State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

ORDER NO. R4-2005-0008
NPDES PERMIT NO. CA0000892

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE REQUIREMENTS
FOR
KAISER ALUMINUM AND CHEMICAL CORPORATION

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

Background

1. Kaiser Aluminum and Chemical Corporation (hereinafter Kaiser or Discharger), discharges wastewater to the Los Angeles River, a water of the United States. Wastes discharged from Kaiser are regulated by Waste Discharge Requirements (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permit contained in Board Order No. 99-044 (NPDES Permit No. CA0000892). Order No. 99-044 expired on April 10, 2004.

2. Kaiser filed a report of waste discharge and applied for renewal of its WDRs and NPDES permit on March 18, 2004. The tentative Order is the reissuance of the WDRs and NPDES permit for discharges from Kaiser. A NPDES permit compliance evaluation inspection (CEI) was conducted on March 23, 2004, to observe operations and collect additional data to develop permit limits and conditions.

Purpose of Order

3. The Discharger has applied for renewal of its WDRs and NPDES permit for discharge of up to 605,000 gallons per day (gpd) of untreated industrial waste water from the Aluminum Extrusion Plant (Facility) consisting of aluminum extrusion process and press heat treatment contact cooling water, reverse osmosis concentrate from an on-site reverse osmosis unit, and storm water, into a storm drain. Wastewater from these processes is discharged to a storm drain on the property, Discharge Serial No. 001 (Latitude: 33° 59' 16", Longitude: 118° 08' 50"), and thence to the Los Angeles River, a water of the United States, at a point about 2,500 feet south of Firestone Boulevard, above the Estuary. Figure 1 provides a facility location map.

Facility Description

4. Kaiser is the owner and operator of the Facility located at 6250 E. Bandini Boulevard, Los Angeles, California. Aluminum is melted, formed, cut, and packaged at the Facility. Extrusion consists of forcing a heated alloy billet through a die by pressure. The extruded aluminum is then sawed off and cooled through a contact cooling process (e.g., press heat treatment quench). After the product is cooled it is further strengthened through an aging process. Figure 2 provides a process and wastewater flow diagram.

5. Effluent limitations and requirements for the discharges from aluminum forming facilities are established in 40 CFR Part 467. The discharges from the Facility are subject to Subpart C (the Extrusion Subcategory) of the established effluent limitations guidelines and standards (ELGs) for the Aluminum Forming Point Source Category. This subpart applies to discharges from core (extrusion die cleaning, dummy block cooling, stationary casting, artificial aging, annealing, degreasing, and sawing) and ancillary (operations performed on-site, following or preceding the extrusion operation) operations of the extrusion subcategory.

6. The age of the Facility is such that both existing and new source standards apply. The casting facility began operations in 1991 and directs the discharge to the Los Angeles County Sanitary Sewer System, as such is subject to new source pretreatment standards not established in this permit. The extrusion operations were in place when the Aluminum Forming limits were established and as such are subject to existing source standards based on best practicable control technology currently available (BPT) and best available technology economically achievable (BAT) allowances.

7. A portion of the industrial process water is discharged to the Los Angeles County Sanitation District's Publicly Owned Treatment Works. The waste streams discharged to the sanitary sewer include: a portion from the water softener and sand filter; new deburr and washer system; miscellaneous non-scope wastewater; die cleaning caustic system; oil-water separation system; and the industrial wastewater treatment system.

8. The wastewater discharge authorized by this permit includes reverse osmosis concentrate (from treating potable water), press heat treatment contact cooling water, aging oven bearing non-contact cooling water, and storm water runoff. Kaiser described contributing waste streams in supporting documentation for the permit renewal application. Reverse osmosis concentrate is the reject water from the reverse osmosis system. The source water is City of Commerce water that has been softened. Press heat treatment contact cooling water is used for cooling the extruded products; source water is reverse osmosis permeate. Aging oven bearing non-contact cooling water is the discharge from the fan bearings that serve the four aging ovens. The source water is City of Commerce water, and it is fed once-through the oven fans prior to discharge.

