## STATE OF CALIFORNIA

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

## FACT SHEET WASTE DISCHARGE REQUIREMENTS for KINDER MORGAN LIQUIDS TERMINALS, LLC Gaffey Street Terminal (formerly GATX San Pedro Marine Terminal)

NPDES Permit No.: CA0001911 Public Notice No.: 03-007

## FACILITY ADDRESS

Kinder Morgan Liquids Terminals, LLC Gaffey Street Terminal 1363 North Gaffey Street San Pedro, CA 90731

FACILITY MAILING ADDRESS Kinder Morgan Liquids Terminals, LLC 1100 Town and Country Road Orange, CA 92868 Contact: Robert Granado Telephone: (714) 560-4873

### 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 4<sup>th</sup> Street, Suite 200 Los Angeles, CA 90013

To be fully responded to by staff and considered by the Regional Board, written comments should be received at the Regional Board offices by 5:00 p.m. on March 18, 2003.

### **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: April 3, 2003 Time: 9:00 a.m. Location: The City of Simi Valley Council Chambers 2929 Tapo Canyon Road Simi Valley, CA

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.

### 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 the Chief Counsel ATTN: Elizabeth Miller Jennings Senior Staff Counsel 1001 I Street, 22<sup>nd</sup> 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 4<sup>th</sup> 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

Kinder Morgan Liquids Terminals, LLC – Gaffey Street Terminal (hereinafter KM-Gaffey Street or Discharger) discharges wastewater to a storm drain located on Gaffey Street, and eventually

to the Los Angeles Inner Harbor, a water of the United States. Wastes discharged from the Gaffey Street facility are regulated by WDRs and the NPDES permit contained in Board Order No. 96-010 (NPDES Permit No. CA0001911). Order No. 96-010 expired on February 10, 2001.

GATX Terminals Corporation (GATX) filed a report of waste discharge and applied for renewal of its WDRs and NPDES permit on September 28, 2000. A letter dated February 20, 2001 notified the Regional Board of a change in ownership and name change to Kinder Morgan – Gaffey Street Terminal. The tentative Order is the reissuance of the WDRs and NPDES permit for discharges from the KM-Gaffey Street Terminal. A site visit was conducted on January 13, 2003, to observe operations and collect additional data to develop permit limits and conditions.

### **III.** Description of Facility and Waste Discharge

The KM-Gaffey Street Terminal, located in San Pedro, California, stores and handles fuel oil and marine diesel oil products (e.g., fuel oil supplements for vessels), at 1363 North Gaffey Street. The site is used for the storage of marine diesel oil, fuel oil, light cycle oil, and cutter stock. Fuel is received via off-loading from trucks and is pumped directly to the above ground steel storage tanks. The facility also conducts "blending" operations where heavy fuels are blended with lighter fuels to produce a final product. The storage tank areas are separated by an earthen berm into two tank farm areas.

The existing permit regulates the discharge of storm water runoff and wastewater from washing down equipment and the washing off of ground surface. Currently, the only wastewater generated at the facility is storm water runoff. Two primary areas contribute storm water runoff: 1) paved areas surrounding the office and truck pumping areas; and 2) the unpaved areas surrounding the above ground storage tanks. Runoff from the paved areas is collected in the on-site storm drain system and directed to the oil water separator. Runoff from the unpaved storage tank farm areas is directed to one of two drains and then to the oil water separator.

Wash down activities have not occurred recently, but the Discharger desires to maintain the ability to continue wash down activities which would occur in the paved area surrounding the office and truck pumping areas. Hence, any wash down water generated would be directed to the on-site storm drain in that area, and subsequently to the oil water separator for treatment and evaporation. The existing permit states that typically, the wash down water is allowed to evaporate so that there is no dry-weather discharge from the facility. In the event that the wash down water is discharged, it would be directed through the oil water separator for treatment, and then discharged to the external storm drain. This Order requires that the discharge of storm water and wash down water not occur simultaneously.

