California Regional Water Quality Control Board
Los Angeles Region

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Linda S. Adams
Acting Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

June 1, 2011

Ms. Katherine Rubin, Manager
Water Quality and Compliance Group
City of Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, CA 90012-2607

Dear Ms. Rubin:

RESPONSE TO REQUEST FOR ADJUSTMENT OF FINAL LIMITS FOR METALS FOR HARBOR GENERATING STATION FUEL STORAGE NORTH SKIM TANK – NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NO. CA0056383, CI NO. 6004.

Your letters dated February 27, 2011, and January 10, 2011, outlined concerns that you have regarding the final effluent limitations for a number of metals that are included in Order No. R4-2008-0015. The letters stated that "the Los Angeles Department of Water and Power (LADWP) considered the limits to be unreasonable, given that the Harbor Generating Station Fuel Storage North Skim Tank facility (tank facility) is not the source of the pollutants found in the effluent." A request to remove the permit limits was included along with a request for the Regional Board to allow LADWP to conduct an aerial deposition source study to prove that the facility is not the source of the pollutants.

Since your discharge demonstrated reasonable potential (RP) to exceed applicable water quality based effluent limits we included the effluent limits in the permit. The protocol outlined in the State Implementation Policy (SIP) states "When a RWQCB determines, using the procedures described in section 1.3, that water quality-based effluent limitations are necessary to control a priority pollutant in a discharge, the permit shall contain effluent limitations developed using one or more of the following methods:..." The SIP protocol was used and staff included the appropriate numeric effluent limits in the permit for copper, cyanide, lead, nickel, and zinc. Since the facility's discharge has demonstrated RP and the limits have been calculated using the appropriate protocol, they must be included in the permit.

Background

The Harbor Generating Station Fuel Storage North Skim Tank (Facility) is located at 100 North Fries Avenue, Wilmington, California. The Facility consists of one fuel storage tank with a capacity of 378,000 gallons and a loading dock which is part of the fuel storage facility for the

Harbor Generating Station. The storage tank area is covered with asphalt and encompasses approximately 27,000 square feet with a 10-foot earthen berm which is also covered with asphalt, providing secondary containment for the area. The storage tank is used for backup storage of No. 2 diesel fuel oil for the generating station. Storm water from the storage tank and loading dock areas is collected in a containment area and directed to a four-stage oil skim unit. The Discharger also maintains a fire protection system for the loading dock area that consists of 28 overhead sprinklers that utilize municipal water at a rate of 100 gallons per minute (gpm) for 5 minutes during annual testing. During the testing, the loading dock fire protection system generates runoff that is also directed to the four-stage oil skim unit. Wastewater from the four-stage oil skim unit is discharged through Discharge Point No. 001 to a storm drain on Fries Avenue that discharges to the Los Angeles Inner harbor, a water of the United States.

As per the January 10, 2011, letter from LADWP, the facility is located in a highly industrialized area. Facilities in the area include petroleum refining, ship repair, power plants, municipal solid waste incinerators, diesel-powered ships at the Ports of Long Beach and Los Angeles, auto body shops, manufacturing and gasoline dispensing facilities, metal plasters, and welders. Surface water discharges from the facility travel via storm drain to the Los Angeles Inner Harbor.

Basis for the Limits

The Fact Sheet of Order R4-2008-0015 includes a thorough analysis of the basis for the limits included in the Order. The data set collected for the discharge from the facility, as per the SIP, was used to evaluate the probability that the concentration of the effluent would exceed applicable water quality criteria via a reasonable potential analysis. The discussion in the Fact Sheet includes information used to determine if numerical effluent limits were warranted for all of the priority pollutants. The analysis lists the applicable water quality based criteria and the associated maximum effluent concentration (MEC) detected in discharges from the Facility. Beginning on page F-16 of the Fact Sheet, Table F-7 Summary of Reasonable Potential Analysis (RPA), presents the determination of whether an effluent limit is required based on the RPA for the priority pollutants for which sufficient data were available. The methodology outlined in the SIP was used to calculate the effluent limits for the priority pollutants.

Table F-9 on Page F-24, presents the Summary of the Final Effluent Limitations and includes a basis for each limit included in the permit. The priority pollutants that demonstrated reasonable potential were included in the Order.

The water quality criteria included in the California Toxics Rule (CTR) were developed under the Clean Water Act section 304(a) to protect aquatic life and/or human health. This criteria as per the CTR "might be thought of as an estimate of the highest concentration of a substance in

water which does not present a significant risk to the aquatic organisms in the water and their uses". Since the criterion is based on the concentration that is safe for the receptors (aquatic organisms or humans) the source of the pollutant discharged is not considered. The SIP discusses the use of intake credits in situations where the discharge goes to the same water body that the influent comes from. However, in this case the influent is storm water runoff and there is no water body associated therewith. Therefore, this discharge does not quality for intake credits.