Discharge Description

9. The Discharger proposes a maximum discharge flow rate of 605,000 gpd. The previous permit established a maximum flow rate of 125,000 gpd and storm water was not taken into consideration. Kaiser currently discharges approximately 36,100 gpd of untreated wastewater. Data submitted by the Discharger for the period from 1999 through 2003 indicates that the facility has an average discharge rate of 30,945 gpd since January 1999, but has discharged at rates of 125,000 gpd during the permit term. These volumes do not represent the discharge of aging oven bearing cooling water or storm water.

Applicable Plans, Policies, and Regulations

10. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) as amended on January 27, 1997 by Regional Board Resolution No. 97-02. The Basin Plan (i) designates beneficial uses for surface and groundwaters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state antidegradation policy (*Statement of Policy with Respect to Maintaining High Quality Waters in California*, State Board Resolution No. 68-16, October 28, 1968), and (iii) describes implementation programs to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The Regional Board prepared the 1994 update of the Basin Plan to be consistent with all previously adopted State and Regional Board plans and policies. This Order implements the plans, policies and provisions of the Regional Board's Basin Plan.

11. The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. Inland surface waters consist of rivers, streams, lakes, reservoirs, and inland wetlands. Beneficial uses for a surface water can be designated, whether or not they have been attained on a waterbody, in order to implement either federal or state mandates and goals (such as fishable and swimmable for regional waters).

12. The Basin Plan contains beneficial uses and water quality objectives for the Los Angeles River. The beneficial uses of the receiving water are:

    Los Angeles River – Hydrologic Unit 405.15

    Existing Uses: Groundwater recharge; water-contact recreation; non-contact water recreation; and warm freshwater habitat

    Potential Uses: Municipal and domestic supply; industrial service supply; and wildlife habitat

    Los Angeles River to Estuary – Hydrologic Unit 405.12

    Existing Uses: Groundwater recharge; water-contact recreation; non-contact water recreation; warm freshwater habitat; marine habitat; wildlife habitat; and threatened, or endangered species

    Potential Uses: Municipal and domestic supply; industrial service supply; industrial process supply; migration of aquatic organisms; spawning, reproduction, and/or early development; and shellfish harvesting

13. **Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional 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 Lif*e. The ammonia Basin Plan amendment was approved by the State Board, the Office of Administrative Law, and U.S. EPA 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 U.S. EPA's 1999 ammonia criteria update.

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

15. On May 18, 2000, the U.S. Environmental Protection Agency (U.S. EPA) promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR 131.38]. In the CTR, U.S. EPA promulgated criteria that protect the general population at an incremental cancer risk level of one in a million (10^{-6}), for all priority toxic pollutants regulated as carcinogens. The CTR also allows for a schedule of compliance not to exceed five years from the date of permit issuance for a point source discharge if the Discharger demonstrates that it is infeasible to promptly comply with effluent limitations derived from the CTR criteria.

16. On March 2, 2000, the State 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 was effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the U.S. EPA through the National Toxics Rule (NTR), and to the priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the U.S. EPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP was effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the U.S. EPA through the CTR. The SIP requires the dischargers' submittal of data sufficient to conduct the determination of priority pollutants requiring water quality-based effluent limits (WQBELs) and to calculate the effluent limitations. The CTR criteria for fresh water or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations in this Order to protect the beneficial uses of the Los Angeles River.

17. Under 40 CFR 122.44(d), Water Quality Standards and State Requirements, "Limitations must control all pollutants or pollutant parameters (either conventional, non-conventional, or toxic pollutants), which the Director [permitting authority] determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." Where numeric effluent limitations for a pollutant or pollutant parameter have not been established in the applicable state water quality control plan, 40 CFR section 122.44(d)(1)(vi) specifies that WQBELs may be set based on U.S. EPA criteria, and may be

supplemented where necessary by other relevant information to attain and maintain narrative water quality criteria, and to fully protect designated beneficial uses.