A three-cell oil water separator provides treatment of storm water runoff. Storm water flows by gravity from cell one to cell two, is pumped from cell two to cell three, and then gravity flows from cell three over a weir prior to discharge to the storm drain. A submersible pump is present after cell three which allows the operator to fully drain the cell, if needed. The storm water and wash down water drainage and discharge points are visually observed and manually operated. A valve is used to control the discharge to the external storm drain system. Three valves are

present at the head of the separator that control the discharges from the paved and unpaved areas and allow the facility to control when discharges occur. These values remain closed during the dry season.

Precipitation and/or oil is collected within pump and pipe sumps and is removed via a vacuum truck and hauled off-site to the Kinder Morgan – L.A. Harbor Terminal. From the L.A. Harbor Terminal, this wastewater is directed to the Kinder Morgan – Carson Terminal via pipeline and the floating oil is vacuumed off and disposed of off-site by a contract hauler to a legal point of disposal.

Wastewater is discharged via the outfall pipe to the storm drain and then ultimately to the West Basin of the Los Angeles Inner Harbor.

KM-Gaffey Street currently discharges up to 500,000 gpd of storm water runoff and wastewater from wash down activities into a storm drain located on Gaffey Street, through Discharge Serial No. 001, (Latitude 33°45'35" North, Longitude 118°17'40" West). The wastewater then flows to the West Basin of Los Angeles Inner Harbor, a water of the United States. Figure 1 depicts the facility location map. Figure 2 depicts the water flow diagram for the KM-Gaffey Street facility.

The Regional Board and the United States Environmental Protection Agency (USEPA) have classified the KM-Gaffey Street facility as a minor discharge.

Effluent limits contained in the existing permit for the KM-Gaffey Street Discharge Serial No. 001 and representative monitoring data are presented in the following table:

| Constituent (units)                    | Effluent Limit |                | Monitoring Data<br>(January 2001 – September 2002) |                       |  |
|--|----------------|----------------|--|-----------------------|--|
|  | Daily Maximum  | 30-Day Average | Maximum Reported                                   | No. of<br>Exceedances |  |
| Oil and Grease (mg/L)                  | 15             | 10             | 20   | 3                     |  |
| Oil and Grease (lb/day) <sup>1</sup>   | 62.6           | 41.7           | NR   | NR                    |  |
| Suspended solids (mg/L)                | 150            | 50             | $NR^{2}$   |                       |  |
| Suspended solids (lb/day) <sup>1</sup> | 626            | 209            | $NR^{2}$   |                       |  |
| Settleable solids (ml/L)               | 0.3            | 0.1            | $NR^{2}$   |                       |  |
| Phenols (mg/L)                         | 1              |                | 1.3  | 1                     |  |
| Phenols (lb/day) <sup>1</sup>          | 4.17           |                | NR   |                       |  |
| Detergents (MBAs)                      | 0.5            |                | $NR^{2}$   |                       |  |
| Acute Toxicity <sup>3</sup>            | 100            |                | 100  |                       |  |

<sup>1</sup> Mass-based effluent limitations were based on 500,000 gallons per day maximum discharge flow.

<sup>&</sup>lt;sup>2</sup> The existing permit stated effluent limitations for suspended solids, settleable solids, and detergents were not applicable during periods of rainfall, therefore samples were never taken, nor were data provided for these constituents.

<sup>&</sup>lt;sup>3</sup> 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. NR = Not Reported

Correspondence from the Discharger to the Regional Board indicates that on three discharge events in 1997, the Discharger exceeded the daily maximum effluent limitation of 15 mg/L for oil and grease; oil and grease was measured at 20 mg/L. The Discharger exceeded the daily maximum effluent limitation of 1.0 mg/L once for phenols; phenols were measured at 1.3 mg/L in November 1997. Since these exceedances, effluent data show that the Discharger has been in compliance with effluent limitations in the existing permit. Further, an inspection conducted on January 13, 2003, reported that the facility appeared to have good housekeeping practices.

