STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
320 W. 4th Street, Suite 200, Los Angeles

FACT SHEET
WASTE DISCHARGE REQUIREMENTS
for
RESOLUTION SPECIALTY MATERIALS, LLC
(Formerly McWhorter Technologies, Inc.)
LYNWOOD FACILITY

NPDES Permit No.: CA0063908
Public Notice No.: 05-009

FACILITY ADDRESS
Resolution Specialty Materials, LLC
2801 Lynwood Road
Lynwood, CA 90262

FACILITY MAILING ADDRESS
Resolution Specialty Materials, LLC
2801 Lynwood Road
Lynwood, CA 90262
Contact: Jeff Nelson
Telephone: (847) 551-4441

I. Public Participation

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is considering the issuance of Waste Discharge Requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the above-referenced facility. As an initial step in the WDR process, the Regional Board staff has developed tentative WDRs. The Regional Board encourages public participation in the WDR adoption process.

A. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to:

Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

To be fully responded to by staff and considered by the Regional Board, written comments pertaining to this proposed Board action must be submitted to the Regional Board staff no later than 5 p.m. on April 8, 2005. The Regional Board chair

may exclude from the record written materials received after this date. (See Cal. Code Regs., tit. 23, § 648.4).

B. Public Hearing

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

Date: May 5, 2005
Time: 9:00 a.m.
Location: The City of Simi Valley Council Chambers,
2929 Tapo Canyon Road, Simi Valley, California.

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

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

C. Waste Discharge Requirements Appeals

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

State Water Resources Control Board, Office of Chief Counsel
ATTN: Elizabeth Miller Jennings, Senior Staff Counsel
1001 I Street, 22nd Floor
Sacramento, CA 95814

D. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4th Street, Suite 200, Los Angeles, California 90013, at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Los Angeles Regional Board by calling (213) 576-6600.

E. Register of Interested Persons

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

II. Introduction

Resolution Specialty Materials, LLC (hereinafter RSM or Discharger), discharges untreated storm water to Compton Creek, which flows to the Los Angeles River, a water of the United States, above the Estuary. Wastes discharged from RSM are regulated by WDRs and a NPDES permit contained in Board Order No. 99-053 (NPDES Permit No. CA0063908). Order No. 99-053 expired on May 10, 2004.

In a correspondence dated May 24, 2001, the Discharger indicated that the facility name has been changed from McWhorter Technologies, Inc. to Eastman Chemical Company. The renewal application also states that Eastman Chemical Company purchased McWhorter. In correspondence dated June 30, 2004, Eastman Chemical Company notified the Regional Board that the new owner and operator of the facility is RSM, LLC, effective on July 30, 2004.

Eastman Chemical Company (ECC) filed a Report of Waste Discharge and applied for renewal of its WDRs and a NPDES permit on April 29, 2004. The tentative Order is the reissuance of the WDRs and a NPDES permit for discharges from RSM. A NPDES permit Compliance Evaluation Inspection (CEI) was conducted on April 2, 2004, that also served as a permitting site visit to observe operations and collect additional data to develop Order limitations and conditions.

III. Description of Facility and Waste Discharge

RSM operates a polyester and alkyd (i.e., oil-modified polyester) resins manufacturing facility for paint production located at 2801 Lynwood Road, Lynwood, California and discharges up to 340,000 gallons per day (gpd) of untreated storm water runoff from undiked areas. The facility consists of both diked zones and undiked zones. Storm water discharge from the diked areas is discharged to the sanitary sewer and is covered under an industrial wastewater sewer permit.

The 17 diked zones provide containment for raw material storage, loading and handling of bulk liquids, and finished goods storage. Storm water within the diked areas is pumped out via a series of air diaphragm pumps to the facility's pretreatment system, which consists of a series of bag filters, settling tank, and a series of carbon vessels. Water is released through a permitted discharge point to the County Sanitation Districts of Los Angeles County (CSDLAC) Sewer System. Storm water from diked areas is prohibited from exiting the property through Discharge Serial Nos. 001 and 002, and entering the surface waters.

Undiked areas include roads, buildings, and services areas. Several tanks located under a roof, and paint and tank wagons, are also stored in the undiked area. The storm water from these areas is diverted by pitched pavement, and through pavement depressions, to the front of the facility, adjacent to Lynwood Road. The majority of storm water is diverted to the southeast corner of the property to a collection box. Because of grading constraints, not all of the storm water can be captured by the collection box, and some of the water leaves the site through two driveways exiting the property. The majority of the storm water exits through the driveway at the East Gate, which will be designated as Discharge Serial No. 001. Smaller amounts of storm water exit through the driveway at the West Gate, designated as Discharge Serial No. 002. Under low flow conditions, storm water in the collection box is sent to the pretreatment system and discharged to the sanitary sewer. Under high flow conditions, the facility can manually unlock the valves to the collection system and pump the collected storm water onto the street. It should be noted that the permit application renewal transmittal states that the storm water is visually inspected prior to discharge onto the street. From the street the storm water enters a storm drain, which directs storm water to Compton Creek. Two small sumps located at the East Gate and West Gate have served as sampling points for the storm water.

RSM transfers process wastewater to an offsite, licensed Treatment Storage Disposal Facility for treatment.

The permit renewal application describes the activities that take place at the facility. Alkyd (i.e., oil-modified polyester), saturated polyester, and unsaturated resins are manufactured in batches at the plant using reactor vessels and mix tanks. The majority of feedstocks are liquid, raw materials that are pumped from aboveground storage tanks to kettles and mixers via a closed piping system. Additional feedstocks are added manually as solids (i.e., powders) from bags and sacks via manways on top of the kettles. The resin is then chemically reacted in the kettles. Next, the resin is pumped from the kettles to the mix tanks for the addition of solvents to thin the resin. The primary by-product of the reaction is water vapor containing soluble organics that are condensed and flow to an isolation tank. There the vapors are directed towards the on-site thermal oxidizer. The finished resin is then pumped through one of three different types of filtration systems into the finished goods aboveground storage tanks, 55-gallon drums, 350-gallon IBC totes, or directly into tanker trucks.

