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

ORDER NO. R4-2003-0148 NPDES PERMIT NO. CA0064050

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR EMERY AIR FREIGHT (Formerly PTI Technologics)

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

Background

- Emery Air Freight (hereinafter Emery or Discharger) discharges treated groundwater under waste discharge requirements (WDRs) contained in Order No. 96-090 (NPDES No. CA0064050) adopted by the Regional Board on December 9, 1996, CI-7743.
- 2. Emery has filed a report of waste discharge and has applied for renewal of its WDRs and NPDES permit for discharge of wastes to surface waters.

Purpose of Order

3. The purpose of this Order is to renew the WDRs for the Emery facility. This NPDES permit regulates the discharge of treated groundwater through Discharge Serial No. 001, to a storm drain which then conveys the wastewater to Arroyo Conejo, a water of the United States. The point of discharge for the treated groundwater is located at Latitude 34°11'30", Longitude 118°55'30".

Facility Description

4. Emery is the owner and operator of a vacant site located at 950 Conejo Boulevard in Newbury Park, California (Figure 1). The facility is an unmanned remediation project extracting and treating groundwater contaminated by leaking underground storage tanks that were previously used in the process of manufacturing aerospace filter components. Previous investigations of the site indicated elevated concentrations of volatile organic compounds. The contaminants of concern included tetrachloroethene (PCE), trichoroethene (TCE) and isopropyl alcohol. Remedial measures began in February 1997 to remove contaminated groundwater from the shallow and deeper aguifers underlying the site.

Discharge Description

- 5. Contaminated groundwater is withdrawn through seven extraction wells located on the site. The extracted groundwater is then pumped through high pressure reinforced piping to the treatment facility. At the treatment facility, extracted groundwater is passed through a porous paper prefilter to removed sediment and then treated with two granular activated carbon (GAC) canisters arranged in series (Figure 2).
- 6. The maximum daily discharge flow rate is 3,000 gallons per day (gpd). Emery discharges the treated groundwater to the storm drain located at the intersection of Rancho Conejo Boulevard and Amgen Center Drive, which then conveys the wastewater to Arroyo Conejo, through Discharge Serial No. 001. Arroyo Conejo is tributary to Conejo Creek, Calleguas Creek, and Mugu Lagoon, a water of the United States, above the estuary.

Storm Water Management

7. Emery Air Freight will be required to comply with all applicable provisions of the Storm Water Pollution Prevention Plan (SWPPP) Requirements (Attachment A) referenced in Requirement II.A.1. This plan includes requirements to develop, implement and when appropriate update the SWPPP along with Best Management Practices (BMPs) that will prevent all pollutants from contacting storm water and with the intent of keeping all contaminants of concern from moving into receiving waters.

Applicable Plans, Policies, and Regulations

- 8. 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.
- 9. 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).

10. The immediate receiving body for the permitted discharge covered by this permit is a storm drain that conveys the wastewater approximately ¾ miles to Arroyo Conejo. The Basin Plan contains beneficial uses and water quality objectives for the Arroyo Conejo and other tributary receiving water bodies. The beneficial uses listed are:

Arroyo Conejo – Hydro Unit No. 403.64

Existing: wildlife habitat, and preservation or rare, threatened of endangered species.

Intermittent: ground water recharge, freshwater replenishment, contact and non-contact

water recreation, and warm freshwater habitat.

Potential: municipal and domestic water supply.

Conejo Creek – Hydro Unit No. 403.63

Existing: wildlife habitat, spawning.

Intermittent: groundwater recharge, freshwater habitat, contact and non-contact water

recreation, warm freshwater habitat.

Potential: municipal and domestic water supply.

Calleguas Creek – Hydro Unit No. 403.12

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

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

habitat, and wildlife habitat.

Potential: municipal and domestic water supply.

Calleguas Creek – Hydro Unit No. 403.11

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

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

and wetland habitat.

Potential: municipal and domestic water supply.

Calleguas Creek Estuary – Hydro Unit No. 403.11

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

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

development, and wetland habitat.

Potential: contact water recreation and navigation.

Mugu Lagoon – Hydro Unit No. 403.11

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

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

harvesting, and wetland habitat.

Potential: contact water recreation.

The potential beneficial use of MUN for the above listed reaches is consistent with Regional Board Resolution 89-03; however the Regional Board has only conditionally designated the MUN beneficial uses and at this time cannot establish effluent limitations designed to protect the conditional designation.