Effluent data presented in the permit renewal application consisted of oil and grease and phenols, as shown in the following table.

| Constituent (units)     | Reported Maximum Daily Value | Reported Long Term Average Value |
|-------------------------|------------------------------|----------------------------------|
| Oil and grease (mg/L)   | 10                           | 10                               |
| Oil and grease (lb/day) | 10.5                         | 6.25                             |
| Phenols (mg/L)          | 0.03                         | 0.03                             |
| Phenols (lb/day)        | 0.032                        | 0.019                            |

## **IV. Applicable Plans, Policies, and Regulations**

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

- 1. 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.
- Title 40, Code of 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 limits for certain dischargers and establish procedures for NPDES permitting, including how to establish effluent limits for certain pollutants discharged.
- 3. 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 Basin Plan contains beneficial uses and water quality objectives for Los Angles Inner Harbor.
  - Existing: industrial water supply, navigation, non-contact water recreation, preservation of rare and endangered species, commercial and sport fishing, and marine habitat.

Potential: contact water recreation and shellfish harvesting.

- 4. 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.
- 5. 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<sup>-6</sup>), 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 renewal for an existing discharger if the Discharger demonstrates that it is infeasible to promptly comply with the CTR criteria.
- 6. 40 CFR section 122.44(d)(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 limits (WQBELs) may be set based on USEPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.
- 7. 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 section 402(o) of the CWA and in the Title 40 of the Code of Federal Regulations (40 CFR), section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions where effluent limitations may be relaxed.
- 8. 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 Los Angeles Inner Harbor.
- Existing waste discharge requirements contained in Board Order No. 96-010, adopted by the Regional Board on February 26, 1996. In some cases, permit conditions (effluent limits and other special conditions) established in the existing waste discharge requirements have been carried over to this permit.

### 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 water quality-based effluent limitations (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 controls:

- 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, 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 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 composed entirely of storm water, such as the potential discharges to inland surface waters, enclosed bays, and estuaries, the USEPA's *Technical Support Document for Water Quality-Based Toxics Control (TSD)* of 1991 (USEPA/505/2-90-001) establishes procedures for determining reasonable potential and establishing WQBELs for priority pollutant criteria promulgated by USEPA through the CTR and NTR, as well as the Basin Plan. With respect to a reasonable potential analysis, the TSD identifies an appropriate stepwise approach that can be used to determine whether a discharge has a reasonable potential. The approach used in the TSD is equally valid for determining the reasonable potential for discharges not comprised entirely of storm water discharges.

There are several other specific factors affecting the development of limitations and requirements in the proposed Order. These are discussed as follows:

### 1. 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 and SIP 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 SIP includes provisions for priority pollutant criteria promulgated by USEPA in the CTR and NTR, and for those priority pollutants outlined in the Basin Plan.

Effluent limitations for Discharge Serial No. 001 in the current permit were established for suspended solids and settleable solids because they are parameters typically used to characterize storm water; thus effluent limitations for these parameters have been established in this permit. Oil and grease and phenols are commonly present in the materials stored on-site; thus effluent limitations for oil and grease and phenols have been established in this permit. Effluent limitations in the current permit were established for detergents (as MBAS) because they may be present in the discharge of washdown wastewater. Due to the nature of the discharge, these constituents are considered pollutants of concern and limits for them have been included in this permit. Total petroleum hydrocarbons, benzene, toluene, xylene, and ethylbenzene are typical components of fuel oil and may be present in the discharge of storm water collected at fuel storage facilities. There is the potential for these constituents to be present in the discharge. However, since there is no data available to complete a RPA on these constituents no limits for them have been included. However, the priority pollutant monitoring will provide the data required to complete an RPA for these constituents.

### 2. <u>Technology-Based Effluent Limits</u>

This permit will require the Discharger to develop and implement 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 directly into surface waters. Due to the fact that storm water discharges do occur at the KM – Gaffey Street facility, this permit will require that KM-Gaffey Street develop and implement a SWPPP.

