limitation for settleable solids. This permit corrects the AMELs for cyanide, from 3 µg/L to 4 µg/L, and for settleable solids from 0.2 ml/L to 0.3 ml/L. The calculations of the water quality based effluent limitations (WQBELs), Item IV.C.4.d., using cyanide as an example indicates the correct AMEL. For settleable solids, the 0.3 ml/L effluent limitation is consistent with the limit of recently adopted permits in this Region.

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

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

The USEPA approved the State's 2006 303(d) list of impaired water bodies on June 28, 2007. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2006 303(d) list and have been scheduled for TMDL development.

The 2006 State Water Board's California 303(d) List classifies the Los Angeles River (Reach 2) as impaired. The pollutants of concern include the following: coliform bacteria, oil and trash. The following were developed and adopted TMDLs for Los Angeles River:

**Trash TMDL:** The Los Angeles River Trash TMDL was adopted by the Regional Water Board on September 19, 2001. The TMDL established a numeric target of zero trash in the Los Angeles River. The TMDL was to be implemented via storm water permits in a phased reduction for a period of 10 years. The Los Angeles River Trash TMDL was approved by the State Water Board on February 19, 2002, and Office of Administrative Law (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 a resolution 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 was adopted by the Regional Water Board on August 9, 2007. The State Water Board approved the 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. This TMDL will be implemented through Municipal Separate Storm Sewer Systems (MS4) NPDES Permit Program.

**Nutrient TMDL for Los Angeles River:** The Regional Water Board adopted Resolution No. 03-009 on July 10, 2003, that amended the Basin Plan to incorporate a TMDL for Nutrients (Nitrogen Compounds and related effects) in the Los Angeles River. The TMDL was approved by the State Water Board and Office of Administrative Law on November 19, 2003, and February 27, 2004, respectively. The Nutrients 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. This permit includes effluent limitations based on the Nutrients TMDL established for the Los Angeles River.

**Metals TMDL for Los Angeles River:** The Regional Water Board adopted Resolution No. 2005-006 on June 2, 2005, that amended the Basin Plan to incorporate a TMDL for metals in the Los Angeles River. The State Water Board approved the metals TMDL on October 20, 2005, and OAL approved the 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. 2007-014) was adopted by the Regional Water Board on September 6, 2007. The State Water Board and OAL approved the metals TMDL, on June 17, 2008, and October 17, 2008, respectively. USEPA approved the metals TMDL on October 14, 2008, and it became effective on October 29, 2008. This permit includes dry weather limits for copper and lead, and wet weather limits for cadmium, copper, lead, and zinc based on the metals TMDL (Resolution No. 2007-014) for the Los Angeles River.

## **E. Other Plans, Policies and Regulations – Not Applicable**

### **IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 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 Discharger operates a glass manufacturing facility. The effluent consists of furnace drain water, oxygen plant vacuum pump seal water, fire protection system test water, and storm water. City-supplied water is used in the Facility. Therefore, typical pollutants of concern in the discharge through Discharge point 001 from the Facility may include residual chlorine, solids, and metals. The discharge through Discharge Point 002 consists of storm water that may pick up pollutants from the main yard (cullet bins, cooling tower, and silos areas). Therefore, the effluent limitations in the existing permit for Discharge Point 001 are also applicable to Discharge Point 002.

Generally, mass-based effluent limitations ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limitations. 40 CFR part 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.

#### **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 Los Angeles River.

#### **B. Technology-Based Effluent Limitations**

##### **1. Scope and Authority**

Section 301(b) of the CWA and implementing USEPA permit regulations at part 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 125.3.

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 part 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 part 125.3.

Under part 426.80, ELGs exist for the glass container manufacturing subcategory and regulate oil and grease, TSS, and pH. The degree of effluent reduction attained by the application of BPT is based on the pounds of glass produced per 1,000 pounds of furnace pull. Part 426.81, defines furnace pull as the amount of glass drawn from the glass furnace or furnaces.

## **2. Applicable Technology-Based Effluent Limitations**

Part 426 establishes effluent limitations and requirements for the Glass Container Manufacturing point source category. The applicability discussion in the regulation indicates that the category applies to discharges resulting from the process by which

raw materials are melted in a furnace and mechanically processed into glass containers. Therefore, the ELGs are applicable to furnace draining activities but are not applicable to other waste streams produced at the Facility (e.g., oxygen plant vacuum pump seal water, fire protection system test water, and storm water runoff). This Order includes ELG-based limits for the furnace draining activities.

Part 426 establishes pollutant effluent limitations and standards for direct discharge point sources. The limitations contained in Part 426 represent the degree of effluent reduction attainable by the application of the best practicable control technology currently available. Production data is needed to determine the mass-based effluent limitations for process wastewaters. The ELG calculations were based on the production data submitted by the Discharger, the maximum allowable production rate of 400 tons/day for Furnace B and 330 tons/day for Furnace C. These data were utilized in developing effluent limitations in accordance with 40 CFR part 426.86. In the case of oil and grease and TSS, the mass-based effluent limitations were determined by multiplying the concentration listed in 40 CFR section 426.82 by the pounds per day of glass produced at Owens. 40 CFR Part 426.82 also specifies a pH range between 6.0 – 9.0.

40 CFR § 426.82 "Effluent Limitation Guidelines Representing the Degree of Effluent Reduction Attainable by the Application of the Best Practicable Control Technology Currently Available" establishes effluent limitations for oil and total suspended solids (TSS) in units of pounds per 1,000 pounds of furnace pull. The term "oil" means those components of a waste water amenable to measurement by the technique or techniques described in the most recent addition of "Standard Methods" for analysis of grease in polluted waters, waste waters, and effluents, such as "Standard Methods" 13<sup>th</sup> Edition, 2<sup>nd</sup> Printing, page 407. The term "furnace pull" means the amount of glass drawn from the glass furnace(s).

**Table F-4. ELGs Based on 40 CFR § 426.82**

Parameters	Units	Effluent Limitations from 40 CFR § 426.82	
		Average Monthly	Maximum Daily
Oil	Lb/1000 lb of furnace pull	0.03	0.06
TSS	Lb/1000 lb of furnace pull	0.07	0.14
pH	Lb/1000 lb of furnace pull	6.0 to 9.0	

The ELG calculations based on 40 CFR part 426. 86 are shown below:

The allowable maximum production data (total pounds of furnace pull) of 400 tons/day for Furnace B and 330 tons/day for Furnace C were utilized to develop the technology-based effluent limitations based on 40 CFR § 426.82.

Maximum daily total value of glass pulled from Furnaces C and B (400 tons + 330 tons = 730 tons), is equal to 730 tons (equivalent to 1,460,000 pounds of glass pulled). Since the Discharger is not permitted to drain the furnace concurrently, the maximum daily total value of glass pulled per furnace (730÷2 = 365) is 365 tons (equivalent to 730,000 pounds of glass pulled).

$$365 \text{ tons} \times 2000 \text{ pounds/ton} = 730,000 \text{ pounds}$$



**For Oil – Maximum Daily Effluent Limitations:**

$730,000 \text{ pounds} / 1000 \text{ pounds} = 730$

From Table F-4:

Maximum Daily Effluent Limitations =  $730 \times 0.06 = 43.8 = \mathbf{44 \text{ lbs per day}}$

**For TSS – Maximum Daily Effluent Limitations:**

$730,000 \text{ pounds} / 1000 \text{ pounds} = 730$

From Table F-4:

Maximum Daily Limitations =  $730 \times 0.14 = 102.2 = \mathbf{102 \text{ lbs per day}}$

The **average monthly effluent limitations** for oil and TSS, were calculated based on the data for both glass furnaces B and C from the last 4 years (2005 – 2008). Within each year’s data set, the maximum average monthly value of glass pulled for each individual furnace was selected from each month, and then added together, to represent a maximum average monthly value of glass pulled (e.g., Furnace B maximum average monthly value + Furnace C maximum average monthly value = Total glass pulled, average monthly value). A maximum average monthly value of glass pulled was calculated for each year, and the highest value from 4 years data was then selected for the effluent limitation calculation.

	Maximum (average monthly) for 2005	Maximum (average monthly) for 2006	Maximum (average monthly) for 2007	Maximum (average monthly) for 2008
Furnace B (tons)	397	390	397	382
Furnace C (tons)	316	320	324	325
Total (tons)	713	710	<b>721</b>	707

The maximum average monthly value of glass pulled, from the 4 years’ worth of data is equal to 721 tons (equivalent to 1,442,000 pounds of glass pulled). Since the Discharger is not permitted to drain the furnace concurrently, the maximum average monthly total value of glass pulled per furnace ( $721 \div 2 = 360.5$ ) is 360.5 tons (equivalent to 721,000 pounds of glass pulled).

$360.5 \text{ tons} \times 2000 \text{ pounds/ton} = 721,000 \text{ pounds}$

**For Oil – Average Monthly Effluent Limitations:**

$721000 \text{ pounds} / 1000 \text{ pounds} = 721$

From Table F-4:

Average Monthly Effluent Limitations =  $721 \times 0.03 = 21.63 = \mathbf{22 \text{ lbs per day}}$

**For TSS - Average Monthly Effluent Limitations:**

721000 pounds / 1000 pounds = 721

From Table F-4:

Average Monthly Effluent Limitations =  $721 \times 0.07 = 50.47 = \mathbf{51 \text{ lbs per day}}$

Table F-5 below summarized the final effluent limitations for pH, oil and grease, and TSS.

**Table F-5. Final Effluent Limitations for Internal Discharge Point 01A**

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
pH	s.u.	Between 6.0 and 9.0	
Oil and Grease	lbs/day	22	44
	mg/L <sup>1</sup>	2.64	5.28
TSS	lbs/day	51	102
	mg/L <sup>1</sup>	6.12	12.23

<sup>1</sup> The concentration-based (mg/L) effluent limitations for oil and grease and TSS were calculated based on the furnace drain flow rate of 1 mgd, using the formula:

$$C = m \div (8.34 \times Q)$$

where:

- m = mass-based effluent limit in lbs/day
- C = concentration for a pollutant, in mg/L
- Q = maximum discharge flow rate of 1 MGD

Internal Outfall No. 01A is maintained in this Order. An internal outfall shall be established for intermittent furnace drain water prior to combining with other waters of the Facility (e.g., the strip drain in the driveway or the junction vault in the sidewalk), and prior to discharging to Discharge Point 001. Effluent limitations established for the Internal Discharge Point 01A are applicable to intermittent discharges of furnace drain water and do not apply to final discharges from Discharge Point 001.<sup>2</sup> Compliance with the ELG-based effluent limitations will be determined at a point following the furnace draining process, but prior to combination with other waste streams (i.e., oxygen plant vacuum pump seal water, fire protection system test water, and storm water) in the strip drain in the driveway or in the junction vault in the sidewalk.

There are no ELGs applicable to the discharge of oxygen plant vacuum pump seal water and fire protection system test water. Also, data are not available to apply BPJ

<sup>2</sup> All final discharges, which may or may not include furnace drain water, must comply with the final effluent limitations associated with Discharge Point 001.

to develop technology-based effluent limitations. Therefore, pursuant to part 122.44(k), the Regional Water Board will require the Discharger to develop and implement best management practices (BMPs) to address non-storm water discharges (i.e., oxygen plant vacuum pump seal water and fire protection system test water).

Order No. R4-2004-0171 requires the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). This Order requires the Discharger to update and continue to implement the SWPPP. The 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 and continue to implement the SWPPP (Attachment G).

Order No. R4-2004-0171 also requires the Discharger develop and implement a Best Management Practices Plan (BMPP). The Discharger provided a summary of BMPs in their ROWD, aimed at controlling the potential exposure of pollutants to storm water. This Order requires the Discharger to update and continue to implement the BMPP.

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

**Table F-6. Summary of Technology-based Effluent Limitations**

Parameter	Units	Effluent Limitations (Discharge Point 001)		Effluent Limitations (Discharge Point 002)	
		Average Monthly	Maximum Daily	Average Monthly	Maximum Daily
BOD <sub>5</sub> 20 °C	mg/L	20	30	20	30
	lbs/day <sup>1</sup>	258	388	177	266
TSS	mg/L	50	75	50	75
	lbs/day <sup>1</sup>	646	969	443	664
Oil & Grease	mg/L	10	15	10	15
	lbs/day <sup>1</sup>	129	194	89	133
Settleable Solids	mL/L	0.1	0.3	0.1	0.3
Turbidity	NTU	50	75	50	75
Phenols	mg/L	—	1.0	—	1.0
	lbs/day <sup>1</sup>	---	13	---	8.9
Sulfides	mg/L	—	0.1	—	0.1
	lbs/day <sup>1</sup>	—	1.3	—	0.89
Fluoride	mg/L	—	1.0	—	1.0
	lbs/day <sup>1</sup>	—	13	—	8.9

<sup>1</sup> Mass-based (lbs/day) effluent limitations are based on a maximum discharge flow rate of 1.549 MGD for Discharge Point 001, and 1.062 MGD for Discharge Point 002 . The mass-based effluent limitation shall be calculated, using the formula:

$$\text{Mass (lbs/day)} = 8.34 \times C \times Q$$

where:

C = actual measured concentration for a pollutant, in mg/L

Q = maximum discharge flow rate in MGD

## **C. Water Quality-Based Effluent Limitations (WQBELs)**

### **1. Scope and Authority**

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

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

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 and, if necessary, calculating WQBELs are contained in the SIP.