The permit renewal application transmittal also states that a variety of raw materials are used by the site including monomers (styrene, alpha methyl styrene), hydrocarbons and natural oils (dicyclopentidiene, tall oil, linseed oil, refined soy oils), acid and anhydride phthalates (terephthalic acid, malcic and phthalic anhydride), glycols (propylene glycol, diethylene glycol), solvents, (toluene, xylene, mineral spirits), cyanates (toluene diisocyanate), and various small quantities of additives or modifiers (antioxidants, alcohols, fumed silica).

Storm water in the undiked areas flows by gravity to a storm drain located at Lynwood Road and Alameda Street. There the waster is directed to Compton Creek, through

Discharge Serial Nos. 001 and 002. (Latitude 33°55'34" N, Longitude 118°13'13" W). Compton Creek is tributary to Los Angeles River, a water of the United States, and is part of the Los Angeles River Watershed.

The Regional Board and the U.S. EPA have classified RSM as a minor discharge.

In the permit renewal application, the Discharger submitted data with the application from November 13, 2001, November 11, 2002, February 12, 2003, and December 1, 2003 for the East and West Gates. These data are summarized in the Table below.

Pollutant (units)	**Reported Maximum Effluent Concentration**	
	East Gate (Range of Reported Values)	West Gate (Range of Reported Values)
pH (standard units)	6.6 – 7.5	6.6 – 7.7
Biochemical Oxygen Demand (BOD) (mg/L)	7.1 – 28	16 – 76
Total Suspended Solids (mg/L)	30 – 230	25 – 220
Oil and Grease (mg/L)	<5 – 5.8	<5 – 18
Total Phenols (mg/L)	<0.05 – 0.068	<0.05 – 0.068
Barium (mg/L)	0.033 – 0.14	0.032 – 0.12
Chromium (mg/L)	0.011 – 0.024	0.013 – 0.019
Cobalt (mg/L)	0.026 – 0.13	0.019 – 0.034
Copper (ì g/L)	23 – 92	30 – 82
Lead (ì g/L)	20 – 66	19 – 57
Nickel (ì g/L)	<20	13 – 23
Vanadium (mg/L)	<0.01 – 0.017	<0.01 – 0.016
Zinc (ì g/L)	840 – 5,800	970 – 2,400
Acute Toxicity (percent survival)	60 – 90	70 – 90
Napthalene (ì g/L)	<10	<10 – 11
Di-n-octylphthalate (ì g/L)	<10 – 20	<10
Bis(2-Ethylhexyl-phthalate) (ì g/L)	<10 – 17	<10
Toluene (ì g/L)	8.3 – 18	<0.5 – 580
Tetrachloroethene (ì g/L)	<0.5	<0.5 – 1.1
Ethylbenzene (ì g/L)	42 – 63	<0.5 – 7,800
Total xylene (ì g/L)	300 – 410	<5 – 62,000

All other pollutants were reported as "not detected" in samples representing the discharge from the East Gate or the West Gate.

Effluent limitations contained in the existing Order for storm water discharges from RSM and representative monitoring data (sampled from the East and West Gates) from the previous Order term are presented in the following Tables. Further, the existing Order also required RSM to monitor for pollutants for which no effluent limitations were developed. All available

data are presented in the following Table.

Pollutant (units)	Effluent Limitation (Daily Maximum)	Monitoring Data (January 2000 - December 2003) Range of Reported Values	
		EAST GATE	WEST GATE
Oil and Grease (mg/L)	15	<3 – 11	<5 – 18
Oil and Grease (lbs/day)	42.5	NR	NR
Phenols (mg/L)	1.0	<0.012 – 0.11	<0.05 – 0.095
Total Suspended Solids (mg/L)	75	43 – 230	27 – 220
Total Suspended Solids (lbs/day)	212.7	NR	NR
Acute Toxicity (percent survival)	--[1]	0 – 100	0 – 100
pH (standard units)	--	6.4 – 7.7	6.6 – 7.9
Temperature (Degrees Fahrenheit)	--	62 – 67	62 – 67
BOD_5 @20°C (mg/L)	--	7.1 – 220	16 – 160
Dissolved Solids (mg/L)	--	42 – 100	88 – 94
Turbidity (NTU)	--	22 – 34	38 – 42

1. 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 percent, with no single test less than 70 percent survival.

On July 27, 2001, the Regional Board sent a letter to ECC to request monitoring of priority pollutants regulated under the California Toxics Rule for seven quarters (from July 2001 to March 2003). The facility provided monitoring data results from the East Gate and West Gate sampling points for two of the seven quarters to the Regional Board. In addition, the Discharger was required to monitor for priority pollutants (excluding pesticides) once during the life of the permit. The Discharger submitted data for priority pollutants, excluding pesticides, for seven discharge events between January 1999 and December 2003. The Table below summarizes the range of reported effluent concentrations for those pollutants that were reported as detected (all other pollutants were reported as below detection levels).