18. Effluent limitation guidelines requiring the application of BPT, best conventional pollutant control technology (BCT), and BAT, were promulgated by the U.S. EPA for some pollutants in this discharge. Effluent limitations for pollutants not subject to the U.S. EPA effluent limitation guidelines are based on one of the following: best professional judgment (BPJ) of BPT, BCT or BAT; current plant performance; or WQBELs. The WQBELs are based on the Basin Plan, other State plans and policies, or U.S. EPA water quality criteria which are taken from the CTR. These requirements, as they are met, will protect and maintain existing beneficial uses of the receiving water. The attached fact sheet for this Order includes specific bases for the effluent limitations.

19. 40 CFR section 122.45(f)(1) requires that except under certain conditions, all permit limits, standards, or prohibitions be expressed in terms of mass units. 40 CFR section 122.45(f)(2) allows the permit writer, at his its discretion, to express limits in additional units (e.g., concentration units). The regulations mandate that, where limits are expressed in more than one unit, the permittee must comply with both.

    Generally, mass-based limits ensure that proper treatment, and not dilution is employed to comply with the final effluent concentration limits. Concentration-based effluent limits, on the other hand, discourage the reduction in treatment efficiency during low-flow periods and require proper operation of the treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low-flow periods and still meet its mass-based limits. To account for this, this permit includes mass and concentration limits.

20. Code of Regulations, Title 40 (40 CFR) – Protection of Environment, Chapter I, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-125 and Subchapter N, Effluent Guidelines. These CWA regulations provide effluent limits for certain dischargers and establish procedures for NPDES permitting, including how to establish effluent limits for certain pollutants discharged by Kaiser.

21. CFR Part 467 established Effluent Limitation Guidelines and Standards for the Aluminum Forming Point Source Category. These regulations provide effluent guidelines for various constituents common in wastewaters from aluminum forming facilities. These guidelines were considered in the development of various effluent limits established in this permit.

22. State and Federal antibacksliding and antidegradation policies require Regional Board actions to protect the water quality of a water body and to ensure that the waterbody will not be further degraded. The antibacksliding provisions are specified in section 402(o) and 303 (d)(4) of the Clean Water Act (CWA) and in Title 40, Code of Federal Regulations (40 CFR), section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions where effluent limitations may be relaxed.

23. Effluent limitations are established in accordance with sections 301, 304, 306, and 307 of the CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of the Los Angeles River.

Watershed Management Approach and Total Maximum Daily Loads (TMDLs)

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

25. The Trash TMDL for the Los Angeles River Watershed, was adopted by the Regional Board on September 19, 2001. It designates Waste Load Allocations for Permittees and Co-Permittees of the Los Angeles County Municipal Storm water Permit that are located within (entirely or partially) the Los Angeles River Watershed. Waste Load allocations are based on a phased reduction from the estimated current discharge over a 10-year period until the final Waste Load Allocation (currently set at zero) is met. Because the discharge from this facility is comprised of process water (i.e., contact and non-contact cooling water), reverse osmosis concentrate, and some storm water from an aluminum forming facility, it is not likely to contribute trash to the Los Angeles River Watershed. However, because the facility discharges to the Los Angeles County municipal separate storm sewer system, Los Angeles County may invoke requirements on the facility in order to meet the waste load allocation.

26. The 2002 State Board's California 303(d) List classifies the Los Angeles River (Reach 2) as impaired. The pollutants of concern include ammonia, high coliform count, lead, nutrients (algae), odors, oil, and scum/foam.

Data Availability and Reasonable Potential Monitoring

27. 40 CFR 122.44(d)(1)(ii) requires that each toxic pollutant be analyzed with respect to its reasonable potential when determining whether a discharge (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality objective. This is done by performing a reasonable potential analysis (RPA) for each pollutant.

28. Section 1.3 of the SIP requires that a limit be imposed for a toxic pollutant if (1) the maximum effluent concentration (MEC) is greater than the most stringent CTR criteria, or (2) the background concentration is greater than the CTR criteria, or (3) other information is available. Sufficient effluent data are needed for this analysis.