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

As noted in Section II of the Limitations and Discharge Requirements, the Regional Water Board adopted a Basin Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The beneficial uses applicable to the Los Angeles River 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 Los Angeles River. 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 part 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time. The CTR criteria for freshwater or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of the Los Angeles River, a water of the United States in the vicinity of the discharge.

As stated previously, on July 10, 2003, the Regional Water Board adopted Resolution No. 03-009, an amendment to the Basin Plan, which establishes TMDLs for the Los Angeles River for nitrogen compounds (including ammonia-nitrogen, nitrate-nitrogen, nitrite-nitrogen, and nitrate-nitrogen plus nitrite-nitrogen) and related effects. The amendment establishes concentration-based TMDLs 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.

On June 2, 2005, the Regional Water Board adopted Resolution No. 2005-006, an amendment to the Basin Plan, which establishes metals TMDLs for the Los Angeles River and tributaries for cadmium, copper, lead, selenium, and zinc. An amendment to the metals TMDL (Resolution No. 2007-014) was adopted by the Regional Water Board on September 6, 2007, and became effective on October 29, 2008. The amendment establishes concentration-based dry-weather waste load allocations (WLAs) in Reach 2 of the Los Angeles River for copper and lead. The amendment also establishes concentration-based wet-weather WLAs for all reaches of the Los Angeles River for cadmium, copper, lead, and zinc. The amendment states that permit writers may translate applicable WLAs into effluent limitations for the major, minor, and general NPDES permits by applying the effluent limitation procedures in Section 1.4 of the SIP or other applicable engineering practices authorized under federal regulations. This permit includes dry-weather effluent limitations for copper and lead, and wet-weather effluent limitations for cadmium, copper, lead, and zinc based on metals TMDL for the Los Angeles River and applying the procedures in Section 1.4 of the SIP.

### **3. Determining the Need for WQBELs**

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

considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Regional Water Board identifies the MEC and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger.

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

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

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

As previously stated, the RPA was not performed for the priority pollutants regulated in the CTR as there were no discharges from the Facility to surface waters during the permit term. As a result, the Regional Water Board determined effluent limitations for certain priority pollutants established in the previous Order are still appropriate for discharges from the Facility. In such circumstances, the Regional Water Board recommends that additional data are gathered prior to permit issuance, or that additional data are gathered during the term of the permit. This Order and MRP require monitoring the effluent and receiving water for priority pollutants when discharges occur, in order to provide data to determine the need for WQBELs.

Pursuant to the Nutrients TMDL for the Los Angeles River as described in Regional Water Board Resolution No. 03-009, WQBELs for ammonia-nitrogen, nitrate-nitrogen, nitrite-nitrogen, and nitrate-nitrogen plus nitrite-nitrogen are established in this Order.

Pursuant to the Metals TMDL for the Los Angeles River as described in Regional Water Board Resolution No. 2005-006, as amended by Resolution No. 2007-014, WQBELs for cadmium, copper, lead, and zinc are established in this Order. The TMDL establishes WLAs for both dry and wet weather conditions. Dry-weather WQBELs are required for copper and lead. Wet-weather WQBELs are required for copper, lead, cadmium, and zinc.

#### 4. WQBEL Calculations

- a. If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in Section 1.4 of the SIP. These procedures include:
  - i. If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).
  - ii. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).
  - iii. Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Water Board.
- b. WQBELs for cadmium, copper, lead, zinc, ammonia-nitrogen, nitrite-nitrogen, nitrate-nitrogen, and nitrate-nitrogen plus nitrite-nitrogen are based on TMDLs developed for the Los Angeles River.

WQBELs for thallium, and bis(2-ethylhexyl)phthalate are based on BPJ. The Regional Water Board has determined that these numeric effluent limitations continue to be applicable to the Facility. WQBELs for cyanide are corrected from 3 µg/L to 4 µg/L in this Order; the Order No. R4-2004-0171 contained a typographical error in the AMEL for cyanide. Using cyanide as an example of the calculations of the WQBELs below, the AMEL equals 4 µg/L.

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

#### d. WQBELs Calculation Example

Using cyanide as an example, the following demonstrates how WQBELs were established for this Order. The effluent limitations established in Order No. R4-2004-0172 for thallium, and bis(2-ethylhexyl)phthalate are carried over to this Order and are based on the process described below.

##### Concentration-Based Effluent Limitations

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

the most restrictive AMEL and the most restrictive MDEL are selected as the WQBEL.

*Calculation of aquatic life AMEL and MDEL:*

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

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

Where

- C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators. The previous Order considered a hardness of 272 mg/L as CaCO<sub>3</sub> for hardness-dependant criteria; the effluent limitations are carried forward from the previous Order, and thus, are based on the same adjusting values.
- D = The dilution credit, and
- B = The ambient background concentration

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

$$\text{ECA} = C$$

For cyanide, the applicable water quality criteria are:

$$\begin{aligned} \text{ECA}_{\text{acute}} &= 22 \mu\text{g/L} \\ \text{ECA}_{\text{chronic}} &= 5.2 \mu\text{g/L} \end{aligned}$$

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

$$\text{LTA}_{\text{acute}} = \text{ECA}_{\text{acute}} \times \text{Multiplier}_{\text{acute}}^{99}$$

$$\text{LTA}_{\text{chronic}} = \text{ECA}_{\text{chronic}} \times \text{Multiplier}_{\text{chronic}}^{99}$$

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.

For cyanide, the following data was used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

No. of Samples	CV	ECA Multiplier <sub>acute 99</sub>	ECA Multiplier <sub>chronic 99</sub>
0 <sup>1</sup>	0.6	0.32	0.53

<sup>1</sup> The previous RPA considered three data points; the calculations illustrated here reflect data and assumptions from the previous Order.

$$LTA_{acute} = 22 \mu\text{g/L} \times 0.32 = 7.06 \mu\text{g/L}$$

$$LTA_{chronic} = 5.2 \mu\text{g/L} \times 0.53 = 2.74 \mu\text{g/L}$$

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

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

For cyanide, the most limiting LTA was the  $LTA_{acute}$

$$LTA = 2.74 \mu\text{g/L}$$

**Step 4:** Calculate the WQBELs by multiplying the LTA by a factor (multiplier). WQBELs are expressed as Average Monthly Effluent Limitations (AMEL) and Maximum Daily Effluent Limitation (MDEL). The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the coefficient of variation (CV) of the data set, the number of samples (for AMEL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

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

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

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

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

No. of Samples Per Month	CV	Multiplier <sub>MDEL 99</sub>	Multiplier <sub>AMEL 95</sub>
4 <sup>1</sup>	0.6	3.11	1.55

<sup>1</sup> When the LTA is based on water quality criteria developed in a TMDL, and site-specific data are not the basis for reasonable potential, the number of samples per month is equal to 4.

$$AMEL_{\text{aquatic life}} = 2.74 \times 1.55 = 4.26 \mu\text{g/L}$$

$$MDEL_{\text{aquatic life}} = 2.74 \times 3.11 = 8.54 \mu\text{g/L}$$

*Calculation of human health AMEL and MDEL:*

**Step 5:** For the ECA based on human health, set the AMEL equal to the ECA<sub>human health</sub>

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

For cyanide:

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

**Step 6:** Calculate the MDEL for human health by multiplying the AMEL by the ratio of the Multiplier<sub>MDEL</sub> to the Multiplier<sub>AMEL</sub>. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

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

For cyanide, following data were used to develop the MDEL<sub>human health</sub>:

No. of Samples Per Month	CV	Multiplier <sub>MDEL 99</sub>	Multiplier <sub>AMEL 95</sub>	Ratio
4	0.6	3.11	1.55	2.01

$$MDEL_{\text{human health}} = 220,000 \mu\text{g/L} \times 2.01 = 441,362 \mu\text{g/L}$$

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

For cyanide:

AMEL <sub>aquatic life</sub>	MDEL <sub>aquatic life</sub>	AMEL <sub>human health</sub>	MDEL <sub>human health</sub>
4 µg/L	8 µg/L	200,000 µg/L	441,362 µg/L

The lowest (most restrictive) effluent limits are based on aquatic toxicity and were incorporated into this Order.

For thallium, and bis(2-ethylhexyl)phthalate, there are no aquatic life criteria; therefore, the effluent limitations based on human health criteria (consumption of organisms only) are established as the WQBELs and were carried forward from the previous Order.

For parameters with applicable TMDLs expressed as concentration-based WLAs, the WLA was used as the ECA for the calculations of the WQBELs, as detailed in Section 5.4 of the USEPA TSD.

TMDLs are applicable for cadmium, copper, lead, zinc, ammonia-nitrogen, nitrate-nitrogen, nitrite-nitrogen, and nitrate-nitrogen plus nitrite-nitrogen; therefore, the AMEL and MDEL were based on WLAs established to achieve the criteria specified (either aquatic life or human health) in the individual TMDLs. Pursuant to Resolution 2005-006 as amended by Resolution No. 2007-014 (the TMDL for Metals in the Los Angeles River), wet-weather WQBELs have been established for cadmium, copper, lead, and zinc using the wet-weather WLAs. In addition, dry-weather WQBELs have also been established for copper and lead using the dry-weather WLAs. A wet-weather event is defined in the TMDL as days when the maximum daily flow in the Los Angeles River is equal to or greater than 500 cubic feet per second (cfs).

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

The Basin Plan states that the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge. Based on the requirements of the Basin Plan, an instantaneous minimum limitation of 6.5 and an instantaneous maximum limitation of 8.5 for pH are included in the proposed permit. The effluent limitations for pH are carried forward from the previous Order.

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

was found to be protective. The effluent limitation for temperature is carried forward from the previous Order.

The Basin Plan, in Table 3-8, lists water quality objectives for selected parameters in inland surface waters. Water quality objectives for TDS, sulfate, and chloride for the Los Angeles River are established in the Basin Plan and included in this Order. The effluent limitations for TDS, sulfate, and chloride are established consistent with the water quality objectives contained in the Basin Plan.

## **6. Whole Effluent Toxicity (WET)**

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

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses 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. The existing Order contains acute toxicity limitations and monitoring requirements in accordance with the Basin Plan, in which the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Consistent with Basin Plan requirements, this Order carries over the acute toxicity limitations and monitoring requirements from the previous Order.

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 Discharge Points 001 and 002 are intermittent and thus, may not contribute to long-term toxic effects within the receiving water; therefore, no chronic toxicity limitations or monitoring requirements are included in this Order.

## **7. Numeric Criterion for TCDD Equivalents:**

The CTR establishes a numeric water quality objective for 2,3,7,8-tetrachlorinated dibenzo-p-dioxin (2,3,7,8-TCDD) of  $1.4 \times 10^{-8}$  'AWL for the protection of human health, when aquatic organisms are consumed. When 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 has therefore used TEFs to express the measured concentrations of 16 dioxin congeners in effluent and background samples as 2,3,7,8-TODD. These "equivalent" concentrations are then compared to the numeric criterion, established by the CTR for 2,3,7,8-TODD of  $1.4 \times 10^{-8}$  'AWL.

Dioxin-TEQ 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, water quality-based effluent limits must be established. If the potentially violated objective is narrative, the narrative objective must be translated into an effluent limitation. The dioxin-TEQ 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-tetrachlorinated dibenzo-p-dioxin (2,3,7,8-TODD). The World Health Organization developed toxicity equivalency factors (TEFs) to convert congener concentrations into equivalent concentrations of 2,3,7,8-TODD, which when added together are expressed as dioxin-TEQ. The *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy) specifies that the World Health Organization's 1998 TEFs are to be used to calculate dioxin-TEQ. To complete the translation of the Basin Plan's narrative bioaccumulation objective into a numeric effluent limit, dioxin-TEQ limits are derived from the California Toxic Rule (40 CFR 131) numeric water quality objective for 2,3,7,8-TODD (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 U.S. Environmental Protection Agency, the Bay Area Clean Water Agencies, and others with expertise in the field participated. The panel's recommendations included the following:

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

### **Bioaccumulation Equivalency Factors**

The different dioxin and furan congeners exhibit different levels of toxicity, they also exhibit different levels of bioaccumulation potential. To account for the different levels of bioaccumulation potential, each congener may be assigned a bioaccumulation equivalency factor (BEF) relative to 2,3,7,8-TODD. This is comparable to the TEFs that account for relative differences in toxicities. The BEFs shown in Table F-7 correspond to the differences in biological uptake from the water column for the various dioxin congeners. They come from the Great Lakes Water Quality Initiative.