Pollutant (µg/L)	Range of Reported Effluent Concentrations (January 1999 – December 2003)	Range of Reported Effluent Concentrations (January 1999 – December 2003)
	EAST GATE	WEST GATE
Arsenic	<10 – 12	--
Total chromium	<10 – 32	<10 – 24
Copper	15 – 120	17 – 100
Lead	15 – 66	22 – 61
Nickel	<20 – 82	<20 – 55
Zinc	740 – 5,800	970 – 2,400

Pollutant (ì g/L)	Range of Reported Effluent Concentrations (January 1999 – December 2003)	Range of Reported Effluent Concentrations (January 1999 – December 2003)
	EAST GATE	**WEST GATE**
Benzene	<0.5 – 1.4	--
Bromoform	<0.5 – 1.2	--
Chloroform	<0.5 – 0.8	--
Dichlorobromomethane	<0.5 – 0.83	--
1,2-Dichloroethane	<0.5 – 1.8	--
Ethylbenzene	<0.5 – 63	<0.5 – 7,800
Tetrachloroethylene	<0.5 – 6.6	<0.5 – 1.1
Toluene	<0.5 – 18	<0.5 – 580
2,4-Dimethylphenol	<0.5 – 14	--
Bis(2-Ethylhexyl)Phthalate	<10 – 66	<10 – 48
Naphthalene	--	<10 – 11

A. Permit Exceedances

The Table below lists each exceedance during the term of the Previous Order.

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units	Gate
1/25/2000	1st Quarter, 2000	Maximum	TSS	100	75	mg/L	East
1/8/2001	1st Quarter, 2001	Maximum	TSS	88	75	mg/L	East
1/26/2001	1st Quarter, 2001	Maximum	TSS	130	75	mg/L	East
11/13/2001	3rd Quarter, 2001	Maximum	TSS	120	75	mg/L	East
12/1/2003	4th Quarter, 2003	Maximum	TSS	230	75	mg/L	East
2/10/1999	1st Quarter, 1999	Maximum	TSS	83	75	mg/L	West
4/6/1999	2nd Quarter, 1999	Maximum	TSS	92	75	mg/L	West
11/5/1999	4th Quarter, 1999	Maximum	TSS	84	75	mg/L	West
1/8/2001	1st Quarter, 2001	Maximum	TSS	190	75	mg/L	West
1/26/2001	1st Quarter, 2001	Maximum	TSS	78	75	mg/L	West
2/25/2003	1st Quarter, 2003	Maximum	TSS	110	75	mg/L	West
12/1/2003	4th Quarter, 2003	Maximum	TSS	220	75	mg/L	West
2/25/2003	1st Quarter, 2003	Maximum	Oil and Grease	18	15	mg/L	East
2/12/2003	1st Quarter, 2003	Maximum	Oil and Grease	18	15	mg/L	West
11/5/1999	1st Quarter, 1999	Maximum	Acute Toxicity	0	--[1]	Percent survival	East
1/25/2000	1st Quarter, 2000	Maximum	Acute Toxicity	0	--[1]	Percent survival	East

Date	Monitoring Period	Violation Type	Pollutant	Reported Value	Permit Limitation	Units	Gate
2/10/2000	1st Quarter, 2000	Maximum	Acute Toxicity	0	--[1]	Percent survival	East
3/8/2000	1st Quarter, 2000	Maximum	Acute Toxicity	60	--[1]	Percent survival	East
4/17/2000	2nd Quarter, 2000	Maximum	Acute Toxicity	50	--[1]	Percent survival	East
1/8/2001	1st Quarter, 2001	Maximum	Acute Toxicity	0	--[1]	Percent survival	East
11/5/1999	4th Quarter, 1999	Maximum	Acute Toxicity	20	--[1]	Percent survival	West
2/10/2000	1st Quarter, 2000	Maximum	Acute Toxicity	60	--[1]	Percent survival	West
1/8/2001	1st Quarter, 2001	Maximum	Acute Toxicity	0	--[1]	Percent survival	West

1. 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 percent, with no single test less than 70 percent survival.

All identified violations are being evaluated for appropriate enforcement actions.

B. Measures Implemented by RSM to Achieve Compliance

RSM, after purchase of the facility, has implemented the following Compliance Assurance Program to improve the water quality of discharge effluent and to eliminate future discharge exceedances.

1. Timely Submittal of Monitoring Reports

In 2004, the previous owner of the facility was cited with numerous monitoring report violations including non-reporting and late submittals. RSM has implemented an Action Item Tracking System. This system is designed to notify and track actions taken by the responsible employee and his/her supervisor to ensure that all monitoring reports are prepared and submitted by the compliance due date.

2. Best Management Practices (BMPs)

The previous owner of the facility was cited with numerous permit effluent limit violations dating back to the year 2000. RSM has reviewed the housekeeping policy and has implemented improvements to the policy to include BMPs in order to reduce the likelihood of contaminating storm water. These BMPs include weekly sweeping of the entire facility with a street sweeper, routinely

washing down areas where the potential of storm water contamination exists, and weekly housekeeping inspections. All wash water generated during this process is collected in a storage tank, treated, and discharge to the Los Angeles County Sanitation District (LACSD) under an industrial wastewater sewer permit.

RSM will continue to investigate all possible sources that may contribute to discharge exceedances (including metals).

3. Sampling Methodology

Sampling methodology is also believed to be a contributing factor to the effluent limit violations. RSM has reviewed the entire process of collecting storm water samples and has implemented improved sampling techniques that ensure storm water collected during each rain event is representative of actual storm water discharge. RSM has developed specific sampling procedures and has trained all site employees on proper sampling techniques.

4. Elimination of Non-Reporting Violations

Some of the reporting violations cited were a a direct result of not sampling during rain events when discharge from the facility occurred. To eliminate any confusion or reporting discrepancies in the future, RSM has purchased and installed at the facility a Taylor 5" Clear VU Rain Gauge. This allows RSM to report actual rainfall events and accumulation in lieu of relying on daily rainfall data published by the Los Angeles County Department of Public Works, Hydraulic Records/Water Conservation Division (LACPDW) for Stations 107D (Downey Fire Department) which is located approximately 5 miles East of the Facility, and Station 291 (Los Angeles – 96th and Central) which is located approximately 4 miles Northwest of the Facility.

5. Measures Being Implemented

a. Containment Curbing (Property Line)

RSM currently has containment structures surrounding the property line of the facility with the exception of the West side. RSM leases a portion of this land from the City of Lynwood who currently operates the property immediately West of the Facility. Based on visual observations, the City of Lynwood uses this facility to maintain vehicles. Due to gradient variations, rainfall migrates from the adjacent property owned by the City of Lynwood onto the RSM facility and is discharged out of RSM's West Gate discharge location.