- 11. 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.
- 12. On May 18, 2000, the U.S. Environmental Protection Agency (USEPA) 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, USEPA 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 provides a schedule of compliance not to exceed 5 years from the date of permit issuance for a point source discharge if the Discharger demonstrates that it is infeasible to promptly comply with the CTR criteria.
- 13. 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 USEPA 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 USEPA 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 USEPA 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 Arroyo Conejo.
- 14. 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 USEPA 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.

- 15. Effluent limitation guidelines requiring the application of best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT), were promulgated by the USEPA for some pollutants in this discharge. Effluent limitations for pollutants not subject to the USEPA 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 USEPA 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.
- 16. 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.

- 17. 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) of the Clean Water Act (CWA). Those provisions require a reissued permit to be as stringent as the previous permit with two exceptions, one found in section 402 (o) (2) and the other in section 402 (o) (3). Section 402 (d) (4) indicates that antibacksliding is permitted for waters that attain water quality standards as long as federal antidegradation requirements are met. Under Section 402 (o) (2), less stringent limits based on water quality may be allowed where:
 - There have been material and substantial alterations or additions to the permitted facility which justify the relaxation
 - Good cause exists due to events beyond the permittee's control and for which there is no reasonable available remedy.
 - The permittee has installed and properly operated and maintained treatment facilities but still has been unable to meet the permit limitations (relaxation may only be allowed to the treatment levels actually achieved).

 New information (other than revised regulations, guidance or test methods) justifies relaxation of water quality-based permit limitations.

Section 402 (o) (3) prohibits the relaxation of effluent limitations in all cases if a revised effluent limitation would result in a violation of applicable effluent limitation guidelines or water quality standards, including antidegradation requirements.

18. 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 Arroyo Conejo.

Watershed Management Approach and Total Maximum Daily Loads (TMDLs)

- 19. 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.
- 20. Calleguas Creek and its major tributaries, Revlon Slough, Conejo Creek, Arroyo Conejo, Arroyo Santa Rosa, and Arroyo Simi drain an area of 343 square miles in southern Ventura County and a small portion of Western Los Angeles County. The 2002 Clean Water Act Section 303(d) List of Water Quality Limited Segments classifies Revlon Slough, Conejo Creek, Calleguas Creek, Calleguas Creek Estuary, and Mugu Lagoon as impaired. The pollutants of concern, detected in the water column, in the sediment, and in the fish tissue, include algae, ammonia, Chem A [refers to the sum of aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene], chlordane, copper, dacthal, DDT, endosulfan, fecal coliform, chloride, nitrate plus nitrite, boron, chloropyrifos, selenium, trash, HCH, mercury, nickel, nitrogen, PCBs, sediment toxicity, silver, sulfate, total dissolved solids, toxaphene, toxicity, sedimentation/siltation, and zinc.
- 21. Section 303(d) of the CWA requires that TMDLs must be developed for the pollutants of concern which impact the water quality of water bodies on the 303(d) list. Under the March 23, 1999, amended consent decree between the USEPA and Heal the Bay, et al., (Case No. C 98-4825 SBA, Heal the Bay, Santa Monica Bay Keeper, et al. v. Browner, et.al.), TMDLs for chloride in Calleguas Creek must be completed by March 2002; nutrients by March 2002; pesticides, historic pesticides, and PCBs by March 2005; and metals by 2006. The remaining TMDLs, such as sulfates are tentatively scheduled for completion in the 2003/2004 fiscal year.

<u>Chloride TMDL and Chloride Limits.</u> On March 22, 2002, the consent decree deadline for the establishment of a chloride TMDL, USEPA Region 9 established the Calleguas Creek Total Maximum Daily Load for chloride. The applicable WLAs for the Discharger have been incorporated into this Order.

Nitrogen Compounds and Related Effects TMDL. On October 24, 2002, the Regional Board adopted Resolution No. 2002-017, Amendment to the Basin Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds and Related Effects in Calleguas Creek (Nitrogen Compounds and Related Effects TMDL). The State Board, Office of Administrative Law and the U.S.EPA approved the Nitrogen Compounds and Related Effects TMDL on March 19, 2003, June 5, 2003 and June 20, 2003 respectively. The TMDL includes WLA for the wastewater treatment plants and LA for agricultural discharges only. Because of the insignificant contribution to the total loading of nutrients to the watershed from the Discharger, no WLAs were developed for the Discharger.