Due to the lack of national effluent limitation guidelines (ELGs) for tank farm facilities and the absence of data available to apply BPJ, and pursuant to 40 CFR 122.44(k), the Regional Board will require the Discharger to develop and implement a *Best Management Practices Plan* (BMPP). The purpose of the BMPP will be to establish site-specific procedures that will prevent the discharge of pollutants in non-storm water discharges (e.g., wash down water). The BMPP shall include a provision to research alternative methods to disposal of non-storm water discharges (e.g., wash down water), which may include total evaporation, to prevent the discharge of wash down water into Los Angeles Inner Harbor. The combination of the SWPPP and BMPP and existing permit 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.

#### 3. Water Quality-Based Effluent Limits

As specified in 40 CFR § 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 USEPA 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 § 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 salt water or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of Los Angeles Inner Harbor.

### (a) Reasonable Potential Analysis (RPA)

The Regional Board will conduct a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. 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 constituent, 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 permit will be reopened for appropriate modification.

The RPA was performed for the priority pollutants in storm water for which effluent data were available. These data were used to perform the RPA and are summarized in Attachment A. Based on the RPA, there was reasonable potential to exceed water quality standards for the following constituents: copper, lead, nickel, and zinc.

### (b) 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:

- 1) If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).
- 2) Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).
- 3) Where sufficient effluent and receiving water data exist, use of a dynamic model which has been approved by the Regional Board.

#### (c) 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 USEPA has approved the State's 303(d) list of impaired water bodies. 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 1998 303(d) list and have been scheduled for TMDL development.

The Los Angeles/Long Beach Harbors are located in the southern portion of the Los Angeles Basin in the greater San Pedro Bay. Together with the Dominguez Channel, these harbors receive discharges from highly industrialized areas. The 1998 State Board's California 303(d) List classifies the Los Angeles Inner Harbor and several water bodies within the Harbor as impaired. These water bodies include: Consolidated Slip, Southwest Slip, a portion of Main Channel, Fish Harbor, Cabrillo Pier, and breakwater. The pollutants of concern, detected in the water column, in the sediment, and in the fish tissue, include: copper, lead, ammonia, coliform, chromium, zinc, DDT, PAHs, sediment toxicity, aldrin, benthic community effects, Chem A [refers to the sum of aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene], chlordane, PCBs, and tributyltin.

### (d) 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 permit contains acute toxicity limitations and monitoring requirements.

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 Basin Plan and existing permit requirements, this Order includes acute toxicity limitations.

The discharges at the KM – Gaffey Street facility occur only after a significant storm event; they are not continuous. Intermittent discharges are likely to have short-term toxic effects; therefore, to be consistent with Basin Plan requirements, the proposed Order requires KM – Gaffey Street to continue to conduct acute toxicity testing in accordance with the existing permit requirements.

#### 4. Specific Rationale for Each Numerical Effluent Limitation

The Regional Board has determined that reasonable potential exists for all pollutants that are regulated under the current permit; therefore effluent limitations have been established for these pollutants. Furthermore, the requirements in the proposed Order for oil and grease, total suspended solids, settleable solids, phenols, and detergents (shown in the table below) are based on limits specified in KM – Gaffey Street's existing permit. The effluent limitations for copper, lead, nickel, and zinc have been established based on the revised water quality criteria in the CTR and the requirements in the TSD.

Section 402(o) of the Clean Water Act and 40 CFR 122.44(I) 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 most of the regulated pollutants are carried over to this permit. The existing permit stated that effluent limitations for

suspended solids, settleable solids, and detergents (MBAS) were not applicable during periods of rainfall. The proposed reissued Order establishes effluent limitations for suspended solids, settleable solids, and detergents (MBAS) that are applicable during any discharge event and requires monitoring during each discharge event.

Because monitoring data available for discharges of washdown water are insufficient to perform the RPA and calculate WQBELs for the priority pollutants, the effluent limitations in the existing permit are prescribed in this Order for discharges consisting of washdown water until sufficient data are obtained to perform the RPA.