In 1995, the U.S. Environmental Protection Agency adopted the approach of using both TEFs and BEFs to calculate dioxin-TEQ for the Great Lakes System (40 CFR 132, Appendix F). In the absence of site-specific BEFs, the U.S. Environmental Protection Agency supports the use of national BEFs, stating, "...EPA believes that national bioaccumulation factors are broadly applicable to sites throughout the United States and can be applied to achieve an acceptable degree of accuracy when estimating bioaccumulation potential at most sites." In its *Great Lakes Water Quality Initiative Technical Support Document for the Procedure to Determine Bioaccumulation Factors* (EPA-820-B-95-005), the U.S. Environmental Protection Agency states, "Limited comparison to BEFs calculated from data obtained for other ecosystems confirms these bioaccumulation potential differences for [dioxins and furans] for fish in ecosystems outside the Great Lakes." Recently, the U.S. Environmental Protection Agency and the Regional Water Board incorporated the national BEFs into the dioxin-TEQ calculations required for the NPDES permit for the City and County of San Francisco's Oceanside Water Pollution Control Plant (Order Number R2-2009-062).

The San Francisco Estuary Institute's expert panel concluded that, if suitable data are unavailable to derive site-specific BEFs for the San Francisco Bay Region, use of the BEFs derived for the Great Lakes System is preferable to omitting BEFs altogether. The panel concluded that, because BEFs for the congeners most commonly detected in wastewater can be as low as 0.01, calculating dioxin-TEQ without BEFs (the current practice) may mischaracterize the significance of dioxin and furan discharges by as much as two orders of magnitude. Therefore, for the purpose of determining compliance with effluent limits, this Order requires the Dischargers to calculate and report dioxin-TEQ using the following formula, where the TEFs and BEFs are as listed in Table F-7:

$$\text{Dioxin-TEQ} = \Sigma(C_x \times \text{TEF}_x \times \text{BEF}_x)$$

where:  $C_x$  = Concentration of, dioxin or furan congener  $x$   
 $\text{TEF}_x$  = TEF for congener  $x$   
 $\text{BEF}_x$  = BEF for congener  $x$

**Table F-7. Toxicity Equivalency Factors and Bioaccumulation Equivalency Factors**

Dioxin or Furan Congener	Minimum Level (pg/L)	Toxicity Equivalency Factor (TEF)	Bioaccumulation Equivalency Factor (BEF)
2,3,7,8-TCDD	10	1.0	1.0
1,2,3,7,8-PeCDD	50	1.0	0.9
1,2,3,4,7,8-HxCDD	50	0.1	0.3
1,2,3,6,7,8-HxCDD	50	0.1	0.1
1,2,3,7,8,9-HxCDD	50	0.1	0.1
1,2,3,4,6,7,8-HpCDD	50	0.01	0.05
OCDD	100	0.0001	0.01
2,3,7,8-TCDF	10	0.1	0.8
1,2,3,7,8-PeCDF	50	0.05	0.2
2,3,4,7,8-PeCDF	50	0.5	1.6
1,2,3,4,7,8-HxCDF	50	0.1	0.08
1,2,3,6,7,8-HxCDF	50	0.1	0.2
1,2,3,7,8,9-HxCDF	50	0.1	0.6
2,3,4,6,7,8-HxCDF	50	0.1	0.7
1,2,3,4,6,7,8-HpCDF	50	0.01	0.01
1,2,3,4,7,8,9-HpCDF	50	0.01	0.4
OCDF	100	0.0001	0.02

**Minimum Levels**

For purposes of laboratory analysis, reporting, and compliance, the minimum level (ML) is the concentration at which the entire analytical system gives a recognizable signal and acceptable calibration point. Below the ML, detected concentrations can sometimes be estimated, but not with sufficient analytical confidence for regulatory compliance purposes. Currently, the Dischargers analyze dioxin and furan congeners in wastewater using the latest version of U.S. Environmental Protection Agency Method 1613 (*Tetra- through OctaChlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS*, USEPA 1994). Many permits set forth the dioxin and furan MLs for reporting and compliance purposes as equal to one half the default MLs specified in Method 1613. This Order revises the dioxin and furan MLs to be consistent among all permits and with Method 1613.

This Order also requires the Dischargers to exclude estimated congener concentrations below MLs when calculating dioxin-TEQ for the purpose of determining compliance with effluent limits. When a dioxin or furan congener is detected below its ML, its concentration could be as high as the ML or as low as zero. Dioxin and furan concentrations measured in effluent using high-volume screening techniques have often been orders of magnitude lower than Method 1613's default MLs. Therefore, the San Francisco Estuary Institute's expert panel concluded that assuming congeners detected below MLs are present at concentrations equal to the MLs (or one half the MLs) probably mischaracterizes the significance of dioxin and furan discharges by orders of magnitude. Moreover, when calculating dioxin-TEQ, the errors associated with adding multiple estimated values compound, resulting in values too uncertain for regulatory compliance purposes. Excluding values below MLs when adding multiple data points is consistent with how the U.S. Environmental Protection Agency directs dischargers to calculate averages when some data are below practical quantitation limits (comparable to MLs). When adding values to determine averages, data points below the practical quantitation limit are to be treated as zeros ("Instructions for Completing EPA Form 3320-1" [Rev. 01/06]).

Although this Order revises the dioxin and furan MLs, the Dischargers must continue to report all measured and estimated congener concentrations with appropriate data qualifiers.

### 8. Final WQBELs

This Order includes effluent limitations for cadmium, copper, lead, zinc, and nutrients based on TMDLs for the Los Angeles River. It includes wet weather limits for cadmium, copper, lead, and zinc, and establishes separate dry-weather limits for copper and lead, based on the metals TMDL for the Los Angeles River. Further, this Order establishes effluent limitations for ammonia-nitrogen, nitrate-nitrogen, nitrite-nitrogen, and nitrate-nitrogen plus nitrite-nitrogen based on the Nutrients TMDL for the Los Angeles River. Effluent limitations for residual chlorine, TDS, sulfate, and chloride consistent with the water quality objectives contained in the Basin Plan are also included and this Order carries forward effluent limitations from the existing permit for some priority pollutants (e.g., metals).

**Table F-8. Summary of Water Quality-based Effluent Limitations (Discharge Point 001)**

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	S.U.	—	—	6.5	8.5
Temperature	°F	—	—	—	86
Residual Chlorine	mg/L	—	0.1	—	—
	lbs/day <sup>1</sup>	—	1.3	—	—
Total Dissolved Solids	mg/L	—	1,500	—	—
	lbs/day <sup>1</sup>	—	19,378	—	—



Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Sulfate	mg/L	—	350	—	—
	lbs/day <sup>1</sup>	—	4,522	—	—
Chloride	mg/L	—	150	—	—
	lbs/day <sup>1</sup>	—	1,938	—	—
Total Ammonia – N	mg/L	2.4	8.7	—	—
	lbs/day <sup>1</sup>	31	112	—	—
Nitrate – N	mg/L	8.0	—	—	—
	lbs/day <sup>1</sup>	103	—	—	—
Nitrite – N	mg/L	1.0	—	—	—
	lbs/day <sup>1</sup>	13	—	—	—
Nitrate+Nitrite – N	mg/L	8.0	—	—	—
	lbs/day <sup>1</sup>	103	—	—	—
Arsenic, Total Recoverable	µg/L	—	10	—	—
	lbs/day <sup>1</sup>	—	0.13	—	—
Cadmium, Total Recoverable (Wet Weather)	µg/L	3 <sup>2</sup>	5 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	0.04	0.07	—	—
Chromium, Total	µg/L	—	50	—	—
	lbs/day <sup>1</sup>	—	0.65	—	—
Copper, Total Recoverable (Wet Weather)	µg/L	14 <sup>2</sup>	28 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	0.18	0.36	—	—
Copper, Total Recoverable (Dry Weather)	µg/L	18 <sup>3</sup>	36 <sup>3</sup>	—	—
	lbs/day <sup>1</sup>	0.23	0.47	—	—
Lead, Total Recoverable (Wet Weather)	µg/L	51 <sup>2</sup>	102 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	0.66	1.32	—	—
Lead, Total Recoverable (Dry Weather)	µg/L	9 <sup>3</sup>	18 <sup>3</sup>	—	—
	lbs/day <sup>1</sup>	0.12	0.23	—	—
Mercury	µg/L	—	2	—	—
	lbs/day <sup>1</sup>	—	0.03	—	—
Selenium, Total Recoverable	µg/L	—	10	—	—
	lbs/day <sup>1</sup>	—	0.13	—	—
Silver, Total Recoverable	µg/L	—	50	—	—
	lbs/day <sup>1</sup>	—	0.65	—	—
Thallium	µg/L	6	13	—	—
	lbs/day <sup>1</sup>	0.08	0.17	—	—
Zinc, Total Recoverable (Wet Weather)	µg/L	130 <sup>2</sup>	261 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	1.68	3.37	—	—
Cyanide	µg/L	4	8	—	—
	lbs/day <sup>1</sup>	0.05	0.10	—	—
2,3,7,8-TCDD (as Equivalents)	µg/L	1.4E-08	2.8E-08	—	—
	lbs/day <sup>1</sup>	1.8E-10	3.6E-10	—	—
Bis(2-ethylhexyl)phthalate	µg/L	6	12	—	—
	lbs/day <sup>1</sup>	0.08	0.16	—	—

**Table F-9. Summary of Water Quality-based Effluent Limitations (Discharge Point 002)**

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
pH	S.U.	—	—	6.5	8.5
Temperature	°F	—	—	—	86
Residual Chlorine	mg/L	—	0.1	—	—
	lbs/day <sup>1</sup>	—	0.89	—	—
Total Dissolved Solids	mg/L	—	1,500	—	—
	lbs/day <sup>1</sup>	—	13,286	—	—
Sulfate	mg/L	—	350	—	—
	lbs/day <sup>1</sup>	—	3,100	—	—
Chloride	mg/L	—	150	—	—
	lbs/day <sup>1</sup>	—	1,329	—	—
Total Ammonia – N	mg/L	2.4	8.7	—	—
	lbs/day <sup>1</sup>	21	77	—	—
Nitrate – N	mg/L	8.0	—	—	—
	lbs/day <sup>1</sup>	71	—	—	—
Nitrite – N	mg/L	1.0	—	—	—
	lbs/day <sup>1</sup>	9	—	—	—
Nitrate+Nitrite – N	mg/L	8.0	—	—	—
	lbs/day <sup>1</sup>	71	—	—	—
Arsenic, Total Recoverable	µg/L	—	10	—	—
	lbs/day <sup>1</sup>	—	0.09	—	—
Cadmium, Total Recoverable (Wet Weather)	µg/L	3 <sup>2</sup>	5 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	0.03	0.04	—	—
Chromium, Total	µg/L	—	50	—	—
	lbs/day <sup>1</sup>	—	0.44	—	—
Copper, Total Recoverable (Wet Weather)	µg/L	14 <sup>2</sup>	28 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	0.12	0.25	—	—
Copper, Total Recoverable (Dry Weather)	µg/L	18 <sup>3</sup>	36 <sup>3</sup>	—	—
	lbs/day <sup>1</sup>	0.16	0.32	—	—
Lead, Total Recoverable (Wet Weather)	µg/L	51 <sup>2</sup>	102 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	0.45	0.90	—	—
Lead, Total Recoverable (Dry Weather)	µg/L	9 <sup>3</sup>	18 <sup>3</sup>	—	—
	lbs/day <sup>1</sup>	0.08	0.16	—	—
Mercury	µg/L	—	2	—	—
	lbs/day <sup>1</sup>	—	0.02	—	—
Selenium, Total Recoverable	µg/L	—	10	—	—
	lbs/day <sup>1</sup>	—	0.09	—	—
Silver, Total Recoverable	µg/L	—	50	—	—
	lbs/day <sup>1</sup>	—	0.44	—	—
Thallium	µg/L	6	13	—	—
	lbs/day <sup>1</sup>	0.05	0.12	—	—
Zinc, Total Recoverable (Wet Weather)	µg/L	130 <sup>2</sup>	261 <sup>2</sup>	—	—
	lbs/day <sup>1</sup>	1.15	2.31	—	—

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Cyanide	µg/L	4	8	—	—
	lbs/day <sup>1</sup>	0.04	0.07	—	—
2,3,7,8-TCDD (as Equivalents)	µg/L	1.4E-08	2.8E-08	—	—
	lbs/day <sup>1</sup>	1.2E-10	2.5E-10	—	—
Bis(2-ethylhexyl)phthalate	µg/L	6	12	—	—
	lbs/day <sup>1</sup>	0.05	0.11	—	—

Footnotes:

<sup>1</sup> Mass-based (lbs/day) effluent limitations are based on a maximum discharge flow rate of 1.549 for Discharge Point 001 and 1.062 MGD for Discharge Point 002. The mass-based effluent limitation shall be calculated, using the formula:

$$\text{Mass (lbs/day)} = 8.34 \times C \times Q$$

where:

C = actual measured concentration for a pollutant, in mg/L

Q = maximum discharge flow rate in MGD

<sup>2</sup> The wet weather TMDL limits apply when the maximum daily flow at Reach 1 of the Los Angeles River at Willow Street gage station at Wardlow is equal to or greater than 500 cubic feet per second (approx. 320 million gallons per day). The daily flow data at Wardlow station is posted on the Department of Public Works, Los Angeles County web site at <http://ladpw.org/wrd/report/0506/runoff/>.