Data Availability and Reasonable Potential Monitoring

- 22. 40 CFR 122.44(d)(1)(i) and (ii) require that each toxic pollutant be analyzed with respect to its reasonable potential to (1) cause; (2) have the reasonable potential to cause; or (3) contribute to the exceedance of a receiving water quality objective. This is done by performing a reasonable potential analysis (RPA) for each pollutant.
- 23. 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.
- 24. Regional Board staff has determined that pollutants that have effluent limits in the current permit will be included in this permit. 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 permit also includes requirements for additional monitoring to provide the data needed to perform an RPA on all of the priority pollutants.
- 25. An RPA was completed using the data collected at the site for the period February 1997 through March 2003 to determine if any of the constituents in the discharge from the site have a reasonable potential to exceed applicable water quality standards. Based on the RPA, there was reasonable potential to exceed water quality standards for copper, chromium VI, lead, mercury, nickel, selenium, and thallium.

Compliance Schedules and Interim Limitations

26. The Emery facility may not be able to achieve immediate compliance with the WQBELs for chromium VI, copper, mercury, nickel, selenium, and thallium contained in Section I.B.4. of this Order. Data submitted in self-monitoring reports indicate that these constituents have been detected at concentrations greater than the new limit proposed in this Order.

- 27. 40 CFR 131.38(e) provides conditions under which interim effluent limits and compliance schedules may be issued. The CTR and SIP allow inclusion of an interim limit with a specific compliance schedule included in a NPDES permit for priority pollutants if the limit for the priority pollutant is CTR-based. Interim limits have been included in this Order for chromium VI, copper, mercury, nickel, selenium, and thallium.
- 28. 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 November 30, 2007, after which, the Discharger must demonstrate compliance with the final effluent limitations.

According to the SIP, pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. Mercury has strong bioaccumulative properties and can cause adverse human health impacts, and because the RPA determined that it could exceed the WQBELs, this permit requires that the Discharger develop and implement a pollution minimization plan for mercury.

CEQA and Notifications

- 29. 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.
- 30. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.
- 31. 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 shall take effect at the end of 10 days from the date of its adoption provided the Regional Administrator, USEPA, has no objections.
- 32. 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.
- 33. 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 Emery Worldwide, Newbury Park Facility, 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 3,000 gallons per day (gpd) of treated groundwater.
- 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, Arroyo Conejo, or 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 6.5 or greater than 8.5.
- 2. A temperature greater than 80°F.
- 3. Final effluent limitations: In addition to the Requirements I.B.1 through I.B.3, the discharge of treated groundwater through Discharge Serial No. 001 containing constituents in excess of the following limitations is prohibited:

Constituent	- Units	Maximum Daily Discharge Limitations		Average Monthly Discharge Limitations	
	Ullits	Concentration	Mass ¹ (lbs/day)	Concentration	Mass ¹ (lbs/day)
Turbidity	NTU	75		50	
Settleable solids	ml/L	0.3		0.1	
Total suspended solids	mg/L	75	0.2	50	0.1
Oil and grease	mg/L	15	0.04	10	0.02
BOD ₅ @ 20°C	mg/L	30	0.07	20	0.05
Total dissolved solids	mg/L	1,250	3.0		
Sulfate	mg/L	250	0.6		
Chloride ²	mg/L	136	0.33		
Chloride ³	mg/L	124	0.30		
Boron	mg/L	1.0	0.002		
Nitrate + Nitrite (as Nitrogen)	mg/L	10	0.02		
Residual chlorine ⁴	mg/L	0.1	0.0002		
Sulfides	mg/L	1.0	0.002		
Total Phenols	mg/L	1	0.000002		
Phenolic compounds (chlorinated) ⁵	μg/L	1	0.000002		
Benzene	μg/L	1	0.000002		
Toluene	μg/L	10	0.00002		
Xylene	μg/L	10	0.00002		
Ethylbenzene	μg/L	10	0.00002		
Dichlorobromomethane	μg/L	100	0.0002		
Carbon tetrachloride	μg/L	0.5	0.000001		
1,1-Dichloroethane	μg/L	5	0.00001		
1,2-Dichloroethane	μg/L	0.5	0.000001		
1,1,1-Trichloroethane	μg/L	5	0.00001		