In compliance with 40 CFR § 122.45(f), mass-based limitations have also been established in the proposed Order for conventional, nonconventional, and toxic pollutants. The previous mass-based effluent limitations were based on 500,000 gpd. The mass-based effluent limitations contained in this Order for storm water discharges are based on an discharge flow rate of 500,000 gpd, as stated in the permit renewal application. The mass-based effluent limitations contained in this Order for washdown water discharges are based on a maximum flow of 100 gpd. When calculating the mass-based limitations for discharges, the appropriate flow, daily maximum limitations for daily maximum mass calculations, and the monthly average limitations when calculating the monthly average mass, should be substituted in the following equation:

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

Effluent limitations established in this Order are applicable to storm water discharges from the NPDES Discharge Serial No. 001, a storm drain on Gaffey Street (Latitude 33° 45' 35" North; Longitude 118° 17' 40" West).

| Constituent (units)              | Maximum Daily Discharge<br>Limitations |                                | Average Monthly Discharge<br>Limitations |                                | Rationale |
|----------------------------------|--|--------------------------------|--|--------------------------------|-----------|
|                                  | Concentration                          | Mass <sup>2</sup><br>(lbs/day) | Concentration                            | Mass <sup>2</sup><br>(lbs/day) |           |
| pH (standard units)              | Between<br>6.5 – 8.5                   |                                | None                                     |                                | BP        |
| Oil and Grease (mg/L)            | 15                                     | 63                             | 10                                       | 42                             | Е         |
| Total Suspended Solids<br>(mg/L) | 75                                     | 313                            | 50                                       | 209                            | E, BPJ    |
| Settleable Solids (ml/L)         | 0.3                                    |                                | 0.1                                      |                                | E         |
| Phenols (mg/L)                   | 1                                      | 4.2                            |  |                                | E         |
| Detergents (MBAs)<br>(mg/L)      | 0.5                                    | 2.1                            |  |                                | E         |
| Copper (µg/L) <sup>3</sup>       | 5.8                                    | 0.02                           |  |                                | CTR       |

| Constituent (units)        | Maximum Daily Discharge<br>Limitations |                                | Average Monthly Discharge<br>Limitations |                                | Rationale |
|----------------------------|--|--------------------------------|--|--------------------------------|-----------|
|                            | Concentration                          | Mass <sup>2</sup><br>(lbs/day) | Concentration                            | Mass <sup>2</sup><br>(lbs/day) |           |
| Lead (µg/L) <sup>3</sup>   | 14                                     | 0.06                           |  |                                | CTR       |
| Nickel (µg/L) <sup>3</sup> | 13.6                                   | 0.06                           |  |                                | CTR       |
| Zinc (µg/L) <sup>3</sup>   | 95                                     | 0.4                            |  |                                | CTR       |

<sup>1</sup> BP = Basin Plan, E = Existing Permit, BPJ = Best Professional Judgment, CTR = California Toxics Rule.

<sup>2</sup> The mass-based effluent limitations are based on a maximum discharge flow rate of 500,000 gpd.

<sup>3</sup> Discharge limitations for these metals are expressed as total recoverable.

Effluent limitations established in this Order are applicable to wash down wastewater discharges from the NPDES Discharge Serial No. 001, a storm drain on Gaffey Street (Latitude 33°45' 35" North; Longitude 118°17' 40" West).

| Constituent (units)              | Maximum Daily Discharge<br>Limitations |                                | Average Monthly Discharge<br>Limitations |                                | Rationale |
|----------------------------------|--|--------------------------------|--|--------------------------------|-----------|
|                                  | Concentration                          | Mass <sup>2</sup><br>(lbs/day) | Concentration                            | Mass <sup>2</sup><br>(lbs/day) |           |
| pH (standard units)              | Between<br>6.5 – 8.5                   |                                | Between<br>6.5 – 8.5                     |                                | BP        |
| Oil and Grease (mg/L)            | 15                                     | 0.013                          | 10                                       | 0.008                          | Е         |
| Total Suspended Solids<br>(mg/L) | 75                                     | 0.063                          | 50                                       | 0.042                          | E, BPJ    |
| Settleable Solids (ml/L)         | 0.3                                    |                                | 0.1                                      |                                | Е         |
| Phenols (mg/L)                   | 1                                      | 0.0008                         |  |                                | E         |
| Detergents (MBAs)<br>(mg/L)      | 0.5                                    | 0.0004                         |  |                                | E         |