<sup>3</sup> The dry weather TMDL limits apply when the maximum daily flow at Reach 1 of the Los Angeles River at Willow Street gage station at Wardlow (See footnote 2 above for web address) is less than 500 cubic feet per second.

**D. Final Effluent Limitations**

Section 402(o) of the CWA and section 122.44(l) require that effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders based on the submitted sampling data. Effluent limitations for pH, temperature, oil and grease, settleable solids, BOD<sub>5</sub>, TSS, turbidity, chromium, mercury, selenium, silver, thallium, 2,3,7,8-TCDD, bis(2-ethylhexyl)phthalate, and acute toxicity are based on BPJ. 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 limitation for arsenic is revised based on the California’s revised maximum contaminant level (MCL) of 0.010 mg/L (equivalent to 10 microgram per liter, µg/L) which became effective on November 28, 2008.

Effluent limitations for cadmium, copper, lead, and zinc are revised to achieve the criteria specified in the TMDLs. Pursuant to Resolution 2005-006 (the TMDL for Metals in the Los Angeles River), WQBELs for cadmium and zinc are only applicable during wet-weather conditions. In addition, separate wet-weather and dry-weather WQBELs have been established for copper and lead. Wet-weather conditions are defined in the TMDL as days when the maximum daily flow in the Los Angeles River is equal to or greater than 500 cfs.

## **1. Satisfaction of Anti-Backsliding Requirements**

Some effluent limitations in this Order are less stringent than the effluent limitations in the previous Order. The previous Order established effluent limitations for copper and lead that were applicable at all times, regardless of dry-weather or wet-weather conditions. This Order establishes individual effluent limitations for copper and lead applicable during dry-weather and wet-weather conditions (based on the maximum daily flow in the Los Angeles River). The dry-weather effluent limitations for copper and lead are slightly less stringent than the previous effluent limitations for copper and lead. The relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations, based on Section 303(d)(4)(A) of the CWA. The receiving water has not yet achieved the applicable water quality standard (e.g., copper and lead) and the existing effluent limitations were based on CTR water quality criteria. Therefore, based on Section 303(d)(4)(A) of the CWA, less stringent WQBELs may be established because they are based on a TMDL which will assure the attainment of water quality standards for copper and lead. In addition, the AMEL for cyanide is less stringent than the existing AMEL; the revised AMEL for cyanide corrects a typographical error.

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

## **2. Satisfaction of Antidegradation Policy**

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

The permitted discharge is consistent with the antidegradation provision of part 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 additional water quality degradation that could result to an increase in permitted design flow or a reduction in the level of treatment. This Order does not provide for an increase in the permitted design flow or allow for 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<sub>5</sub>, settleable solids, turbidity, phenols, sulfides, and fluoride. In

addition, this Order establishes technology-based effluent limitations for oil and grease and TSS based on ELGs contained in Part 426. Restrictions on these pollutants are discussed in section IV.B of the Fact Sheet. This Order’s technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant 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 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.

**Table F-10. Summary of Final Effluent Limitations**

Parameter	Units	Effluent Limitations				Basis <sup>1</sup>
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
<b>Internal Discharge Point 01A<sup>2</sup></b>						
pH	s.u.	—	—	6.0	9.0	ELGs
Oil & Grease	mg/L	2.64	5.28	—	—	ELGs
	lbs/day	22	44	—	—	
Total Suspended Solids	mg/L	6.12	12.23	—	—	E, ELGs
	lbs/day	51	102	—	—	
<b>Discharge Point 001 and 002</b>						
pH	s.u.	—	—	6.5	8.5	E; BP
BOD <sub>5</sub> 20°C	mg/L	20	30	—	—	E; BPJ
	lbs/day	258 <sup>3</sup>	388 <sup>3</sup>	—	—	
		177 <sup>4</sup>	266 <sup>4</sup>	—	—	
Oil & Grease	mg/L	10	15	—	—	E; BPJ
	lbs/day	129 <sup>3</sup>	194 <sup>3</sup>	—	—	
		89 <sup>4</sup>	133 <sup>4</sup>	—	—	
Total Suspended Solids	mg/L	50	75	—	—	E; BPJ
	lbs/day	646 <sup>3</sup>	969 <sup>3</sup>	—	—	
		443 <sup>4</sup>	664 <sup>4</sup>	—	—	
Temperature	°F	—	—	—	86	E, TP
Phenols	mg/L	—	1.0	—	—	E; BPJ
	lbs/day	—	13 <sup>3</sup>	—	—	
		---	8.9 <sup>4</sup>	—	—	

Parameter	Units	Effluent Limitations				Basis <sup>1</sup>
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Sulfides	mg/L	—	0.1	—	—	E; BPJ
	lbs/day	—	1.3 <sup>3</sup>	—	—	
			---	0.89 <sup>4</sup>	—	—
Fluoride	mg/L	—	1.0	—	—	E; BPJ
	lbs/day	—	13 <sup>3</sup>	—	—	
			---	8.9 <sup>4</sup>	—	—
Settleable Solids	mL/L	0.1	0.3	—	—	E; BPJ
Turbidity	NTU	50	75	—	—	E; BPJ
Total Dissolved Solids	mg/L	—	1,500	—	—	E; BP
	lbs/day	—	19,378 <sup>3</sup>	—	—	
			---	13,286 <sup>4</sup>	—	—
Sulfate	mg/L	—	350	—	—	E; BP
	lbs/day	—	4,522 <sup>3</sup>	—	—	
			---	3,100 <sup>4</sup>	—	—
Chloride	mg/L	—	150	—	—	E; BP
	lbs/day	—	1,938 <sup>3</sup>	—	—	
			---	1,329 <sup>4</sup>	—	—
Total Ammonia – N	mg/L	2.4	8.7	—	—	TMDL
	lbs/day	31 <sup>3</sup>	112 <sup>3</sup>	—	—	
			21 <sup>4</sup>	77 <sup>4</sup>	—	—
Nitrate – N	mg/L	8.0	—	—	—	TMDL
	lbs/day	103 <sup>3</sup>	—	—	—	
			71 <sup>4</sup>	---	—	—
Nitrite – N	mg/L	1.0	—	—	—	TMDL
	lbs/day	13 <sup>3</sup>	—	—	—	
			9 <sup>4</sup>	—	—	—
Nitrate+Nitrite – N	mg/L	8.0	—	—	—	TMDL
	lbs/day	103 <sup>3</sup>	—	—	—	
			71 <sup>4</sup>	---	—	—
Arsenic, Total Recoverable	µg/L	—	10	—	—	MCL
	lbs/day	—	0.13 <sup>3</sup>	—	—	
			---	0.09 <sup>4</sup>	—	—
Cadmium, Total Recoverable (Wet Weather)	µg/L	3 <sup>5</sup>	5 <sup>5</sup>	—	—	TMDL
	lbs/day	0.04 <sup>3</sup>	0.07 <sup>3</sup>	—	—	
			0.03 <sup>4</sup>	0.04 <sup>4</sup>	—	—
Chromium, Total	µg/L	—	50	—	—	E, MCL
	lbs/day	—	0.65 <sup>3</sup>	—	—	
			---	0.44 <sup>4</sup>	—	—
Copper, Total Recoverable (Wet Weather)	µg/L	14 <sup>5</sup>	28 <sup>5</sup>	—	—	TMDL
	lbs/day	0.18 <sup>3</sup>	0.36 <sup>3</sup>	—	—	
			0.12 <sup>4</sup>	0.25 <sup>4</sup>	—	—

Parameter	Units	Effluent Limitations				Basis <sup>1</sup>
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Copper, Total Recoverable (Dry Weather)	µg/L	18 <sup>6</sup>	36 <sup>6</sup>	—	—	TMDL
	lbs/day	0.23 <sup>3</sup>	0.47 <sup>3</sup>	—	—	
		0.16 <sup>4</sup>	0.32 <sup>4</sup>	—	—	
Lead, Total Recoverable (Wet Weather)	µg/L	51 <sup>5</sup>	102 <sup>5</sup>	—	—	TMDL
	lbs/day	0.66 <sup>3</sup>	1.32 <sup>3</sup>	—	—	
		0.45 <sup>4</sup>	0.90 <sup>4</sup>	—	—	
Lead, Total Recoverable (Dry Weather)	µg/L	9 <sup>6</sup>	18 <sup>6</sup>	—	—	TMDL
	lbs/day	0.12 <sup>3</sup>	0.23 <sup>3</sup>	—	—	
		0.08 <sup>4</sup>	0.16 <sup>4</sup>	—	—	
Mercury	µg/L	—	2	—	—	E, BPJ, MCL
	lbs/day	—	0.03 <sup>3</sup>	—	—	
		---	0.02 <sup>4</sup>	—	—	
Selenium, Total Recoverable	µg/L	—	10	—	—	E, BPJ
	lbs/day	—	0.13 <sup>3</sup>	—	—	
		---	0.09 <sup>4</sup>	—	—	
Silver, Total Recoverable	µg/L	—	50	—	—	E, BPJ
	lbs/day	—	0.65 <sup>3</sup>	—	—	
		---	0.44 <sup>4</sup>	—	—	
Thallium, Total Recoverable	µg/L	6	13	—	—	E, CTR
	lbs/day	0.08 <sup>3</sup>	0.17 <sup>3</sup>	—	—	
		0.05 <sup>4</sup>	0.12 <sup>4</sup>	—	—	
Zinc, Total Recoverable (Wet Weather)	µg/L	130 <sup>5</sup>	261 <sup>5</sup>	—	—	TMDL
	lbs/day	1.68 <sup>3</sup>	3.37 <sup>3</sup>	—	—	
		1.15 <sup>4</sup>	2.31 <sup>4</sup>	—	—	
Cyanide	µg/L	4	8	—	—	E, CTR
	lbs/day	0.05 <sup>3</sup>	0.10 <sup>3</sup>	—	—	
		0.04 <sup>4</sup>	0.07 <sup>4</sup>	—	—	
2,3,7,8-TCDD (as Equivalents)	µg/L	1.4E-08	2.8E-08	—	—	E, CTR
	lbs/day	1.8E-10 <sup>3</sup>	3.6E-10 <sup>3</sup>	—	—	
		1.2E-10 <sup>4</sup>	2.5E-10 <sup>4</sup>	—	—	
Bis(2-ethylhexyl)phthalate	µg/L	6	12	—	—	E, CTR
	lbs/day	0.08 <sup>3</sup>	0.16 <sup>3</sup>	—	—	
		0.05 <sup>4</sup>	0.11 <sup>4</sup>	—	—	
Toxicity, Acute	% survival	7				E, BP

<sup>1</sup> BP: Basin Plan; BPJ = Best Professional Judgment; CTR = California Toxics Rule; E = Existing Limitation; ELG = Effluent Limitations and Guidelines at Part 426; TP = Thermal Plan; MCL = Maximum Contaminant Level; TMDL = Total Maximum Daily Load

<sup>2</sup> Technology-based effluent limitations applicable to the discharge of furnace drain water through Internal Discharge Point 01A are based on ELGs contained in Part 426 and production data provided by the Discharger.

<sup>3</sup> Mass-based (lbs/day) effluent limitations for Discharge Point 001.

<sup>4</sup> Mass-based (lbs/day) effluent limitations for Discharge Point 002.