Constituent	Units	Maximum Daily Discharge Limitations		Average Monthly Discharge Limitations	
		Concentration	Mass ¹ (lbs/day)	Concentration	Mass ¹ (lbs/day)
1,1-Dichloroethylene	μg/L	6	0.00001		1
Trans 1,2-Dichloroethylene	μg/L	10	0.00002		1
Trichloroethylene	μg/L	5	0.00001		-
1,1,2-Trichloro-1,2,2-Triflouroethane	mg/L	1.2	0.003		
Tetrachloroethylene	μg/L	5	0.00001		-
Vinyl chloride	μg/L	0.5	0.000001		1
TCDD	μg/L	2.04x10 ⁻⁸	4.93x10 ⁻¹⁴	1.4x10 ⁻⁸	3.39x10 ⁻¹⁴
Arsenic ⁶	μg/L	50	0.0001		
Cadmium ^{6,7}	μg/L	10	0.00002		
Chromium VI 67	μg/L	16.3	0.000004	11.2	0.00003
Copper ⁶	μg/L	22	0.00005	13	0.00003
Lead ⁶	μg/L	9.5	0.00002	6.5	0.00002
Mercury ^{6,7}	μg/L	0.07	1.8 x 10 ⁻⁷	0.051	1.2 x10 ⁻⁷
Nickel ^{6,7}	μg/L	130	0.0003	87	0.0002
Selenium 6,7	μg/L	8	0.00002	5.6	0.00001
Silver ⁶	μg/L	50	0.001		
Thallium ^{6,7}	μg/L	9	0.00002	6.3	0.00002

¹ The mass-based effluent limitations for pollutants are based on a maximum discharge flow rate of 290 gpd. If the flowrate is different the mass limits should be realculated using the following equation.

m = 8.34 * C * Q where:

m = mass limit for a pollutant in lbs/day

C = concentration limit for a pollutant, mg/L

Q = maximum discharge flow rate, mgd

4. Interim Effluent Limitations. From the effective date of this Order until November 30, 2007 the discharge of an effluent in excess of the following limitations is prohibited:

	Discharge Limitations (Maximum Daily)			
Constituents	Concentration (μg/L)	Mass ¹ (lbs/day)		
Chromium VI ²	43	0.000104		
Copper ²	22	0.00006		
Mercury ²	0.27	6.5E-07		
Nickel ²	170	0.0004		
Selenium ²	10	0.000022		
Thallium ²	58	0.00014		

² This is the wasteload allocation (WLA) under routine conditions, according to the Chloride TMDL promulgated by USEPA on March 22, 2002.

³ This is the wasteload allocation (WLA) under drought conditions, according to the Chloride TMDL promulgated by USEPA on March 22, 2002.

⁴If chlorine is used.

⁵Phenolic compounds include the sum of the following individual chlorinated phenolic compounds: 2-chlorophenol; 2-nitrophenol; phenol; 2,4-dimethylphenol; 2,4-dichlorophenol; 2,4-diritrophenol; 2-methyl-4,6-dinitrophenol; pentachlorophenol; and 4-nitrophenol

⁶ Discharge limitations for these metals are expressed as total recoverable.

⁷The interim limits in Section I.B.5 below are applicable from the date of adoption of the Order through November30, 2007.

Discharges after November 30, 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 to be present 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.

2. Toxicity limitations:

- a) Acute Toxicity Limitation and Requirements
 - (1) The acute toxicity of the effluent shall be such that (i) the average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival.
 - (2) If either of the above requirements (Section C.2.a.1) is not met, the Discharger shall conduct six additional tests over a six-week period. The Discharger shall ensure that they receive results of a failing acute toxicity test within 24 hours of the 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.

¹ The mass-based effluent limitations are based on a flow rate of 290 gpd.

² Discharge limitations for these metals are expressed as total recoverable.

- (3) 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.
- (4) The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program No. 7743.
- b) Chronic Toxicity Limitation and Requirements
 - (1) This Order includes a chronic testing toxicity trigger defined as an exceedance of $1.0~{\rm TU_c}$ in a critical life stage test for 100% effluent. (The monthly median for chronic toxicity of 100% effluent shall not exceed, 1 ${\rm TU_c}$ in a critical life stage test.)
 - (2) If the chronic toxicity of the effluent exceeds 1.0 TU_c, the Discharger shall immediately implement accelerated chronic toxicity testing according to Monitoring and Reporting Program 7743, Item IV.B.1. If the results of two of the six accelerated tests exceed 1.0 TU_c, the Discharger shall initiate a TIE and implement the Initial investigation TRE Workplan.
 - (3) The Discharger shall conduct chronic toxicity monitoring as specified in Monitoring and Reporting Program No. 7743.
 - (4) The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:

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

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

- (5) Preparation of an Initial Investigation TRE Workplan
 - i. The Discharger shall submit a copy of the Discharger's initial investigation Toxicity Reduction Evaluation (TRE) workplan (1-2 pages) to the Executive Officer of the Regional Board for approval within 90 days of the effective date of this permit. If the Regional Board Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use EPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum, the elements described in ii through iv below.