<sup>1</sup> BP = Basin Plan, E = Existing Permit, BPJ = Best Professional Judgment, CTR = California Toxics Rule.

<sup>2</sup> The mass-based effluent limitations are based on a maximum discharge flow rate of 100 gpd.

#### 5. Interim Requirements

The data available were used to perform an RPA for discharges from the site. The RPA indicates that four constituents (copper, lead, nickel, and zinc) have the potential to exceed the CTR based WQBELs prescribed in the table above. Hence, interim limits have been prescribed for these constituents.

As a result, the proposed Order contains a compliance schedule that allows the Discharger up to 3 years to comply with the revised effluent limitations. Within 1 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.

The Discharger will specifically be required to develop and implement a plan to reduce the concentrations of copper, lead, nickel, and zinc in its discharge. The Discharger currently does not treat the water to remove copper, lead, nickel, and zinc from the discharge; therefore, it is unlikely that current operations will allow the Discharger to meet the established effluent limitations. This plan, therefore, should evaluate options to achieve compliance with the revised permit limitations. These options may include, for example, available treatment unit processes and/or pollution prevention and source control practices.

This Order establishes interim requirements such as requiring the Discharger to develop a pollutant minimization plan and/or source control measures. Order No. 96-010 does not contain effluent limitations for copper, lead, nickel, or zinc; therefore the MEC will serve as the basis for the interim effluent limitations for these constituents. The interim effluent limitations shall be applicable until April 30, 2006, after which, the Discharger shall demonstrate compliance with the final effluent limitations included in the Order. It should be noted that the Board may take appropriate enforcement actions if interim limitations and requirements are not met.

From the effective date of this Order until April 30, 2006 the discharge of storm water from Discharge Serial No. 001 in excess of the following limitations is prohibited:

| Constituent (units)        | Maximum Daily<br>Discharge Limitation | Rationale <sup>1</sup> |
|----------------------------|---------------------------------------|------------------------|
| Copper (µg/L) <sup>2</sup> | 59                                    | MEC                    |
| Lead (µg/L) <sup>2</sup>   | 53                                    | MEC                    |
| Nickel (µg/L) <sup>2</sup> | 22                                    | MEC                    |
| Zinc (µg/L) <sup>2</sup>   | 210                                   | MEC                    |

<sup>1</sup> MEC = Maximum Effluent Concentration

<sup>2</sup> Discharge limitations for these metals are expressed as total recoverable. The effluent limits in this table are effective from the date of adoption of this Order through April 30, 2006.

#### 6. Monitoring Requirements

For regulated parameters, the previous permit for KM – Gaffey Street required monitoring once per discharge event for flow, pH, temperature, and phenols. The existing permit stated monitoring requirements for suspended solids, settleable solids, and detergents were not applicable during periods of rainfall. The existing permit also required annual monitoring for toxicity. Further, the existing permit required monitoring for priority pollutants for the first discharge of storm water runoff.

According to Section 3.2 of the TSD, if data are unavailable or insufficient to conduct the RPA, the Regional Board must establish interim requirements that require additional monitoring for the pollutants in place of a WQBEL. Upon completion of the required monitoring, the Regional Board must use the gathered data to conduct the RPA and determine if a WQBEL is required. As prescribed in the Monitoring and Reporting Program, the Regional Board shall require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established.