- <sup>5</sup> The wet weather TMDL limits apply when the maximum daily flow at Reach 1 of the Los Angeles River at Willow Street gage station at Wardlow is equal to or greater than 500 cubic feet per second (approx. 320 million gallons per day). The daily flow data at Wardlow station is posted on the Department of Public Works, Los Angeles County web site at <http://ladpw.org/wrd/report/0506/runoff/>.
- <sup>6</sup> The dry weather TMDL limits apply when the maximum daily flow at Reach 1 of the Los Angeles River at Willow Street gage station at Wardlow (See footnote 3 above for web address) is less than 500 cubic feet per second.
- <sup>7</sup> The acute toxicity of the effluent shall be such that:
- i. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and
  - ii. No single test producing less than 70% survival

#### **4. Mass-based Effluent Limitations**

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

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

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

#### **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 (part 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. Sections of the Los Angeles River, Los Angeles River Reach 2 (Carson to Figueroa Street), are designated as GWR. Surface water from the Los Angeles River percolates into the Central Los Angeles Coastal Plain Groundwater Basins. Since groundwater from these Basins is used to provide drinking



water to the community, the groundwater aquifers should be protected. Therefore, Title 22-based limits are needed to protect that drinking water supply. This permit includes effluent limitations based on MCLs.

## **VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

40 CFR part 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 of the furnace drain water shall occur at Internal Discharge Point 01A (Monitoring Location INT-001), prior to combining with other waste streams within the Facility, to determine compliance with technology-based effluent limitations for pH, oil and grease, and TSS.

Monitoring for those pollutants expected to be present in the discharge from Monitoring Locations EFF-001 and EFF-002 at Discharge Points 001 and 002, respectively, is required as shown in the proposed MRP. To determine compliance with effluent limitations, the monitoring requirements for pollutants that have effluent limitations are once per discharge event. Monitoring frequencies for nitrate, nitrite, nitrate plus nitrite, and ammonia are also once per discharge event. Monitoring for acute toxicity is annually. E. Coli and fecal coliform are added in the monitoring program to determine reasonable potential and are monitored once per discharge event.

According to the SIP, the Discharger is required to monitor the effluent for the CTR priority pollutants, to determine reasonable potential. Accordingly, the Discharger is required to conduct effluent monitoring of the CTR priority pollutants. The monitoring requirements and frequencies of the priority pollutants are annually during the first discharge event of the wet season (October 1 – May 30).

### **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. 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 the section entitled Limitations and Discharge Requirements, Effluent Limitations, Section IV.A.1.b.

## **D. Receiving Water Monitoring**

### **1. Surface Water**

The Regional Water Board is requiring that the Discharger conduct annual upstream receiving water monitoring for the CTR priority pollutants at RSW-001, 50 feet upstream of the discharge point of the storm drain to the receiving water, the Los Angeles River. Further, the Discharger must analyze temperature, pH, salinity, hardness and bacteria of the upstream receiving water at the same time the samples are collected for priority pollutants analysis.

The Discharger is required to report the maximum daily flow in the Los Angeles River, at the Los Angeles County Department of Public Works' Willow Street Gage Station at Wardlow. For the purposes of this permit, this station is also known as RSW-002. The daily flow data at Wardlow station is posted on the Department of Public Works, Los Angeles County web site at <http://ladpw.org/wrd/report/0506/runoff/>. This information is necessary to determine the wet-weather and dry-weather condition of the river, as defined in the Los Angeles River Metals TMDL.

### **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 part 122.41, and additional conditions applicable to specified categories of permits in accordance with part 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under part 122.42.

40 CFR part 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR part 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with part 123.25, this Order omits federal conditions that address enforcement authority specified in parts 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 part 123 and the previous Order. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new federal regulations, modification in toxicity requirements, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

### **2. Special Studies and Additional Monitoring Requirements**

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

### **3. Best Management Practices and Pollution Prevention**

The objective of this Order is to protect the beneficial uses of the receiving waters. To meet this objective, this Order requires the Discharger to update and continue to implement an updated SWPPP and address storm water runoff to the storm drain that discharges to the Los Angeles River. This is consistent with the SWPPP requirements in the NPDES General Permit for Storm Water Discharges Associated with Industrial Activity (State Water Board Order No. 97-03-DWQ, NPDES Permit No. CAS000001). A SWPPP outlines site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into surface waters. Storm water discharges do occur at the Facility, and best management practices are identified as one method to reduce contamination of storm water.

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

The Discharger uses, stores, handles and disposes of materials, chemicals, and wastes at the facility, and conducts operational and maintenance activities to its facility and equipment that are potential or existing sources of pollutants in wastewater discharged from the facility to the receiving water. In addition, this Order prohibits the Discharger from causing or threatening to cause a pollution or nuisance and degrading groundwater. Therefore, this Order requires the Discharger to develop and implement a BMPP that includes site-specific plans, procedures, and practices to minimize the amount of pollutants entering wastewater discharges from materials being stored and activities being conducted throughout the entire facility. To ensure the Discharger considers and implements appropriate and effective BMPs, the Discharger is required to consider implementing BMPs contained in the USEPA *Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004) or equivalent alternatives when developing its BMPP.

**4. Construction, Operation, and Maintenance Specifications**

This provision is based on the requirements of part 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 Owens-Illinois, Incorporated – Owens-Brockway Glass Container. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

**A. Notification of Interested Parties**

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

**B. Written Comments**

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

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on May 6, 2010.

**C. Public Hearing**

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

Date: June 3, 2010  
Time: 9:00 A.M.  
Location: Metropolitan Water District, Board Room  
700 N. Alameda Street  
Los Angeles, California

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

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

#### **D. Nature of Hearing**

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

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

#### **E. Parties to the Hearing**

The following are the parties to this proceeding:

1. The applicant/permittee

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

#### **F. Public Comments and Submittal of Evidence**

Persons wishing to comment upon or object to the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to the above address. To be evaluated and responded to by staff, included in the Board's agenda folder, and fully considered by the Board, written comments must be received no later than close of business May 6, 2010. Comments or evidence received after that date will only be included in administrative record with express approval of the Chair during the hearing, only upon a showing of good cause, and only if it will not prejudice any other party or Regional Water Board staff. Additionally, if the Board receives only supportive comments, the permit may be placed on the Board's consent calendar, and approved without an oral testimony.

#### **G. Hearing Procedure**

The meeting, in which the hearing will be a part of, will start at 9:00 a.m. Interested persons are invited to attend. Staff will present the matter under consideration, after

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

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

If there should not be a quorum on the scheduled date of this meeting, all cases will be automatically continued to the next scheduled meeting on July 8, 2010. A continuance will not extend any time set forth herein.

## **H. Waste Discharge Requirements Petitions**

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

[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

or will be provided upon request.

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

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 110, 1101 I Street  
Sacramento, CA 95812-0110

## **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 Rosario Aston at (213) 576-6653.

## **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 8-½ x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, facility operators may provide the required information on multiple site maps.

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

#### PLANNING AND ORGANIZATION

Form Pollution Prevention Team  
Review other plans

#### ASSESSMENT PHASE

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

#### BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE

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

<p><b>IMPLEMENTATION PHASE</b></p> <p>Train employees Implement BMPs Conduct recordkeeping and reporting</p>
--

<p><b>EVALUATION / MONITORING</b></p> <p>Conduct annual site evaluation Review monitoring information Evaluate BMPs Review and revise SWPPP</p>
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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.). Non-storm water discharges that meet the conditions provided in Special Condition D of the general storm water permit are authorized by this Permit. The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

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

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

## **VII. Assessment of Potential Pollutant Sources**

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

Facility operators are required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in Section 8 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**

<b>Area</b>	<b>Activity</b>	<b>Pollutant Source</b>	<b>Pollutant</b>	<b>Best Management Practices</b>
Vehicle & Equipment Fueling	Fueling	Spills and leaks during delivery.  Spills caused by topping off fuel tanks.  Hosing or washing down fuel oil fuel area.  Leaking storage tanks.  Rainfall running off fuel oil, and rainfall running onto and off fueling area.	fuel oil	Use spill and overflow protection.  Minimize run-on of storm water into the fueling area.  Cover fueling area.  Use dry cleanup methods rather than hosing down area.  Implement proper spill prevention control program.  Implement adequate preventative maintenance program to preventive tank and line leaks.  Inspect fueling areas regularly to detect problems before they occur.  Train employees on proper fueling, cleanup, and spill response techniques.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The

description shall also include a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

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

#### **A. Non-Structural BMPs**

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

- 1. Good Housekeeping.** Good housekeeping generally consist 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 run-on and runoff away from pollutant sources.
- 4. Secondary Containment Structures.** This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.
- 5. Treatment.** This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc. that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

## **IX. Annual Comprehensive Site Compliance Evaluation**

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

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

## **X. SWPPP General Requirements**

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



- E.** When any part of the SWPPP is infeasible to implement due to proposed significant structural changes, the facility operator shall submit a report to the Regional Water Board prior to the applicable deadline that (i) describes the portion of the SWPPP that is infeasible to implement by the deadline, (ii) provides justification for a time extension, (iii) provides a schedule for completing and implementing that portion of the SWPPP, and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.
  
- F.** The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

## ATTACHMENT H – STATE WATER BOARD MINIMUM LEVELS

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

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

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

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

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

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

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

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

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

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

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

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

**Techniques:**

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

### ATTACHMENT I – LIST OF PRIORITY POLLUTANTS

CTR Number	Parameter	CAS Number	Suggested Analytical Methods
1	Antimony	7440360	
2	Arsenic	7440382	
3	Beryllium	7440417	
4	Cadmium	7440439	
5a	Chromium (III)	16065831	
5a	Chromium (VI)	18540299	
6	Copper	7440508	
7	Lead	7439921	
8	Mercury	7439976	
9	Nickel	7440020	
10	Selenium	7782492	
11	Silver	7440224	
12	Thallium	7440280	
13	Zinc	7440666	
14	Cyanide	57125	
15	Asbestos	1332214	
16	2,3,7,8-TCDD	1746016	
17	Acrolein	107028	
18	Acrylonitrile	107131	
19	Benzene	71432	
20	Bromoform	75252	
21	Carbon Tetrachloride	56235	
22	Chlorobenzene	108907	
23	Chlorodibromomethane	124481	
24	Chloroethane	75003	
25	2-Chloroethylvinyl Ether	110758	
26	Chloroform	67663	
27	Dichlorobromomethane	75274	
28	1,1-Dichloroethane	75343	
29	1,2-Dichloroethane	107062	
30	1,1-Dichloroethylene	75354	
31	1,2-Dichloropropane	78875	
32	1,3-Dichloropropylene	542756	
33	Ethylbenzene	100414	
34	Methyl Bromide	74839	
35	Methyl Chloride	74873	
36	Methylene Chloride	75092	
37	1,1,2,2-Tetrachloroethane	79345	
38	Tetrachloroethylene	127184	
39	Toluene	108883	
40	1,2-Trans-Dichloroethylene	156605	
41	1,1,1-Trichloroethane	71556	
42	1,1,2-Trichloroethane	79005	
43	Trichloroethylene	79016	
44	Vinyl Chloride	75014	
45	2-Chlorophenol	95578	
46	2,4-Dichlorophenol	120832	
47	2,4-Dimethylphenol	105679	

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

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

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



## ATTACHMENT J – SUMMARY OF REASONABLE POTENTIAL ANALYSIS

Attachment J - Calculation of Dry-Weather Effluent Limitations for Metals Based on TMDL (Per Section 1.4 of SIP)