- A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency;
- iii. A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility; and
- iv. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor) (Section IV.E.3. of Monitoring and Reporting Program No. 7743 provides references for the guidance manuals that should be used for performing TIEs.)
- 3. The discharge shall not cause nuisance, or adversely effect beneficial uses of the receiving water.
- 4. 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. At no time shall these WARM-designated waters be raised above 80°F as a result of waste discharges.
- 5. The discharge shall not cause the following limitations 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 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.

II. REQUIREMENTS

- A. The Discharger shall develop and implement, within 90 days of the effective date of this Order:
 - 1. 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 A.

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 and updated information shall be submitted within 30 days of revision.

B. Compliance Plan

- The Discharger shall develop and implement a compliance plan that will identify the
 measures that will be taken to reduce the concentrations of chloride, total dissolved
 solids, chromium VI, nickel, selenium, and thallium 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 chloride, total dissolved solids, chromium VI, nickel, selenium, and thallium 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 Monitoring and Reporting Program No. 7743.
- 3. The Discharger shall develop a pollutant minimization program (PMP) to maintain effluent concentrations of chromium VI, copper, mercury, nickel, selenium, and thallium 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. 7743, and include:
 - All PMP monitoring results for the previous year
 - A list of potential sources of mercury
 - 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 November 30, 2007. Thereafter, the Discharger shall comply with the limitations specified in Section I.B.4 of this Order.
- 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 limitations in 40 CFR 122.42(a).

D. 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 III. A. 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 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 III. A. of M&RP), 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 II. C. of M&RP), 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.

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 and greater than or equal to the reported Minimum Level, 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.
- E. 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 II.B.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.
- F. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.
- G. The Discharger shall comply with the waste load allocations that will be developed from the TMDL process for the 303 (d) listed pollutants.
- H. 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.
- I. 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.
- J. There shall be no discharge of PCB compounds such as those once commonly used for transformer fluid.

- K. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to planned discharge of any chemical, 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. USEPA registration number, if applicable.

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

L. The Regional Board and USEPA shall be notified immediately by telephone, of the presence of adverse conditions in the receiving waters or on beaches and shores 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 Monitoring and Reporting Program No. 7743. If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former shall prevail.
- C. This Order includes the attached *Storm Water Pollution Prevention Plan Requirements* (Attachment A).
- D. Storm water runoff discharges from the site are subject to requirements stipulated in this NPDES permit and the Discharger will be required to comply with all applicable provisions of the Storm Water Pollution Prevention Plan (Attachment A). This plan includes requirements to develop, implement, and when appropriate update a Storm Water Pollution Prevention Plan (SWPPP) along with Best Management Practices (BMPs) that will prevent all pollutants from contacting storm water and with the intent of keeping all contaminants of concern from moving into receiving waters.
- E. 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.

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

IV. REOPENERS

- A. This Order may be reopened and modified, in accordance with SIP Section 2.2.2.A, to incorporate new limits based on future RPA to be conducted, upon completion of the collection of additional data by the Discharger.
- 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 minimum levels (MLs) for each pollutant.
- D. This Order may be reopened and modified, to revise effluent limitations as a result of future Basin Plan Amendments, or the adoption of a TMDL for the Calleguas Creek Watershed Management Area.
- E. This Order may be reopened upon the submission by the Discharger, of adequate information, as determined by the Regional Board, to provide for dilution credits or a mixing zone, as may be appropriate.
- F. 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, endangerment to human health or the environment resulting from the permitted activity.

V. EXPIRATION DATE

This Order expires on November 10, 2008.

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.

VI. RESCISSION

Order No. 96-090, adopted by this Regional Board on December 9, 1996, is hereby rescinded except for enforcement purposes.

I, Dennis Dickerson, 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 December 4, 2003.

Dennis A. Dickerson Executive Officer