29. Certain effluent limitations have been established based on the revised water quality criteria contained in the CTR and the requirements contained in Section 1.4 of the SIP. This Order will require the Discharger to monitor the effluent and the receiving water annually for priority pollutants to provide the data necessary to complete an RPA for all priority pollutants.

30. In accordance with section 13267 of the California Water Code, the Regional Board, required the Discharger to conduct an interim monitoring program of the effluent and the receiving water for 7 quarters. Data sets for effluent for the period from September 2001 though February 2003 were available. In addition, samples for certain priority pollutants were collected as required by the existing Monitoring and Reporting Program (*M&RP*); these data were also used to complete the RPA. The available effluent data were used to evaluate the reasonable potential of the priority pollutants and to calculate the effluent limitations. Based on the RPA, there is reasonable potential to exceed water quality standards at Discharge Serial No. 001 for copper, lead, mercury, selenium, zinc, and bis(2-ethylhexyl)phthalate. Thus, effluent limitations and monitoring requirements for copper, lead, mercury, selenium, zinc, and bis(2-ethylhexyl)phthalate have been established. Further, the previous limits for cadmium, nickel, and silver have been revised, since they are still considered pollutants of concern in Kaiser's discharge.

Compliance Schedules and Interim Limitations

31. Based on effluent monitoring data submitted by the Discharger, a comparison between the MEC and calculated AMEL values shows that the Discharger may be unable to consistently comply with effluent limitations established in the proposed Order for copper, lead, selenium, zinc, and mercury. Hence, interim limits have been prescribed for these constituents. As a result, this Order contains a compliance schedule that allows the Discharger up to three years to comply with the revised effluent limitations. Within one year after the effective date of the Order, the Discharger must prepare and submit a compliance plan that describes the steps that will be taken to ensure compliance with applicable limitations.

32. The SIP requires that the Regional Board establish other interim requirements such as requiring the discharger to develop a pollutant minimization plan and/or source control measures and participate in the activities necessary to achieve the final effluent limitations. These interim limitations shall be effective until December 31, 2007, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

33. The Discharger also will be required to develop and implement a compliance plan that will identify the measures that will be taken to reduce the concentrations of copper, lead, zinc, and bis(2-ethylhexyl)phthalate in their discharge. This plan should evaluate options to achieve compliance with the revised permit limitations. These options can include, for

example, evaluating the need for a treatment system and identifying and eliminating sources of pollution.

CEQA and Notifications

34. The Regional Board has notified the Discharger and interested agencies and persons of its intent to issue waste discharge requirements for this discharge, and has provided them with an opportunity to submit their written views and recommendations.

35. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.

36. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to section 402 of the Federal Clean Water Act or amendments thereto, and is effective 30 days (February 26, 2005) from the date of its adoption, in accordance with federal law, provided the Regional Administrator, U.S. EPA, has no objections.

37. Pursuant to California Water Code section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, Office of Chief Counsel, ATTN: Elizabeth Miller Jennings, Senior Staff Counsel, 1001 I Street, 22nd Floor, Sacramento, California, 95814, within 30 days of adoption of this Order.

38. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) in accordance with the California Water Code, section 13389.

IT IS HEREBY ORDERED that Kaiser Aluminum and Chemical Corporation, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted there under, shall comply with the following:

I. DISCHARGE REQUIREMENTS

A. Discharge Prohibitions

1. Wastes discharged shall be limited to a maximum of 605,000 gpd of industrial process wastewater and storm water as described in the findings. The discharge of wastes from accidental spills or other sources is prohibited.

2. 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, Los Angeles River, or other waters of the State, are prohibited.

B. Effluent Limitations

The discharge of an effluent in excess of the following limitations is prohibited:

1. A pH value less than 7 or greater than 8.5.

2. Temperature:

   a. A temperature greater than 86 °F; and

   b. The maximum temperature of the discharge shall not exceed the natural receiving water temperature by more than 20 °F.