RSM has collected and analyzed rainwater after it has migrated onto the facility from the adjacent property to the West. Analytical data indicates that certain parameters including BOD and Oil and Grease exceed permitted discharge limitations.

RSM is currently attempting to arrange a meeting with the City of Lynwood to discuss this issue. RSM proposes the installation of a 6" containment curb along the West side of the facility to prevent the migration of storm water from one property to the other. Since this property is leased, RSM is seeking approval from the property owner (City of Lynwood) prior to initiating this project.

b. Roofing Structures

RSM uses numerous roll off containers to temporarily store non hazardous waste materials. RSM is currently investigating a means to cover these roll off containers in order to further minimize any rain water from entering the containers where it may potentially pick up contaminants.

RSM is also investigating a means to cover or install containment curbing around uncovered transfer pumps.

6. Measures Being Considered

a. Elimination of West Gate Discharge Location

RSM is currently investigating a means to eliminate the existing West Gate storm water discharge point. RSM has contracted a consulting firm to evaluate the feasibility of eliminating one (West Gate) of the two storm water discharge points. This evaluation will include the installation of additional curbing, sumps, drainage channels, and transfer systems to efficiently capture, transfer, and discharge all rainwater from one location (East Gate). However, this evaluation has not been completed. Therefore, RSM expects to discharge storm water from both permitted discharge locations.

b. Potential Discharge to Sanitary Sewer of CSDLAC

RSM is pursuing the option of discharging the undiked storm water to the municipal sanitary sewer of CSDLAC. After obtaining an industrial discharge permit from CSDLAC, RSM plans to request rescission of the NPDES permit.

IV. Applicable Plans, Policies, Laws, and Regulations

The requirements contained in the proposed Order are based on the requirements and authorities contained in the following:

A. The federal Clean Water Act (CWA). The federal Clean Water Act requires that any point source discharges of pollutants to a water of the United States must be done in conformance with an NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect water quality.

B. Title 40, Code of Federal Regulations (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 limitations for certain dischargers and establish procedures for NPDES permitting, including how to establish effluent limitations for certain pollutants discharged.

C. 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). The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. The immediate receiving water body for the permitted discharge covered by this Order is Compton Creek, which then conveys water to Los Angeles River, above the Estuary. The Basin Plan contains beneficial uses and water quality objectives for Compton Creek. The beneficial uses listed in the Basin Plan for Compton Creek are:

Compton Creek – Hydro Unit No. 405.15

Existing: Ground water recharge, water contact recreation, non-contact water recreation, warm freshwater habitat, wildlife habitat, and wetland habitat.

Potential: Municipal and domestic water supply.

D. Ammonia Basin Plan Amendment. The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through 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 Life. The ammonia Basin Plan amendment was approved by the State Board, the Office of Administrative Law, and the 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.

E. 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.

F. 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 section 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 5 years from the date of permit renewal for an existing discharger if the Discharger demonstrates that it is infeasible to promptly comply with effluent limitations derived from the CTR criteria.

G. 40 CFR section122.44(d)(1)(vi)(A) requires the establishment of numeric effluent limitations to attain and maintain applicable narrative water quality criteria to protect the designated beneficial uses. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that Water Quality-Based Effluent Limitations (WQBELs) may be set based on U.S. EPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

H. State and Federal antibacksliding and antidegradation policies require that 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 sections 402(o) and 303(d)(4) of the CWA and in the 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.

I. Effluent limitations are established in accordance with sections 301, 304, 306, and 307 of the federal CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of Compton Creek.

J. Existing waste discharge requirements contained in Board Order No. 99-053, were adopted by the Regional Board on June 30, 1999. In some cases, permit conditions (effluent limitations and other special conditions) established in the existing waste discharge requirements have been carried over to this Order.

V. Regulatory Basis for Effluent Limitations

The CWA requires point source discharges to control the amount of conventional, nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control of the discharge of pollutants is established through NPDES permits

that contain effluent limitations and standards. The CWA establishes two principal bases for effluent limitations. First, dischargers are required to meet technology-based effluent limitations that reflect the best controls available considering costs and economic impact. Second, they are required to meet WQBELs that are developed to protect applicable designated uses of the receiving water.

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

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

- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional pollutants.

- Best conventional pollutant control technology (BCT) is a standard for the control from existing industrial point sources of conventional pollutants including BOD_5, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

- New source performance standards (NSPS) that represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BCT, BAT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR 125.3 of the NPDES regulations authorize the use of Best Professional Judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern.

If a reasonable potential exists for pollutants in a discharge to exceed water quality standards, WQBELs are also required under 40 CFR section 122.44(d)(1)(i). WQBELs are established after determining that technology-based limitations are not stringent enough to ensure that state water quality standards are met for the receiving water. WQBELs are based on the designated use of the receiving water, water quality criteria necessary to support the designated uses, and the state's antidegradation policy. For discharges that are composed entirely of storm water, such as the potential discharges from this facility to inland surface waters, enclosed bays, and estuaries, the *U.S. EPA's Technical Support Document for Water Quality-Based Toxics Control (TSD)* of 1991 (USEPA/505/2-90-001) established procedures for determining reasonable potential and establishing WQBELs for

priority pollutant criteria promulgated by U.S. EPA through the CTR and NTR, as well as the Basin Plan. With respect to a reasonable potential analysis, the TSD identifies an appropriate step-wise approach that can be used to determine whether a discharge has a reasonable potential.
There are several other specific factors affecting the development of limitations and requirements in the proposed Order. These are discussed as follows:

A. Pollutants of Concern

The CWA requires that any pollutant that may be discharged by a point source in quantities of concern must be regulated through an NPDES permit. Further, the NPDES regulations require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective.