### (a) Effluent Monitoring

To demonstrate compliance with effluent limitations established in the permit, monitoring once per discharge event for flow, pH, temperature, oil and grease, phenols, as required in the existing permit is required to ensure compliance with effluent limitations. In addition, this Order carries over the annual monitoring requirement for toxicity. Whereas the existing permit stated that monitoring for suspended solids, settleable solids, and detergents was not applicable during periods of rainfall, this Order establishes monitoring once per every discharge event for suspended solids, settleable solids, detergents (MBAs), copper, lead, nickel, and zinc to ensure compliance with effluent limitations. Further, monitoring once per discharge event for total petroleum hydrocarbons, benzene, toluene, xylene, and ethylbenzene is required to determine if they are present in the discharge and determine if there is reasonable potential to exceed State water quality standards. This Order also requires the Discharger to collect the effluent sample prior to the effluent entering the storm system.

The following shall constitute the effluent monitoring program for NPDES Discharge Serial No. 001, a storm drain on Gaffey Street (Latitude 33° 45' 35" North; Longitude 118° 17' 40" West):

| Constituent                  | Units          | Type of Sample | Sampling Frequency                      |
|------------------------------|----------------|----------------|---|
| Flow                         | gal/day        |                | once per discharge event <sup>1</sup>   |
| pH                           | standard units | grab           | once per discharge event <sup>1</sup>   |
| Temperature                  | °F             | grab           | once per discharge event <sup>1</sup>   |
| Phenols                      | mg/L           | grab           | once per discharge event <sup>1</sup>   |
| Oil and grease               | mg/L           | grab           | once per discharge event <sup>1</sup>   |
| Settleable solids            | ml/L           | grab           | once per discharge event <sup>1</sup>   |
| Total suspended solids       | mg/L           | grab           | once per discharge event <sup>1</sup>   |
| Copper                       | µg/L           | grab           | once per discharge event <sup>1,2</sup> |
| Lead                         | µg/L           | grab           | once per discharge event <sup>1,2</sup> |
| Nickel                       | µg/L           | grab           | once per discharge event <sup>1,2</sup> |
| Zinc                         | µg/L           | grab           | once per discharge event <sup>1,2</sup> |
| Benzene                      | µg/L           | grab           | once per discharge event <sup>1</sup>   |
| Ethylbenzene                 | µg/L           | grab           | once per discharge event <sup>1</sup>   |
| Toluene                      | µg/L           | grab           | once per discharge event <sup>1</sup>   |
| Xylene                       | µg/L           | grab           | once per discharge event <sup>1</sup>   |
| Total Petroleum Hydrocarbons | µg/L           | grab           | once per discharge event <sup>1</sup>   |
| Priority pollutants          | µg/L           | grab           | semiannually <sup>3</sup>               |
| Toxicity-acute               | % survival     | grab           | Annually                                |

<sup>1</sup> During periods of extended rainfall, no more than one sample per week need be obtained. Sampling shall be during the first hour of discharge. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, a sample shall be obtained at a safe opportunity and the reason for delay shall be included in the monitoring report.

<sup>2</sup>Discharge limitations for these metals are expressed as total recoverable.

<sup>3</sup> Semiannually for three years, annually thereafter.

### (b) Effluent Monitoring for Reasonable Potential Determination

Consistent with the TSD, 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. Therefore, the Discharger will be required to conduct an interim monitoring program for all CTR priority pollutants until December 2005. Monitoring reports must be submitted according to the schedule outlined in Section I of the Monitoring and Reporting Program No. CI 4192.

This interim monitoring shall occur at the following locations:

• Effluent discharge point (Discharge Serial No. 001), for both discharge wastewater streams (i.e., storm water and washdown water).

### (c) 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 storm water discharges at all storm water discharge locations to observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity and odor. Furthermore, the Discharger shall implement the Storm Water Pollution Prevention Plan Requirements (SWPPP) and monitoring requirements as is enumerated in NPDES General Permit for Storm Water Discharges Associated with Industrial Activity [State Water Resources Control Board (State Board) Order No. 97-03-DWQ, NPDES Permit No. CAS000001].