3. Toxicity limitations:

   a. Acute Toxicity Limitation and Requirements

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

      ii. If either of the above requirements [Section I.B.3.a.(i)] 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 acute 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 result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing. However if the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the source(s) of toxicity. Once the source(s) of toxicity is identified, the Discharger shall take all reasonable steps to reduce the toxicity to meet the objective.

      iii. 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.

      iv. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program No. 6010.

4. Final effluent limitations: In addition to the Requirements I.B.1 through I.B.3, the discharge of industrial process wastewater and storm water from Discharge

Serial No. 001 (Latitude 33• 59' 16", Longitude 118• 08' 50") containing constituents in excess of the following limits is prohibited:

Pollutant	Units	Average Monthly [1]	Maximum Daily
Total dissolved solids [3]	mg/L	--	1,500
BOD_5 @ 20°C [3]	mg/L	20	30
Total suspended solids [4]	mg/L	26.84 [1]	56.41 [1]
	lbs/day [2]	27.98	58.81
Oil and grease [4]	mg/L	--	15
	lbs/day [2]	17.21	28.69
Aluminum [4,5]	mg/L	--	1
	lbs/day [2]	1.32	2.67
Cyanide [4,5]	µg/L	4.3	8.5
	lbs/day [2]	0.05	0.12
Chromium (total) [4,5]	µg/L	--	50
	lbs/day [2]	0.075	0.18
Arsenic [3,5]	µg/L	--	50
Cadmium [3,5]	µg/L	1.4	2.8
Copper [3,5]	µg/L	4.6	9.3
Lead [3,5]	µg/L	1.5	3
Mercury [3]	µg/L	0.051	0.102
Nickel [3,5]	µg/L	29.7	59.5
Selenium [3]	µg/L	4.1	8.2
Silver [3,5]	µg/L	0.96	1.9
Zinc [3,5]	µg/L	41.5	83.2
	lbs/day [2]	0.041	0.086
Bis(2-ethylhexyl)Phthalate	µg/L	5.9	11.8
Acute Toxicity [3]	% survival	--	[6]

[1] The monthly average concentration shall be the arithmetic average of all the values of daily concentrations calculated using the results of analyses of all samples collected during the month. If only one sample is taken in that month, compliance shall be based on this sample result.

[2] Mass-based effluent limitations for pollutants are based on a maximum discharge flow rate of 125,000 gpd. The mass emission (in lb/day) for the discharge shall be calculated and reported using the limitation concentration and the actual flow rate measured at the time of discharge, using the formula:

$m = 8.34\ C_i Q$

where: m = mass discharge for a pollutant, lb/day
C_i = limitation concentration for a pollutant, mg/L
Q = actual discharge flow rate, mgd

[3] Applicable to total combined effluent (industrial process waste water, reverse osmosis condensate, and storm water).

[4] Applicable at Sample Point 001 (industrial process waste water only, not including storm water or reverse osmosis condensate).

[5] Effluent limitations for these metals are expressed as total recoverable.

[6] For any three consecutive 96-hour static or continuous flow bioassay tests must be at least 90%, with no single test producing less than 70% survival (more information can be found in Section I.B.3.a. of the tentative permit.)

5. Interim Effluent Limitations. From the effective date of this Order until December 31, 2007, the discharge of an effluent in excess of the following limitations is prohibited:

Pollutant (units)	Daily Maximum Concentration
Copper (µg/L)[1]	65
Lead (µg/L) [1]	50
Selenium (µg/L)	8.9
Zinc (µg/L) [1]	85
Mercury (µg/L)	0.49
Bis(2-ethylhexyl)Phthalate (µg/L)	6.99

[1] Discharge limitations for these metals are expressed as total recoverable.

Discharges after December 31, 2007, must comply with the limits for these constituents stipulated in the table in section I.B.4.