The storm water discharge from RSM is generated in the undiked areas of the facility, and may come into contact with roads, buildings, and service areas. Solids and oil and grease are typical pollutants found in storm water discharges from industrial facilities. Phenols may be present in storm water runoff from facilities that produce synthetic materials.

Effluent limitations for Discharge Serial No. 001 in the current Order were established for oil and grease, phenols, and total suspended solids because they are considered pollutants of concern in the discharge of storm water runoff from the RSM facility. Oil and grease, phenols, and suspended solids are pollutants commonly present in storm water from resin manufacturing facilities; therefore, these pollutants remain pollutants of concern in this Order.

In addition, the Discharger stated in its permit renewal application transmittal that a variety of raw materials are used in the manufacturing process including styrene, alpha methyl styrene, hydrocarbons, dicyclopentidiene, tall oil, linseed oil, refined soy oils, terephthalic acid, malcic and phthalic anhydride, propylene glycol, toluene, xylene, mineral spirits, toluene diisocyanate, antioxidants, alcohols, and fumed silica. Because these materials are used on site and could come into contact with storm water, these pollutants are considered pollutants of concern. The proposed Order does not establish effluent limitations for these pollutants. However, these materials may contribute to toxicity in the receiving water; and because toxicity is an indicator of the combined effect of pollutants contained in the discharge, toxicity will be considered for possible regulation in the proposed Order. In addition, monitoring requirements for total organic carbon and chemical oxygen demand will be included in the proposed Order because they are often used as indicators of pollutants related to chemical manufacturing.

B. Technology-Based Effluent Limitations

This Order will require the Discharger to update and continue to implement, consistent with the existing Order requirements, a *Storm Water Pollution Prevention Plan* (SWPPP). The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged into the storm drain. At a minimum, the management practices should ensure that raw materials and chemicals do not come into contact with storm water in the undiked areas, and that all storm water within the diked areas is contained within the diked areas at all times, treated by the pretreatment system, and discharged to the sanitary sewer system. Because storm water discharges do occur at the RSM facility and make up the entire discharge, this Order will require that RSM update and continue to implement their SWPPP.

Due to the lack of national ELGs for storm water runoff from polyester and alkyd resins manufacturing facilities and the absence of data to apply BPJ to develop numeric effluent limitations, and pursuant to 40 CFR section 122.44(k), the Regional Board will require the Discharger to develop and implement BMPs, which shall be included in the SWPPP. The purpose of the BMPs will be to establish site-specific procedures that will ensure proper operation and maintenance of equipment and storage areas, to ensure that unauthorized non-storm water discharges (i.e., process water, spills, diked storm water) do not occur at the RSM facility.

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

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

C. Water Quality-Based Effluent Limitations

As specified in 40 CFR section 122.44(d)(1)(i), permits are required to include WQBELs for toxic pollutants (including toxicity) that are or may be discharged at levels which cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses for the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria (that are contained in other state plans and policies, or U.S. EPA water quality criteria contained in the CTR and NTR). The procedures for determining reasonable potential, and if necessary for calculating WQBELs, are contained in the TSD for storm water discharges. Further, in the best professional judgment of the Regional Board staff the TSD identifies an appropriate, rational step-wise approach that can be used to determine whether storm water discharges have a

reasonable potential.

The CTR contains both saltwater and freshwater criteria. According to 40 CFR section 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time; saltwater criteria apply at salinities of 10 ppt and above at locations where this occurs 95 percent or more of the time; and at salinities between 1 and 10 ppt the more stringent of the two apply. The CTR criteria for the protection of aquatic freshwater organisms or human health for consumption of organisms or the California Department of Health Services recommended maximum contaminant levels specified in Title 22 of the California Code of Regulations, whichever is more stringent, are used to develop the effluent limitations in this Order to protect the beneficial uses of Compton Creek.

Some water quality criteria are hardness dependent. Because the Discharger did not provide ambient receiving water hardness data and is unable to collect a receiving water sample (i.e., the channel is dry) and such data were not available from nearby facilities, 100 mg/L as $CaCO_3$, was used for evaluating reasonable potential.

1. Reasonable Potential Analysis (RPA)

The Regional Board will conduct a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the Order. The Regional Board would analyze effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have a reasonable potential, numeric WQBELs are required. The RPA considers water quality objectives outlined in the CTR, NTR, as well as the Basin Plan. To conduct the RPA, the Regional Board must identify the maximum observed effluent concentration (MEC) for each pollutant, based on data provided by the Discharger.

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

Two RPAs were performed for the priority pollutants for which effluent data were available for Discharge Serial Nos. 001 and 002. The previous Order required monitoring for the priority pollutants once during the life of the permit. Monitoring data for these pollutants were available from January 1999 through December 2003. In addition, the Regional Board issued a letter on July 27, 2001 that required RSM to monitor quarterly for priority pollutants regulated in the CTR. Monitoring data for these pollutants were available for the period from November 2001 through February 2003. All these effluent monitoring data were

used in the RPAs and are summarized in Attachment A

Based on the RPA for Discharge Serial No. 001, the following pollutants demonstrated reasonable potential to exceed water quality standards: hexavalent chromium, copper, lead, nickel, zinc, 1,2-dichloroethane, benzene, bis(2-ethylhexyl)phthalate, tetrachloroethylene, and toluene. Based on the RPA for Discharge Serial No. 002, the following pollutants demonstrated reasonable potential to exceed water quality standards: hexavalent chromium, copper, lead, nickel, zinc, bis(2-ethylhexyl)phthalate, ethylbenzene, tetrachloroethylene, and toluene. Refer to Attachment A for a summary of the RPAs and associated effluent limitation calculations.

2. Calculating WQBELs

If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one of three procedures contained in Section 5.4 of the TSD. These procedures include:

a. If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).

b. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).

c. Where sufficient effluent and receiving water data exist, use of a dynamic model which has been approved by the Regional Board.