CTR#	Parameters	Units	CV	CTR Water Quality Criteria (ug/L)							REASONABLE POTENTIAL ANALYSIS (RPA)									
				Freshwater		Saltwater		Human Health of consumption of:		TMDL	MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects	If all data points ND Enter the min detection	Enter the pollutant B detected max conc	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?
				C acute = CMC tot	C chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms	Organisms only	Dry-Weather WLAs										
1	Antimony	ug/L	0.6					14.00								No detected value of B, S		Ud		
2	Arsenic	ug/L	0.6	340.00	150.00			150.00								No detected value of B, S		Ud		
3	Beryllium	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
4	Cadmium	ug/L	0.6	8.93	3.96			3.96								No detected value of B, S		Ud		
5a	Chromium (III)	ug/L	0.6	2848.56	339.53			339.53								No detected value of B, S		Ud		
5b	Chromium (VI)	ug/L	0.6	16.29	11.43			11.43								No detected value of B, S		Ud		
6	Copper	ug/L	0.6	24.74	15.63		1300.00	22.00								No detected value of B, S	LA River TMDL	Ud		
7	Lead	ug/L	0.6	176.21	6.87			11.00								No detected value of B, S	LA River TMDL	Ud		
8	Mercury	ug/L	0.6	Reserved	Reserved		0.050	0.050								No detected value of B, S		Ud		
9	Nickel	ug/L	0.6	782.29	86.98		610.00	86.98								No detected value of B, S		Ud		
10	Selenium	ug/L	0.6	20.00	5.00			5.00								No detected value of B, S		Ud		
11	Silver	ug/L	0.6	11.48				11.48								No detected value of B, S		Ud		
12	Thallium	ug/L	0.6				1.70	1.70								No detected value of B, S		Ud		
13	Zinc	ug/L	0.6	199.94	199.94			199.94								No detected value of B, S		Ud		
14	Cyanide	ug/L	0.6	22.00	5.20			5.20								No detected value of B, S		Ud		
15	Asbestos	Fibers/L	0.6				7000000.00	7000000.00								No detected value of B, S		Ud		
16	2,3,7,8 TCDD	ug/L	0.6				0.000000013	0.000000013								No detected value of B, S		Ud		
17	Acrolein	ug/L	0.6				320	320								No detected value of B, S		Ud		
18	Acrylonitrile	ug/L	0.6				0.059	0.059								No detected value of B, S		Ud		
19	Benzene	ug/L	0.6				1.2	1.2								No detected value of B, S		Ud		
20	Bromoform	ug/L	0.6				4.3	4.3								No detected value of B, S		Ud		
21	Carbon Tetrachloride	ug/L	0.6				0.25	0.25								No detected value of B, S		Ud		
22	Chlorobenzene	ug/L	0.6				680	680								No detected value of B, S		Ud		
23	Chlorodibromomethane	ug/L	0.6				0.41	0.41								No detected value of B, S		Ud		
24	Chloroethane	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
25	2-Chloroethylvinyl ether	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
26	Chloroform	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
27	Dichlorobromomethane	ug/L	0.6				0.56	0.56								No detected value of B, S		Ud		
28	1,1-Dichloroethane	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
29	1,2-Dichloroethane	ug/L	0.6				0.38	0.38								No detected value of B, S		Ud		
30	1,1-Dichloroethylene	ug/L	0.6				0.057	0.057								No detected value of B, S		Ud		
31	1,2-Dichloropropane	ug/L	0.6				0.52	0.52								No detected value of B, S		Ud		
32	1,3-Dichloropropylene	ug/L	0.6				10	10								No detected value of B, S		Ud		
33	Ethylbenzene	ug/L	0.6				3100	3100								No detected value of B, S		Ud		
34	Methyl Bromide	ug/L	0.6				48	48								No detected value of B, S		Ud		
35	Methyl Chloride	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
36	Methylene Chloride	ug/L	0.6				4.7	4.7								No detected value of B, S		Ud		
37	1,1,2,2-Tetrachloroethane	ug/L	0.6				0.17	0.17								No detected value of B, S		Ud		
38	Tetrachloroethylene	ug/L	0.6				0.8	0.8								No detected value of B, S		Ud		
39	Toluene	ug/L	0.6				6800	6800								No detected value of B, S		Ud		
40	1,2-Trans-Dichloroethylene	ug/L	0.6				700	700								No detected value of B, S		Ud		
41	1,1,1-Trichloroethane	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
42	1,1,2-Trichloroethane	ug/L	0.6				0.6	0.6								No detected value of B, S		Ud		
43	Trichloroethylene	ug/L	0.6				2.7	2.7								No detected value of B, S		Ud		
44	Vinyl Chloride	ug/L	0.6				2	2								No detected value of B, S		Ud		
45	2-Chlorophenol	ug/L	0.6				120	120								No detected value of B, S		Ud		
46	2,4-Dichlorophenol	ug/L	0.6				93	93								No detected value of B, S		Ud		
47	2,4-Dimethylphenol	ug/L	0.6				540	540								No detected value of B, S		Ud		
48	4,6-dinitro-o-resol (aka 2-methyl-4,6-Dinitrophenol)	ug/L	0.6				13.4	13.4								No detected value of B, S		Ud		
49	2,4-Dinitrophenol	ug/L	0.6				70	70								No detected value of B, S		Ud		
50	2-Nitrophenol	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
51	4-Nitrophenol	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
53	Pentachlorophenol	ug/L	0.6	8.30	6.36		0.28	0.28								No detected value of B, S		Ud		
54	Phenol	ug/L	0.6				21000	21000								No detected value of B, S		Ud		
55	2,4,6-Trichlorophenol	ug/L	0.6				2.1	2.1								No detected value of B, S		Ud		
56	Acenaphthene	ug/L	0.6				1200	1200								No detected value of B, S		Ud		
57	Acenaphthylene	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
58	Anthracene	ug/L	0.6				9600	9600								No detected value of B, S		Ud		
59	Benzidine	ug/L	0.6				0.0012	0.0012								No detected value of B, S		Ud		
60	Benzo(a)Anthracene	ug/L	0.6				0.0044	0.0044								No detected value of B, S		Ud		
61	Benzo(a)Pyrene	ug/L	0.6				0.0044	0.0044								No detected value of B, S		Ud		
62	Benzo(b)Fluoranthene	ug/L	0.6				0.0044	0.0044								No detected value of B, S		Ud		
63	Benzo(ghi)Perylene	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
64	Benzo(k)Fluoranthene	ug/L	0.6				0.0044	0.0044								No detected value of B, S		Ud		
65	Bis(2-Chloroethoxy)Me	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
66	Bis(2-Chloroethyl)Ether	ug/L	0.6				0.031	0.031								No detected value of B, S		Ud		
67	Bis(2-Chloroisopropyl)E	ug/L	0.6				1400	1400								No detected value of B, S		Ud		
68	Bis(2-Ethylhexyl)Phthal	ug/L	0.6				1.8	1.8								No detected value of B, S		Ud		
69	4-Bromophenyl Phenyl	ug/L	0.6					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
70	Butylbenzyl Phthalate	ug/L	0.6				3000	3000								No detected value of B, S		Ud		



CTR#	Parameters	Reason	HUMAN HEALTH CALCULATIONS				AQUATIC LIFE CALCULATIONS								LIMITS		Recommendation	Comment
			Organisms only			Saltwater / Freshwater / Basin Plan												
			AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life	Lowest AMEL	Lowest MDEL		
1	Antimony	No effluent data & no B														No Limit		
2	Arsenic	No effluent data & no B														No Limit		
3	Beryllium	No Criteria														No Limit		
4	Cadmium	No effluent data & no B														No Limit		
5a	Chromium (III)	No effluent data & no B														No Limit		
5b	Chromium (VI)	No effluent data & no B														No Limit		
6	Copper	yes, TMDL		2.01		0.32		0.53	11.60	11.60	1.55	18.01	3.11	36.1387	18	36	Limit is based on TMDL	Dry-Weather Limit
7	Lead	yes, TMDL		2.01		0.32		0.53	5.80	5.80	1.55	9.01	3.11	18.0694	9	18	Limit is based on TMDL	Dry-Weather Limit
8	Mercury	No effluent data & no B														No Limit		
9	Nickel	No effluent data & no B														No Limit		
10	Selenium	No effluent data & no B														No Limit		
11	Silver	No effluent data & no B														No Limit		
12	Thallium	No effluent data & no B														No Limit		
13	Zinc	No effluent data & no B														No Limit		
14	Cyanide	No effluent data & no B														No Limit		
15	Asbestos	No effluent data & no B														No Limit		
16	2,3,7,8 TCDD	No effluent data & no B														No Limit		
17	Acrolein	No effluent data & no B														No Limit		
18	Acrylonitrile	No effluent data & no B														No Limit		
19	Benzene	No effluent data & no B														No Limit		
20	Bromoform	No effluent data & no B														No Limit		
21	Carbon Tetrachloride	No effluent data & no B														No Limit		
22	Chlorobenzene	No effluent data & no B														No Limit		
23	Chlorodibromomethane	No effluent data & no B														No Limit		
24	Chloroethane	No Criteria														No Limit		
25	2-Chloroethylvinyl ether	No Criteria														No Limit		
26	Chloroform	No Criteria														No Limit		
27	Dichlorobromomethane	No effluent data & no B														No Limit		
28	1,1-Dichloroethane	No Criteria														No Limit		
29	1,2-Dichloroethane	No effluent data & no B														No Limit		
30	1,1-Dichloroethylene	No effluent data & no B														No Limit		
31	1,2-Dichloropropane	No effluent data & no B														No Limit		
32	1,3-Dichloropropylene	No effluent data & no B														No Limit		
33	Ethylbenzene	No effluent data & no B														No Limit		
34	Methyl Bromide	No effluent data & no B														No Limit		
35	Methyl Chloride	No Criteria														No Limit		
36	Methylene Chloride	No effluent data & no B														No Limit		
37	1,1,2,2-Tetrachloroethane	No effluent data & no B														No Limit		
38	Tetrachloroethylene	No effluent data & no B														No Limit		
39	Toluene	No effluent data & no B														No Limit		
40	1,2-Trans-Dichloroethylene	No effluent data & no B														No Limit		
41	1,1,1-Trichloroethane	No Criteria														No Limit		
42	1,1,2-Trichloroethane	No effluent data & no B														No Limit		
43	Trichloroethylene	No effluent data & no B														No Limit		
44	Vinyl Chloride	No effluent data & no B														No Limit		
45	2-Chlorophenol	No effluent data & no B														No Limit		
46	2,4-Dichlorophenol	No effluent data & no B														No Limit		
47	2,4-Dimethylphenol	No effluent data & no B														No Limit		
48	4,6-dinitro-o-resol (aka 2-methyl-4,6-Dinitrophenol)	No effluent data & no B														No Limit		
49	2,4-Dinitrophenol	No effluent data & no B														No Limit		
50	2-Nitrophenol	No Criteria														No Limit		
51	4-Nitrophenol	No Criteria														No Limit		
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	No Criteria														No Limit		
53	Pentachlorophenol	No effluent data & no B														No Limit		
54	Phenol	No effluent data & no B														No Limit		
55	2,4,6-Trichlorophenol	No effluent data & no B														No Limit		
56	Acenaphthene	No effluent data & no B														No Limit		
57	Acenaphthylene	No Criteria														No Limit		
58	Anthracene	No effluent data & no B														No Limit		
59	Benzidine	No effluent data & no B														No Limit		
60	Benzo(a)Anthracene	No effluent data & no B														No Limit		
61	Benzo(a)Pyrene	No effluent data & no B														No Limit		
62	Benzo(b)Fluoranthene	No effluent data & no B														No Limit		
63	Benzo(ghi)Perylene	No Criteria														No Limit		
64	Benzo(k)Fluoranthene	No effluent data & no B														No Limit		
65	Bis(2-Chloroethoxy)Methane	No Criteria														No Limit		
66	Bis(2-Chloroethyl)Ether	No effluent data & no B														No Limit		
67	Bis(2-Chloroisopropyl)Ether	No effluent data & no B														No Limit		
68	Bis(2-Ethylhexyl)Phthalate	No effluent data & no B														No Limit		
69	4-Bromophenyl Phenyl Ether	No Criteria														No Limit		
70	Butylbenzyl Phthalate	No effluent data & no B														No Limit		

Attachment J - Calculation of Dry-Weather Effluent Limitations for Metals Based on TMDL (Per Section 1.4 of SIP)