C. Receiving Water Limitations

1. The discharge shall not cause the following conditions to exist in the receiving waters:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam;

   b. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   c. Visible, floating, suspended or deposited oil or other products of petroleum origin;

   d. Bottom deposits or aquatic growths; or,

   e. Toxic or other deleterious substances present in concentrations or quantities that 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.

2. The discharge shall not cause nuisance or adversely affect beneficial uses of the receiving water.

3. No discharge shall cause a surface water temperature rise greater than 5°F above the natural temperature of the receiving waters at any time or place.

4. The discharge shall not cause the following limits to be exceeded in the receiving waters at any place within the waterbody of the receiving waters:

   a. The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units;

   b. Dissolved oxygen shall not be less than 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation;

   c. Dissolved sulfide shall not be greater than 0.1 mg/L;

   d. The ammonia limits in the 1994 Basin Plan were revised by Regional Board Resolution No. 2002-011, adopted on April 28, 2002, to be consistent with the 1999 U.S. EPA update on ammonia criteria. Regional Board Resolution No. 2002-011 was approved by State Board, OAL and U.S. EPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively and is now in effect. Total ammonia (as N) shall not exceed concentrations specified in the Regional Board Resolution 2002-011.

5. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or State Board. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Regional Board will revise or modify this Order in accordance with such standards.

6. The discharge shall not cause the following to be present in receiving waters:

   a. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses;

   b. Chemical substances in amounts that adversely affect any designated beneficial use;

c. 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;

d. Suspended or settleable materials in concentrations that cause nuisance or adversely affect beneficial uses;

e. 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;

f. Substances that result in increases of $BOD_5 20^0C$ that adversely affect beneficial uses;

7. The discharge shall not alter the color, create a visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters.

8. The discharge shall not degrade surface water communities and population including vertebrate, invertebrate, and plant species.

9. The discharge shall not damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload their design capacity.

10. The discharge shall not cause problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.

II. REQUIREMENTS

A. Compliance Plan

1. The Discharger shall develop and implement a compliance plan that will identify the measures that will be taken to reduce the concentrations of copper, selenium, silver, zinc, and bis(2-ethylhexyl)phthalate in their discharge. This plan must evaluate options to achieve compliance with the permit limitations specified in provision I.B.4.

2. The Discharger shall submit annual reports to describe the progress of studies and or actions undertaken to reduce copper, lead, selenium, zinc, mercury, and bis(2-ethylhexyl)phthalate in the effluent, and to achieve compliance with the limits in this Order by the deadline specified in provision I.B.5. The Regional Board shall receive the first annual progress report at the same time the annual summary report is due, as required in Section I.B of *M&RP* No. CI-6010.

3. The Discharger shall develop a pollutant minimization program (PMP) to maintain effluent concentrations of mercury and selenium at or below the

effluent limitations specified in provision I.B.4. The PMP shall include the following:

a. Annual review and semi-annual monitoring of the potential sources of mercury;

b. Quarterly monitoring of the influent to the wastewater treatment system;

c. Submittal of a control strategy designed to proceed toward the goal of maintaining effluent concentrations at or below the effluent limitation;

d. Implementation of appropriate cost-effective control measures consistent with the control strategy;

e. An annual status report that shall be sent to the Regional Board at the same time the annual summary report is submitted in accordance with Section I.B of Monitoring and Reporting Program No. 6010, and include:
   - All PMP monitoring results for the previous year
   - A list of potential sources of mercury and selenium
   - A summary of all actions undertaken pursuant to the control strategy
   - A description of actions to be taken in the following year.

4. The interim limits stipulated in Section I.B.5 shall be in effect for a period not to extend beyond December 31, 2007. Thereafter, the Discharger shall comply with the limitations specified in Section I.B.4 of this Order.

B. The Discharger shall submit, within 90 days of the effective date of this Order:

A *Storm Water Pollution Prevention Plan* (SWPPP) that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The SWPPP shall be developed in accordance with the requirements in Attachment M. Under the SWPPP, the Discharger shall implement or require the implementation of the most effective combination of BMPs for storm water pollution control. When implemented, BMPs are intended to result in the reduction of pollutants in storm water to the maximum extent practicable.