3. Impaired Water Bodies in 303 (d) List

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

The U.S. EPA has approved the State's 303(d) list of impaired water bodies on July 25, 2003. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2002 303(d) list, some of which have been scheduled for TMDL development.

Compton Creek is located in the Los Angeles River Watershed. The 2002 State Board's California 303(d) List classifies Compton Creek as impaired. The pollutants of concern detected include copper and high coliform counts. Copper

and high coliform counts are both considered to be of high priority. However, to date no TMDLs have been developed. Therefore, no conditions in the proposed Order are based on TMDLs.

4. Whole Effluent Toxicity

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

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. The existing Order contains acute toxicity effluent limitations and monitoring requirements. Toxicity data during the previous Order term were collected between November 1999 to February 2003.

In accordance with the Basin Plan, acute toxicity limitations dictate that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Consistent with the Basin Plan, this Order carries over acute toxicity limitations from the previous Order. As discussed in Section III of this Fact Sheet, the acute toxicity limitations were exceeded several times during the term of the previous Order. For this reason, the monitoring frequency will be increased to quarterly, for the first year of the permit term, to determine if there is acute toxicity in the effluent. Results of these samples shall be compared to the acute toxicity effluent limitation; if any of the results indicate non-compliance with the effluent limitation, the Discharger shall immediately implement the Initial Investigation of the TRE Workplan. If compliance is observed after the first year, monitoring may revert to annually. Accelerated acute toxicity monitoring requirements are discussed in detail in Section IV.C.1 of the associated MRP.

The discharges at the RSM facility occur only after a significant storm event; they are not continuous. The discharge at the facility is not expected to contribute to long-term toxic effects, therefore the Discharger will not be required to monitor for chronic toxicity. Intermittent discharges are likely to

have short-term effects; therefore at this facility, RSM will be required to comply with acute toxicity effluent limitations established in accordance with the Basin Plan and the proposed Order.

D. Specific Rationale for Each Numerical Effluent Limitation

Section 402(o) of the Clean Water Act and 40 CFR section 122.44(l) require that effluent limitations standards or conditions in re-issued permits are at least as stringent as in the existing permit. Therefore, existing effluent limitations for aquatic toxicity, phenols, oil and grease, and total suspended solids are carried over to this permit. The effluent limitations for pH have been revised to be consistent with the Basin Plan. The effluent limitation for temperature has been revised based on the Thermal Plan. In addition to these limitations, the Regional Board is implementing the CTR, and additional effluent limitations are required for those priority pollutants that show reasonable potential to exceed water quality standards. CTR-based WQBELs are established for Discharge Serial No. 001 for hexavalent chromium, copper, lead, nickel, zinc, 1,2-dichloroethane, benzene, bis(2-ethylhexyl)phthalate, tetrachloroethylene, and toluene. For Discharge Serial No. 002, CTR-based WQBELs are established for hexavalent chromium, copper, lead, nickel, zinc, bis(2-ethylhexyl)phthalate, ethylbenzene, tetrachloroethylene, and toluene because they show reasonable potential to exceed water quality standards. As stated previously, a receiving water hardness of 100 mg/L (as $CaCO_3$) was assumed for determining water quality criteria and calculating WQBELs for copper, lead, nickel, and zinc.

The previous permit did not establish average monthly effluent limitations (AMELs). In the previous Order, the permit limitations for parameters were expressed only as maximum daily effluent limitations (MDELs). Consistent with section 122.45(e), permit limitations may be allowed as maximum daily effluent limitations for non-continuous discharges (such as storm water) ; therefore, effluent limitations in the proposed Order for pollutants are expressed as MDELs.

As stated earlier, the storm water discharge is not continuous (i.e., it is periodic in nature) and mass-based limitations are not appropriate because the facility will not be treating their discharge and therefore, dilution will not be used at the site as a means to comply with effluent limitations. For this reason, mass-based limitations for storm water discharges are not established in this Order, pursuant to 40 CFR section 122.45(f)(iii).

Effluent limitations established in this Order are applicable to storm water discharges through NPDES Discharge Serial No. 001, (Latitude 33°55'34", Longitude 118°13'13").

Pollutant (units)	Maximum Daily Discharge Limitations	Rationale [1]
	Concentration	
pH (standard units)	Between 6.5 – 8.5 [2]	BP
Temperature (°F)	86 [2]	TP
Total suspended solids (mg/L)	75	E, BPJ
Oil and grease (mg/L)	15	E, BPJ
Phenols (mg/L)	1.0	E, BPJ
Hexavalent chromium (ìg/L)	16	CTR
Copper [3] (ìg/L)	14	CTR
Lead [3] (ìg/L)	5	CTR
Nickel [3] (ìg/L)	86	CTR
Zinc [3] (ìg/L)	120	CTR
1,2-Dichloroethane (ìg/L)	1	CTR
Benzene (ìg/L)	2	CTR
Bis(2-Ethylhexyl)Phthalate (ìg/L)	12	CTR
Tetrachloroethylene (ìg/L)	10	CTR
Toluene (ìg/L)	30	CTR
Acute toxicity (% survival)	[4]	E, BP

1. BP = Basin Plan; TP = Thermal Plan; E = Existing Order; CTR = California Toxics Rule; BPJ = Best professional judgment.

2. The pH shall remain in this range at all times. Temperature: This value represents an instantaneous maximum value, not to be exceeded at any time.

3. Measured as total recoverable.

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

Effluent limitations established in this Order are applicable to storm water discharges through NPDES Discharge Serial No. 002.