CTR#	Parameters	Reason	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS								LIMITS		Recommendation	Comment
			Organisms only			Saltwater / Freshwater / Basin Plan								Lowest AMEL	Lowest MDEL		
			AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99				
71	2-Chloronaphthalene	No effluent data & no B														No Limit	
72	4-Chlorophenyl Phenyl	No Criteria														No Limit	
73	Chrysene	No effluent data & no B														No Limit	
74	Dibenzo(a,h)Anthracen	No effluent data & no B														No Limit	
75	1,2-Dichlorobenzene	No effluent data & no B														No Limit	
76	1,3-Dichlorobenzene	No effluent data & no B														No Limit	
77	1,4-Dichlorobenzene	No effluent data & no B														No Limit	
78	3,3-Dichlorobenzidine	No effluent data & no B														No Limit	
79	Diethyl Phthalate	No effluent data & no B														No Limit	
80	Dimethyl Phthalate	No effluent data & no B														No Limit	
81	Di-n-Butyl Phthalate	No effluent data & no B														No Limit	
82	2,4-Dinitrotoluene	No effluent data & no B														No Limit	
83	2,6-Dinitrotoluene	No Criteria														No Limit	
84	Di-n-Octyl Phthalate	No Criteria														No Limit	
85	1,2-Diphenylhydrazine	No effluent data & no B														No Limit	
86	Fluoranthene	No effluent data & no B														No Limit	
87	Fluorene	No effluent data & no B														No Limit	
88	Hexachlorobenzene	No effluent data & no B														No Limit	
89	Hexachlorobutadiene	No effluent data & no B														No Limit	
90	Hexachlorocyclopentad	No effluent data & no B														No Limit	
91	Hexachloroethane	No effluent data & no B														No Limit	
92	Indeno(1,2,3-cd)Pyrene	No effluent data & no B														No Limit	
93	Isophorone	No effluent data & no B														No Limit	
94	Naphthalene	No Criteria														No Limit	
95	Nitrobenzene	No effluent data & no B														No Limit	
96	N-Nitrosodimethylamin	No effluent data & no B														No Limit	
97	N-Nitrosodi-n-Propylam	No effluent data & no B														No Limit	
98	N-Nitrosodiphenylamin	No effluent data & no B														No Limit	
99	Phenanthrene	No Criteria														No Limit	
100	Pyrene	No effluent data & no B														No Limit	
101	1,2,4-Trichlorobenzene	No Criteria														No Limit	
102	Aldrin	No effluent data & no B														No Limit	
103	alpha-BHC	No effluent data & no B														No Limit	
104	beta-BHC	No effluent data & no B														No Limit	
105	gamma-BHC	No effluent data & no B														No Limit	
106	delta-BHC	No Criteria														No Limit	
107	Chlordane	No effluent data & no B														No Limit	
108	4,4'-DDT	No effluent data & no B														No Limit	
109	4,4'-DDE (linked to DD	No effluent data & no B														No Limit	
110	4,4'-DDD	No effluent data & no B														No Limit	
111	Dieldrin	No effluent data & no B														No Limit	
112	alpha-Endosulfan	No effluent data & no B														No Limit	
113	beta-Endosulfan	No effluent data & no B														No Limit	
114	Endosulfan Sulfate	No effluent data & no B														No Limit	
115	Endrin	No effluent data & no B														No Limit	
116	Endrin Aldehyde	No effluent data & no B														No Limit	
117	Heptachlor	No effluent data & no B														No Limit	
118	Heptachlor Epoxide	No effluent data & no B														No Limit	
119-125	PCBs sum (2)	No effluent data & no B														No Limit	
126	Toxaphene	No effluent data & no B														No Limit	

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

Attachment J - Calculation of Wet-Weather Effluent Limitations for Metals Based on TMDL (Per Section 1.4 of SIP)

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)					REASONABLE POTENTIAL ANALYSIS (RPA)											
					Freshwater		Saltwater		Human Receptor consumption of:	TMDL	Lowest C or TMDL	MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects	If all data points ND Enter the min detection	Enter the pollutant B detected max conc	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?
					C acute = CMC tot	chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot	Water & organisms												
1	Antimony	ug/L	0.6						14.00								No detected value of B, Step 7		Ud		
2	Arsenic	ug/L	0.5		340.00	150.00			150.00								No detected value of B, Step 7		Ud		
3	Beryllium	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
4	Cadmium	ug/L	0.6		8.93	3.96			3.10								No detected value of B, Step 7	LA River TMDL	Ud		
5a	Chromium (III)	ug/L	0.6		2848.56	339.53			339.53								No detected value of B, Step 7		Ud		
5b	Chromium (VI)	ug/L	0.6		16.29	11.43			11.43								No detected value of B, Step 7		Ud		
6	Copper	ug/L	0.6		24.74	15.63		1300.00	17.00								No detected value of B, Step 7	LA River TMDL	Ud		
7	Lead	ug/L	0.6		176.21	6.87			62.00								No detected value of B, Step 7	LA River TMDL	Ud		
8	Mercury	ug/L	0.6		Reserved	Reserved		0.050	0.050								No detected value of B, Step 7		Ud		
9	Nickel	ug/L	0.6		782.29	86.98		610.00	86.98								No detected value of B, Step 7		Ud		
10	Selenium	ug/L	0.6		20.00	5.00			5.00								No detected value of B, Step 7		Ud		
11	Silver	ug/L	0.6		11.48				11.48								No detected value of B, Step 7		Ud		
12	Thallium	ug/L	0.6					1.70	1.70								No detected value of B, Step 7		Ud		
13	Zinc	ug/L	0.6		199.94	199.94			159.00	159.00							No detected value of B, Step 7	LA River TMDL	Ud		
14	Cyanide	ug/L	0.6		22.00	5.20		700.00	5.20								No detected value of B, Step 7		Ud		
15	Asbestos	Fibers/l	0.6					7000000.00	7000000.00								No detected value of B, Step 7		Ud		
16	2,3,7,8 TCDD	ug/L	0.6					0.000000013	0.000000013								No detected value of B, Step 7		Ud		
17	Acrolein	ug/L	0.6					320	320								No detected value of B, Step 7		Ud		
18	Acrylonitrile	ug/L	0.6					0.059	0.059								No detected value of B, Step 7		Ud		
19	Benzene	ug/L	0.6					1.2	1.2								No detected value of B, Step 7		Ud		
20	Bromoform	ug/L	0.6					4.3	4.3								No detected value of B, Step 7		Ud		
21	Carbon Tetrachloride	ug/L	0.6					0.25	0.25								No detected value of B, Step 7		Ud		
22	Chlorobenzene	ug/L	0.6					680	680								No detected value of B, Step 7		Ud		
23	Chlorodibromomethane	ug/L	0.6					0.41	0.41								No detected value of B, Step 7		Ud		
24	Chloroethane	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
25	2-Chloroethylvinyl ether	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
26	Chloroform	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
27	Dichlorobromomethane	ug/L	0.6					0.56	0.56								No detected value of B, Step 7		Ud		
28	1,1-Dichloroethane	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
29	1,2-Dichloroethane	ug/L	0.6					0.38	0.38								No detected value of B, Step 7		Ud		
30	1,1-Dichloroethylene	ug/L	0.6					0.057	0.057								No detected value of B, Step 7		Ud		
31	1,2-Dichloropropane	ug/L	0.6					0.52	0.52								No detected value of B, Step 7		Ud		
32	1,3-Dichloropropylene	ug/L	0.6					10	10								No detected value of B, Step 7		Ud		
33	Ethylbenzene	ug/L	0.6					3100	3100								No detected value of B, Step 7		Ud		
34	Methyl Bromide	ug/L	0.6					48	48								No detected value of B, Step 7		Ud		
35	Methyl Chloride	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
36	Methylene Chloride	ug/L	0.6					4.7	4.7								No detected value of B, Step 7		Ud		
37	1,1,2,2-Tetrachloroethane	ug/L	0.6					0.17	0.17								No detected value of B, Step 7		Ud		
38	Tetrachloroethylene	ug/L	0.6					0.8	0.8								No detected value of B, Step 7		Ud		
39	Toluene	ug/L	0.6					6800	6800								No detected value of B, Step 7		Ud		
40	1,2-Trans-Dichloroethylene	ug/L	0.6					700	700								No detected value of B, Step 7		Ud		
41	1,1,1-Trichloroethane	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
42	1,1,2-Trichloroethane	ug/L	0.6					0.6	0.6								No detected value of B, Step 7		Ud		
43	Trichloroethylene	ug/L	0.6					2.7	2.7								No detected value of B, Step 7		Ud		
44	Vinyl Chloride	ug/L	0.6					2	2								No detected value of B, Step 7		Ud		
45	2-Chlorophenol	ug/L	0.6					120	120								No detected value of B, Step 7		Ud		
46	2,4-Dichlorophenol	ug/L	0.6					93	93								No detected value of B, Step 7		Ud		
47	2,4-Dimethylphenol	ug/L	0.6					540	540								No detected value of B, Step 7		Ud		
48	4,6-dinitro-o-resol (aka 2-methyl-4,6-Dinitrophenol)	ug/L	0.6					13.4	13.4								No detected value of B, Step 7		Ud		
49	2,4-Dinitrophenol	ug/L	0.6					70	70								No detected value of B, Step 7		Ud		
50	2-Nitrophenol	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
51	4-Nitrophenol	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
53	Pentachlorophenol	ug/L	0.6		8.30	6.36		0.28	0.28								No detected value of B, Step 7		Ud		
54	Phenol	ug/L	0.6					21000	21000								No detected value of B, Step 7		Ud		
55	2,4,6-Trichlorophenol	ug/L	0.6					2.1	2.1								No detected value of B, Step 7		Ud		
56	Acenaphthene	ug/L	0.6					1200	1200								No detected value of B, Step 7		Ud		
57	Acenaphthylene	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
58	Anthracene	ug/L	0.6					9600	9600								No detected value of B, Step 7		Ud		
59	Benzidine	ug/L	0.6					0.00012	0.00012								No detected value of B, Step 7		Ud		
60	Benzo(a)Anthracene	ug/L	0.6					0.0044	0.0044								No detected value of B, Step 7		Ud		
61	Benzo(a)Pyrene	ug/L	0.6					0.0044	0.0044								No detected value of B, Step 7		Ud		
62	Benzo(b)Fluoranthene	ug/L	0.6					0.0044	0.0044								No detected value of B, Step 7		Ud		
63	Benzo(ghi)Perylene	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
64	Benzo(k)Fluoranthene	ug/L	0.6					0.0044	0.0044								No detected value of B, Step 7		Ud		
65	Bis(2-Chloroethoxy)Ether	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
66	Bis(2-Chloroethyl)Ether	ug/L	0.6					0.031	0.031								No detected value of B, Step 7		Ud		
67	Bis(2-Chloroisopropyl)Ether	ug/L	0.6					1400	1400								No detected value of B, Step 7		Ud		
68	Bis(2-Ethylhexyl)Phthalate	ug/L	0.6					1.8	1.8								No detected value of B, Step 7		Ud		
69	4-Bromophenyl Phenyl	ug/L	0.6	No Criteria					No Criteria	No Criteria	No Criteria						No Criteria	No Criteria	Uc		
70	Butylbenzyl Phthalate	ug/L	0.6					3000	3000								No detected value of B, Step 7		Ud		