The SWPPP shall cover all areas of the facility and shall include an updated drainage map for the facility. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge points; describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material; and address the feasibility of containment and/or treatment of the storm water. The plan shall be reviewed annually. Updated information shall be submitted within 30 days of revision.

C. Pursuant to the requirements of 40 CFR 122.42(a), the Discharger must notify the Board as soon as it knows, or has reason to believe (1) that it has begun or expected to begin, to use or manufacture a toxic pollutant not reported in the permit application, or (2) a discharge of toxic pollutant not limited by this Order has occurred, or will occur, in concentrations that exceed the specified limits in 40 CFR 122.42(a).

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

E. The Discharger shall comply with the waste load allocations that will be developed from the TMDL process for the 303(d)-listed pollutants.

F. 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.

G. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream which ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.

H. The Discharger shall notify the Executive Officer in writing no later than six months prior to the planned discharge of any chemical, other than chlorine or other product previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

   a. Name and general composition of the chemical,
   b. Frequency of use,
   c. Quantities to be used,
   d. Proposed discharge concentrations, and
   e. U.S. EPA registration number, if applicable.

   No discharge of such chemical shall be made prior to the Executive Officer's approval.

I. The Regional Board and U.S. EPA shall be notified immediately, by telephone, of the presence of adverse conditions in the receiving waters as a result of wastes discharged; written confirmation shall follow as soon as possible but not later than five working days after occurrence.

III. PROVISIONS

A. This Order includes the attached *Standard Provisions and General Monitoring and Reporting Requirements* (Standard Provisions, Attachment N). If there is any conflict

between provisions stated herein and the attached Standard Provisions, those provisions stated herein shall prevail.

B. This Order includes the attached *M&RP* No. CI-6010. If there is any conflict between provisions stated in the *M&RP* and the Standard Provisions, those provisions stated in the former shall prevail.

C. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

D. 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 Board to local agencies.

E. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.

F. 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, and 423 of the Federal Clean Water Act and amendments thereto.

G. Compliance Determination

1. Compliance with 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 II.C. of *M&RP)*, then the Discharger is out of compliance.

2. Compliance with monthly average limitations – In determining compliance with monthly average limitations, the following provisions shall apply to all constituents:

   a. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the monthly average limit for that constituent, the Discharger has demonstrated compliance with the monthly average limit for that month.

b. If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the monthly average limit for any constituent, the Discharger shall collect up to four additional samples at approximately equal intervals during the month. All 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 II.C. of *M&RP*), the numerical average of the analytical results of these 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 III. D. of *M&RP*), the median value of these 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.

c. In the event of noncompliance with a monthly average effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the monthly average effluent limitation has been demonstrated.

d. If only one sample was obtained for the month or more than a monthly period and the result exceed the monthly average, then the Discharger is in violation of the monthly average limit.

3. Compliance with 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.

4. Compliance with 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

a. If the number of measurements (n) is odd, then the median will be calculated as = $X_{(n+1)/2}$, or

b. 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.

H. In calculating mass emission rates from the monthly average concentrations, use one half of the method detection limit for "Not Detected" (ND) and the estimated

concentration for "Detected, but Not Quantified" (DNQ) for the calculation of the monthly average concentration. To be consistent with section III.G.3., if all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant concentrations should be considered as zero for the calculation of the monthly average concentration.

IV. REOPENERS

A. 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.

B. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.

C. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, 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 also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 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 and permit, and endangerment to human health or the environment resulting from the permitted activity.

V. EXPIRATION DATE

This Order expires on December 10, 2009.

The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

V. RESCISSION

Order No. 99-044, adopted by this Regional Board on May 27, 1999, is hereby rescinded except for enforcement purposes.

I, Jonathan S. Bishop, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on January 27, 2005.

_____
Jonathan S. Bishop
Executive Officer