Pollutant (units)	Maximum Daily Discharge Limitations	Rationale [1]
	Concentration	
pH (standard units)	Between 6.5 – 8.5 [2]	BP
Temperature (°F)	86 [2]	TP
Total suspended solids (mg/L)	75	E, BPJ
Oil and grease (mg/L)	15	E, BPJ
Phenols (mg/L)	1.0	E, BPJ
Hexavalent chromium (ì g/L)	16	CTR
Copper [3] (ì g/L)	14	CTR
Lead [3] (ì g/L)	5	CTR
Nickel [3] (ì g/L)	86	CTR
Zinc [3] (ì g/L)	120	CTR
Bis(2-Ethylhexyl)Phthalate (ì g/L)	12	CTR
Toluene (ì g/L)	30	CTR
Tetrachloroethylene (ì g/L)	10	CTR
Ethylbenzene (ì g/L)	1404	CTR
Acute toxicity (% survival)	[4]	E, BP

1. BP = Basin Plan; TP = Thermal Plan; E = Existing Order; CTR = California Toxics Rule; BPJ = Best professional judgment.

2. The pH shall remain in this range at all times. Temperature: This value represents an instantaneous maximum value, not to be exceeded at any time.

3. Measured as total recoverable.

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

E. Compliance Schedule

Based on effluent monitoring data submitted by the Discharger, a comparison between the MEC and calculated AMEL values shows that the Discharger will be unable to consistently comply with final effluent limitations established in the proposed Order for hexavalent chromium, copper, lead, zinc, 1,2-dichloroethane, bis(2-ethylhexyl)phthalate, and ethylbenzene for Discharge Serial No. 001. Hence, interim limitations have been prescribed for these pollutants As a result, the proposed Order contains a compliance schedule that allows the Discharger up to December 31, 2007, (except for Zinc which is December 31, 2006) to comply with the final effluent limitations based on CTR criteria. 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. A shorter interim limit compliance period (approximately 18 months) is given for zinc because the given interim limit is based upon the secondary Maximum Contaminant Level (MCL), and is relatively high compared to the final CTR limit.

This Order establishes 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 final effluent limitations. Once final limitations become effective, the interim limitations will no longer apply.

The Discharger will be required to develop and implement a compliance plan that will identify the measures that will be taken to reduce the concentrations of hexavalent chromium, copper, lead, nickel, zinc, 1,2-dichloroethane, bis(2-ethylhexyl)phthalate, benzene, tetrachloroethylene, and toluene in their discharge through Discharge Serial No. 001 and hexavalent chromium, copper, lead, zinc, bis(2-ethylhexyl)phthalate, ethylbenzene, and toluene through Discharge Serial No. 002. This plan should evaluate options to achieve compliance with the revised Order limitations. These options can include, for example, evaluating the need to direct storm water generated in the undiked areas to the treatment system prior to discharge through Discharge Serial Nos. 001 and 002.

Generally, the Regional Board has determined that interim limitations will be included based on current facility performance to maintain existing water quality. When sufficient effluent data exist, a statistical analysis can performed to calculate the 99th percentile, based on procedures contained in the TSD. This value is compared to the MEC, and the more stringent of the two serves as the basis for the interim limitation. Effluent data for the period from January 2000 through December 2003 from the East Gate were used in the analysis to calculate interim limitations for Discharge Serial No. 001. For hexavalent chromium, copper, and lead, the MEC was more stringent that the 99th percentile determined from the data; therefore, the MEC will serve as the interim limitations for these pollutants. For 1,2-dichloroethane and bis(2-ethylhexyl)phthalate, there were insufficient data to calculate the 99th percentile; therefore the MECs will serve as the basis for the interim limitations for 1,2-dichloroethane and bis(2-

ethylhexyl)phthalate. For nickel, benzene, tetrachloroethylene, and toluene, the Discharger is able to comply with the MDEL; therefore, no interim limits are given for these pollutants. The existing beneficial uses of the receiving water (Compton Creek) includes groundwater recharge. The interim limit for zinc is based upon the secondary Maximum Contaminant Level (MCL) of California Secondary Drinking Water Standards [California Code of Regulation (CCR) – Title 22, Division4, Article 16, Section 64449].

Effluent data for the period from January 2000 through December 2003 from the West Gate were used in the analysis to calculate interim limitations for Discharge Serial No. 002. For hexavalent chromium, copper, and lead, the MEC was more stringent that the 99th percentile determined from the data; therefore, the MEC will serve as the interim limitations for these pollutants. For ethylbenzene, toluene, and bis(2-ethylhexyl)phthalate, there were insufficient data to calculate the 99th percentile; therefore the MECs will serve as the basis for the interim limitations for ethylbenzene, toluene, and bis(2-ethylhexyl)phthalate. For nickel, the Discharger is able to comply with the MDEL; therefore, no interim limit is given for this pollutant. As stated earlier, the interim limit for zinc is based upon the secondary MCL.

From the effective date of this Order until December 31, 2007 (except for zinc where the limit is effective up to December 31. 2006), the discharge of effluent from Discharge Serial No. 001 in excess of the following is prohibited:

Pollutant (units)	Maximum Daily Discharge Limitations	Rationale
Hexavalent chromium[1] (µg/L)	32	MEC[2]
Copper[1] (µg/L)	120	MEC[2]
Lead[1] (µg/L)	66	MEC[2]
Zinc (mg/L)	5	MCL[3]
1,2-Dichloroethane (µg/L)	1.8	MEC[2]
Bis(2-Ethylhexyl)Phthalate (µg/L)	66	MEC[2]

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

2. MEC = Maximum Effluent Concentration

3 MCL = Secondary Maximum Contaminant Level (California Drinking Water Standards)

From the effective date of this Order until December 31, 2007 (except for zinc where the limit is effective up to December 31. 2006), the discharge of effluent from Discharge Serial No. 002 in excess of the following is prohibited:

Pollutant (units)	Maximum Daily Discharge Limitations	Rationale
Hexavalent chromium[1] (µg/L)	24	MEC[2]
Copper[1] (µg/L)	100	MEC[2]
Lead[1] (µg/L)	61	MEC[2]
Zinc (mg/L)	5	MCL[3]
Bis(2-Ethylhexyl)Phthalate (µg/L)	48	MEC[2]
Ethylbenzene (µg/L)	7,800	MEC[2]
Toluene (µg/L)	580	MEC[2]

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

2. MEC = Maximum Effluent Concentration

3. MCL = Secondary Maximum Contaminant Level (California Drinking Water Standards).

F. Monitoring Requirements

The previous Order for RSM required monitoring for total waste flow, pH, and temperature at a frequency of once per month and required monitoring for total suspended solids, BOD_5, oil and grease, and phenols at a frequency of once per discharge, where no more than one sample per quarter is required. The Order also required monitoring for priority pollutants listed on page T-4 of the Monitoring and Reporting Program once during the life of the permit. Annual monitoring for acute toxicity was also required.