CTR#	Parameters	Units	CV	MEC	CTR Water Quality Criteria (ug/L)					Human Health consumption of:	TMDL	REASONABLE POTENTIAL ANALYSIS (RPA)												
					Freshwater:		Saltwater:		Water & organisms			Organisms only	Wet-Weather WLAs	Lowest C or TMDL	MEC >= Lowest C	Tier 1 - Need limit?	B Available (Y/N)?	Are all B data points non-detects	If all data points ND Enter the min detection	Enter the pollutant B detected max conc	If all B is ND, is MDL>C?	If B>C, effluent limit required	Tier 3 - other info. ?	RPA Result - Need Limit?
					C acute = CMC tot	chronic = CCC tot	C acute = CMC tot	C chronic = CCC tot																
71	2-Chloronaphthalene	ug/L	0.6					1700		1700			N					No detected value of B, Step 7		Ud				
72	4-Chlorophenyl Phenyl	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria	Uc				
73	Chrysene	ug/L	0.6					0.0044		0.0044			N					No detected value of B, Step 7		Ud				
74	Dibenz(a,h)Anthracene	ug/L	0.6					0.0044		0.0044			N					No detected value of B, Step 7		Ud				
75	1,2-Dichlorobenzene	ug/L	0.6					2700		2700			N					No detected value of B, Step 7		Ud				
76	1,3-Dichlorobenzene	ug/L	0.6					400		400			N					No detected value of B, Step 7		Ud				
77	1,4-Dichlorobenzene	ug/L	0.6					400		400			N					No detected value of B, Step 7		Ud				
78	3,3-Dichlorobenzidine	ug/L	0.6					0.04		0.04			N					No detected value of B, Step 7		Ud				
79	Diethyl Phthalate	ug/L	0.6					23000		23000			N					No detected value of B, Step 7		Ud				
80	Dimethyl Phthalate	ug/L	0.6					313000		313000			N					No detected value of B, Step 7		Ud				
81	Di-n-Butyl Phthalate	ug/L	0.6					2700		2700			N					No detected value of B, Step 7		Ud				
82	2,4-Dinitrotoluene	ug/L	0.6					0.11		0.11			N					No detected value of B, Step 7		Ud				
83	2,6-Dinitrotoluene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria	Uc				
84	Di-n-Octyl Phthalate	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria	Uc				
85	1,2-Diphenylhydrazine	ug/L	0.6					0.040		0.040			N					No detected value of B, Step 7		Ud				
86	Fluoranthene	ug/L	0.6					300		300			N					No detected value of B, Step 7		Ud				
87	Fluorene	ug/L	0.6					1300		1300			N					No detected value of B, Step 7		Ud				
88	Hexachlorobenzene	ug/L	0.6					0.00075		0.00075			N					No detected value of B, Step 7		Ud				
89	Hexachlorobutadiene	ug/L	0.6					0.44		0.44			N					No detected value of B, Step 7		Ud				
90	Hexachlorocyclopentadiene	ug/L	0.6					240		240			N					No detected value of B, Step 7		Ud				
91	Hexachloroethane	ug/L	0.6					1.9		1.9			N					No detected value of B, Step 7		Ud				
92	Indeno(1,2,3-cd)Pyrene	ug/L	0.6					0.0044		0.0044			N					No detected value of B, Step 7		Ud				
93	Isophorone	ug/L	0.6					8.4		8.4			N					No detected value of B, Step 7		Ud				
94	Naphthalene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria	Uc				
95	Nitrobenzene	ug/L	0.6					17		17			N					No detected value of B, Step 7		Ud				
96	N-Nitrosodimethylamine	ug/L	0.6					0.00069		0.00069			N					No detected value of B, Step 7		Ud				
97	N-Nitrosodi-n-Propylamine	ug/L	0.6					0.005		0.005			N					No detected value of B, Step 7		Ud				
98	N-Nitrosodiphenylamine	ug/L	0.6					5.0		5.0			N					No detected value of B, Step 7		Ud				
99	Phenanthrene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria	Uc				
100	Pyrene	ug/L	0.6					960		960			N					No detected value of B, Step 7		Ud				
101	1,2,4-Trichlorobenzene	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria	Uc				
102	Aldrin	ug/L	0.6					0.00013		0.00013			N					No detected value of B, Step 7		Ud				
103	alpha-BHC	ug/L	0.6					0.0039		0.0039			N					No detected value of B, Step 7		Ud				
104	beta-BHC	ug/L	0.6					0.014		0.014			N					No detected value of B, Step 7		Ud				
105	gamma-BHC	ug/L	0.6					0.019		0.019			N					No detected value of B, Step 7		Ud				
106	delta-BHC	ug/L	0.6	No Criteria						No Criteria	No Criteria	No Criteria	N					No Criteria	No Criteria	Uc				
107	Chlordane	ug/L	0.6					0.00057		0.00057			N					No detected value of B, Step 7		Ud				
108	4,4'-DDT	ug/L	0.6					0.00059		0.00059			N					No detected value of B, Step 7		Ud				
109	4,4'-DDE (linked to DD)	ug/L	0.6					0.00059		0.00059			N					No detected value of B, Step 7		Ud				
110	4,4'-DDD	ug/L	0.6					0.00083		0.00083			N					No detected value of B, Step 7		Ud				
111	Dieldrin	ug/L	0.6					0.00014		0.00014			N					No detected value of B, Step 7		Ud				
112	alpha-Endosulfan	ug/L	0.6					0.22	0.056	0.056			N					No detected value of B, Step 7		Ud				
113	beta-Endosulfan	ug/L	0.6					0.22	0.056	0.056			N					No detected value of B, Step 7		Ud				
114	Endosulfan Sulfate	ug/L	0.6					110		110			N					No detected value of B, Step 7		Ud				
115	Endrin	ug/L	0.6					0.086	0.036	0.036			N					No detected value of B, Step 7		Ud				
116	Endrin Aldehyde	ug/L	0.6					0.76		0.76			N					No detected value of B, Step 7		Ud				
117	Heptachlor	ug/L	0.6					0.52	0.0038	0.0038			N					No detected value of B, Step 7		Ud				
118	Heptachlor Epoxide	ug/L	0.6					0.52	0.0038	0.0038			N					No detected value of B, Step 7		Ud				
119-125	PCBs sum (2)	ug/L	0.6					0.014		0.014			N					No detected value of B, Step 7		Ud				
126	Toxaphene	ug/L	0.6					0.73	0.0002	0.0002			N					No detected value of B, Step 7		Ud				

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

CTR#	Parameters	Reason	HUMAN HEALTH CALCULATIONS					AQUATIC LIFE CALCULATIONS								LIMITS		Recommendation	Comment
			Organisms only			Saltwater / Freshwater / Basin Plan								LIMITS					
			AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	ECA acute multiplier (p.7)	LTA acute	chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99	MDEL aq life	Lowest AMEL	Lowest MDEL			
1	Antimony	No effluent data & no B															No Limit		
2	Arsenic	No effluent data & no B															No Limit		
3	Beryllium	No Criteria															No Limit		
4	Cadmium	yes, TMDL		2.01		0.32		0.53	1.64	1.64	1.55	2.54	3.11	5.09227		3	5	Limit based on TMDL	Wet-Weather Limit
5a	Chromium (III)	No effluent data & no B															No Limit		
5b	Chromium (VI)	No effluent data & no B															No Limit		
6	Copper	yes, TMDL		2.01		0.32		0.53	8.97	8.97	1.55	13.92	3.11	27.9254		14	28	Limit based on TMDL	Wet-Weather Limit
7	Lead	yes, TMDL		2.01		0.32		0.53	32.70	32.70	1.55	50.77	3.11	101.845		51	102	Limit based on TMDL	Wet-Weather Limit
8	Mercury	No effluent data & no B															No Limit		
9	Nickel	No effluent data & no B															No Limit		
10	Selenium	No effluent data & no B															No Limit		
11	Silver	No effluent data & no B															No Limit		
12	Thallium	No effluent data & no B															No Limit		
13	Zinc	yes, TMDL		2.01		0.32		0.53	83.86	83.86	1.55	130.19	3.11	261.184		130	261	Limit based on TMDL	Wet-Weather Limit
14	Cyanide	No effluent data & no B															No Limit		
15	Asbestos	No effluent data & no B															No Limit		
16	2,3,7,8 TCDD	No effluent data & no B															No Limit		
17	Acrolein	No effluent data & no B															No Limit		
18	Acrylonitrile	No effluent data & no B															No Limit		
19	Benzene	No effluent data & no B															No Limit		
20	Bromofom	No effluent data & no B															No Limit		
21	Carbon Tetrachloride	No effluent data & no B															No Limit		
22	Chlorobenzene	No effluent data & no B															No Limit		
23	Chlorodibromomethane	No effluent data & no B															No Limit		
24	Chloroethane	No Criteria															No Limit		
25	2-Chloroethylvinyl ether	No Criteria															No Limit		
26	Chloroform	No Criteria															No Limit		
27	Dichlorobromomethane	No effluent data & no B															No Limit		
28	1,1-Dichloroethane	No Criteria															No Limit		
29	1,2-Dichloroethane	No effluent data & no B															No Limit		
30	1,1-Dichloroethylene	No effluent data & no B															No Limit		
31	1,2-Dichloropropane	No effluent data & no B															No Limit		
32	1,3-Dichloropropylene	No effluent data & no B															No Limit		
33	Ethylbenzene	No effluent data & no B															No Limit		
34	Methyl Bromide	No effluent data & no B															No Limit		
35	Methyl Chloride	No Criteria															No Limit		
36	Methylene Chloride	No effluent data & no B															No Limit		
37	1,1,2,2-Tetrachloroethane	No effluent data & no B															No Limit		
38	Tetrachloroethylene	No effluent data & no B															No Limit		
39	Toluene	No effluent data & no B															No Limit		
40	1,2-Trans-Dichloroethylene	No effluent data & no B															No Limit		
41	1,1,1-Trichloroethane	No Criteria															No Limit		
42	1,1,2-Trichloroethane	No effluent data & no B															No Limit		
43	Trichloroethylene	No effluent data & no B															No Limit		
44	Vinyl Chloride	No effluent data & no B															No Limit		
45	2-Chlorophenol	No effluent data & no B															No Limit		
46	2,4-Dichlorophenol	No effluent data & no B															No Limit		
47	2,4-Dimethylphenol	No effluent data & no B															No Limit		
48	4,6-dinitro-o-resol (aka 2-methyl-4,6-Dinitrophenol)	No effluent data & no B															No Limit		
49	2,4-Dinitrophenol	No effluent data & no B															No Limit		
50	2-Nitrophenol	No Criteria															No Limit		
51	4-Nitrophenol	No Criteria															No Limit		
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	No Criteria															No Limit		
53	Pentachlorophenol	No effluent data & no B															No Limit		
54	Phenol	No effluent data & no B															No Limit		
55	2,4,6-Trichlorophenol	No effluent data & no B															No Limit		
56	Acenaphthene	No effluent data & no B															No Limit		
57	Acenaphthylene	No Criteria															No Limit		
58	Anthracene	No effluent data & no B															No Limit		
59	Benzidine	No effluent data & no B															No Limit		
60	Benzo(a)Anthracene	No effluent data & no B															No Limit		
61	Benzo(a)Pyrene	No effluent data & no B															No Limit		
62	Benzo(b)Fluoranthene	No effluent data & no B															No Limit		
63	Benzo(ghi)Perylene	No Criteria															No Limit		
64	Benzo(k)Fluoranthene	No effluent data & no B															No Limit		
65	Bis(2-Chloroethoxy)Me	No Criteria															No Limit		
66	Bis(2-Chloroethyl)Ether	No effluent data & no B															No Limit		
67	Bis(2-Chloroisopropyl)E	No effluent data & no B															No Limit		
68	Bis(2-Ethylhexyl)Phthal	No effluent data & no B															No Limit		
69	4-Bromophenyl Phenyl	No Criteria															No Limit		
70	Butylbenzyl Phthalate	No effluent data & no B															No Limit		



CTR#	Parameters	Reason	HUMAN HEALTH CALCULATIONS			AQUATIC LIFE CALCULATIONS								LIMITS		Recommendation	Comment
			Organisms only			Saltwater / Freshwater / Basin Plan								Lowest AMEL	Lowest MDEL		
			AMEL hh = ECA = C hh O only	MDEL/AMEL multiplier	MDEL hh	ECA acute multiplier (p.7)	LTA acute	chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier 95	AMEL aq life	MDEL multiplier 99				
71	2-Chloronaphthalene	No effluent data & no B														No Limit	
72	4-Chlorophenyl Phenyl	No Criteria														No Limit	
73	Chrysene	No effluent data & no B														No Limit	
74	Dibenzo(a,h)Anthracen	No effluent data & no B														No Limit	
75	1,2-Dichlorobenzene	No effluent data & no B														No Limit	
76	1,3-Dichlorobenzene	No effluent data & no B														No Limit	
77	1,4-Dichlorobenzene	No effluent data & no B														No Limit	
78	3,3 Dichlorobenzidine	No effluent data & no B														No Limit	
79	Diethyl Phthalate	No effluent data & no B														No Limit	
80	Dimethyl Phthalate	No effluent data & no B														No Limit	
81	Di-n-Butyl Phthalate	No effluent data & no B														No Limit	
82	2,4-Dinitrotoluene	No effluent data & no B														No Limit	
83	2,6-Dinitrotoluene	No Criteria														No Limit	
84	Di-n-Octyl Phthalate	No Criteria														No Limit	
85	1,2-Diphenylhydrazine	No effluent data & no B														No Limit	
86	Fluoranthene	No effluent data & no B														No Limit	
87	Fluorene	No effluent data & no B														No Limit	
88	Hexachlorobenzene	No effluent data & no B														No Limit	
89	Hexachlorobutadiene	No effluent data & no B														No Limit	
90	Hexachlorocyclopentadiene	No effluent data & no B														No Limit	
91	Hexachloroethane	No effluent data & no B														No Limit	
92	Indeno(1,2,3-cd)Pyrene	No effluent data & no B														No Limit	
93	Isophorone	No effluent data & no B														No Limit	
94	Naphthalene	No Criteria														No Limit	
95	Nitrobenzene	No effluent data & no B														No Limit	
96	N-Nitrosodimethylamine	No effluent data & no B														No Limit	
97	N-Nitrosodi-n-Propylamine	No effluent data & no B														No Limit	
98	N-Nitrosodiphenylamine	No effluent data & no B														No Limit	
99	Phenanthrene	No Criteria														No Limit	
100	Pyrene	No effluent data & no B														No Limit	
101	1,2,4-Trichlorobenzene	No Criteria														No Limit	
102	Aldrin	No effluent data & no B														No Limit	
103	alpha-BHC	No effluent data & no B														No Limit	
104	beta-BHC	No effluent data & no B														No Limit	
105	gamma-BHC	No effluent data & no B														No Limit	
106	delta-BHC	No Criteria														No Limit	
107	Chlordane	No effluent data & no B														No Limit	
108	4,4'-DDT	No effluent data & no B														No Limit	
109	4,4'-DDE (linked to DD)	No effluent data & no B														No Limit	
110	4,4'-DDD	No effluent data & no B														No Limit	
111	Dieldrin	No effluent data & no B														No Limit	
112	alpha-Endosulfan	No effluent data & no B														No Limit	
113	beta-Endosulfan	No effluent data & no B														No Limit	
114	Endosulfan Sulfate	No effluent data & no B														No Limit	
115	Endrin	No effluent data & no B														No Limit	
116	Endrin Aldehyde	No effluent data & no B														No Limit	
117	Heptachlor	No effluent data & no B														No Limit	
118	Heptachlor Epoxide	No effluent data & no B														No Limit	
119-125	PCBs sum (2)	No effluent data & no B														No Limit	
126	Toxaphene	No effluent data & no B														No Limit	

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