On July 27, 2001 the Regional Board sent a letter to ECC requiring the monitoring of effluent and receiving water for priority pollutants regulated in the CTR, and submit the data by April 15, 2003. As stated previously, RSM has submitted effluent data for seven quarters and no receiving water data.

Monitoring requirements are discussed in greater detail in Section III of the Monitoring and Reporting Program CI-7655 (hereinafter *MRP*).

1. Effluent Monitoring

To demonstrate compliance with effluent limitations established in the Order, this Order carries over the existing monitoring requirements for most parameters. Monitoring once per month for flow, pH, temperature, as required in the existing Order is required to ensure compliance with final effluent limitations. Monitoring once per discharge event for total suspended solids, BOD_5, oil and grease, and phenols will also be carried over to this Order to provide effluent characterization data. Annual monitoring has also been added for total petroleum hydrocarbons because it is a constituent of concern based on upon facility type and operation.

Because effluent data collected from the East Gate exceed final CTR-based WQBELs, this proposed Order establishes monthly monitoring requirements at Discharge Serial No. 001 for hexavalent chromium, copper, lead, nickel, zinc, 1,2-dichloroethane, benzene, bis(2-ethylhexyl)phthalate, tetrachloroethylene, and toluene to ensure compliance with interim and final effluent limitations. Effluent data collected from the West Gate exceed final CTR-based WQBELs; therefore, this Order establishes monthly monitoring requirements at Discharge Serial No. 002 for hexavalent chromium, copper, lead, nickel, zinc, bis(2-ethylhexyl)phthalate, ethylbenzene, tetrachloroethylene, and toluene to ensure compliance with interim and final effluent limitations. In addition, this proposed Order establishes quarterly monitoring requirements for acute toxicity at Discharge Serial Nos. 001 and 002 because of concerns with toxicity levels reported during the term of the previous Order. This proposed Order also establishes annual monitoring requirements for Discharge Serial Nos. 001 and 002 for total organic carbon and chemical oxygen demand to indicate the presence of pollutants associated with chemical manufacturing.

As discussed previously, there were insufficient effluent monitoring data for CTR priority pollutants to complete the RPA for some pollutants (i.e., pesticides). If data are unavailable or insufficient to conduct the RPA, the Regional Board will establish requirements that require additional monitoring for the pollutants in place of a WQBEL. This proposed Order requires the Discharger to conduct annual monitoring for all CTR priority pollutants, as listed in the *MRP*, in the storm water for the life of the permit. The Regional Board will use the additional data to conduct the RPA and determine if a WQBEL is required, and may reopen the permit to incorporate additional effluent limitations and requirements, if necessary.

This proposed Order also requires the Discharger to collect the effluent samples prior to the effluent entering the storm drain at the two sumps located at the southeast and southwest sides of the main office building, “East Gate” and “West Gate,” herein referred to as SW-1 and SW-2.

The effluent monitoring program for the discharge of storm water through NPDES Discharge Serial Nos. 001 and 002, (Latitude 33° 55’34” North; Longitude 118° 13’13” West), sampled at SW-1 and SW-2, is described in more detail in Section III of the Monitoring and Reporting Program.

2. Receiving Water Monitoring

The Discharger is required to monitor the receiving water for the California Toxics Rule priority pollutants, to determine reasonable potential. Pursuant to the California Water Code, section 13267, the Discharger is required to submit data sufficient for: (1) determining if WQBELs for priority pollutants are required and (2) to calculate effluent limitations, if required. The TSD recommends that the data be provided. As stated previously, the Discharger has not submitted any

receiving water data. Therefore, the Discharger will be required to conduct two time annual monitoring (in the first and fourth year after adoption of permit) of the receiving water for the all CTR priority pollutants to collect data and perform the RPA in the future.

Monitoring requirements are discussed in greater detail in Section V of the *MRP*.

This receiving water monitoring location (named RW-1) shall be within 50 feet upstream from the discharge point (storm drain) into the receiving water (Compton Creek).

3. Storm Water Monitoring

The Discharger is required to measure and record the rainfall each day of the month. The Discharger is also required to conduct visual observations of all storm water discharges of all storm water discharge locations to observe the presence of floating and suspended materials, oil and grease, sheen, discoloration, turbidity and odor. Furthermore, the Discharger shall implement the Storm Water Pollution Prevention Plan Requirements (SWPPP) as is enumerated in Attachment M of the WDR Order No. R4-2005-0029.

4. 2,3,7,8-TCDD Monitoring for Reasonable Potential Determination

The Regional Board is requiring, as part of the *MRP*, that the Discharger conduct effluent and receiving water monitoring for 2,3,7,8-TCDD, twice during the Order term (for two storm events, not to exceed more than one sampling event per calendar year). Samples shall be collected during the months of October through May. The Regional Board requires monitoring for 2,3,7,8-TCDD and the 16 congeners listed the table in Section V.C. of the associated *MRP*. The Discharger is required to calculate Toxic Equivalence (TEQ) for each congener by multiplying its analytical concentration by the Appropriate Toxicity Equivalent Factors (TEF).