The receiving water for discharges from the Facility is the Los Angeles Inner Harbor. As per the Fact Sheet, the 2006 303 (d) List of impaired water bodies classifies the Los Angeles Inner Harbor as impaired. The pollutants/stressors of concern include copper and zinc along with beach closures, benthic community effects, DDT, PCBs, and sediment toxicity. There were no TMDLs in effect for the Harbor in 2008, therefore none of the limits included in the permit were developed based on TMDLS.

A new TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters has been developed and was adopted during the May 5, 2011, Board Hearing. The TMDL also includes waste load allocations for copper, lead, zinc, 4, 4-DDT, and total PCBs in the Inner Harbor. The modeling used to develop the TMDL includes contributions from direct atmospheric deposition, indirect atmospheric deposition and bed sediments in both wet and dry weather.

Analysis

LADWP is requesting that the final effluent limits for cyanide, lead, nickel and zinc be removed from the permit. The letter asserts that aerial deposition, not site activities, is the source of the elevated contaminant concentrations in the Facility's effluent for these constituents. The source of the discharges from the Facility is storm water runoff and fire protection system test water. Routine maintenance operations, leaching of contaminants from structures and equipments onsite, and aging of structures could result in the release of some of these contaminants from pipelines, tanks, and materials used onsite.

The analysis performed to determine the regulated contaminants in your permit utilizes all available, valid, relevant, representative information to determine whether the discharge may (1) cause, (2) have reasonable potential (RP) to cause, or (3) contribute to an excursion above any applicable priority pollutant criterion or objective. An analysis of the pollutant concentrations in your discharge resulted in reasonable potential for copper, cyanide, lead, nickel and zinc. If after the next RPA these constituents no longer demonstrate RP they will be removed from the permit.

Section 1.3 of the SIP which describes the reasonable potential analysis procedures states, "the RWQCB shall conduct the analysis in this section for each priority pollutant with an applicable criterion or objective, excluding priority pollutants for which a Total Maximum Daily Load (TMDL) has been developed, to determine if a water quality-based effluent limitation is required in the discharger's permit." Also in Step 7 of the RPA procedures, the review of other information includes consideration of whether the receiving water is CWA 303(d) listed. This step requires that waste load allocations (WLA) included in TMDLs developed for the water body is implemented in the permit.

The discharge enters the Los Angeles Inner Harbor. As stated previously, that water body is CWA 303(d) listed and during the May 5, 2011, Board Hearing a TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters has been adopted. That TMDL includes WLAs for storm water discharges and other NPDES permits. Copper, lead, zinc, 4, 4-DDT, and total PCBs have assigned salt water column WLAs. Hence, based on noted impairments to the receiving water, WLAs have been developed for a number of the constituents that have demonstrated RP in discharges from the Fuel Storage North Skim Tank. When the TMDL becomes effective the WLAs will be implemented into the Fuel Storage North Skim Tank NPDES permit.

Conclusion

Since the discharge from the facility demonstrates RP for the noted constituents, numeric effluent limits are included in the permit. It is not appropriate to apply intake credits since the intake water (storm water and fire system test water) does not come from the receiving water body (Los Angeles Inner Harbor). Intake credits require that the intake source and receiving water be the same waterbody.

Staff concurs that aerial deposition may contributes to the contaminant concentrations detected in the effluent. However, since the NPDES permit regulates the concentrations of the contaminant at the end of pipe and the effluent limit is based on a criterion that is developed to protect the aquatic life receptor there is no apparent method to safely increase the limit without data from site specific studies that prove that an increase will not adversely affect the aquatic life living in the Harbor.

When the TMDL has received all of the required approvals the WLAs included in the TMDL will be implemented in the permits for discharges to the Los Angeles Inner Harbor. The TMDL addresses aerial deposition; however, that may not result in increases in the permitted effluent concentrations discharged to the Harbor. The TMDL in the Phase I implementation for the Greater Los Angeles and Long Beach Harbor Waters (including Consolidated Slip) includes a

description of some of the implementation strategies that may be used to meet the required WLAs. It reads:

> Potential watershed-wide non structural BMPs include more frequent and appropriately timed storm drain catch basin cleaning, improved street cleaning by upgrading to vacuum type sweepers, and educating residents and industries about good housekeeping practices. Structural BMPs may include the placement of storm water treatment devices designed to reduce sediment loading, such as infiltration trenches, vegetated swales, and/or filter strips at critical points in the watershed. Structural BMPs may also include diversion and treatment facilities to divert runoff directly, or provide capture and storage of runoff and then diversion to a location of treatment. Treatment options to reduce sediment could include sand or media filters.

In conclusion, implementation of the potential mitigation measures included in the TMDL or other measures may be used to address contaminant concentrations that are the result of aerial deposition on your property. We continue to be open to further dialogue regarding aerial deposition and how it can be used in our current regulatory framework.

If you have any questions, please contact Cassandra D. Owens at (213) 576-6750 or Rosario Aston at (213) 576-6653.

Sincerely,

Samuel Unger

Samuel Unger, P.E.
Executive Officer

Enclosure: February 27, 2011 Letter – Request for Adjustment of Final Limits for Metals

cc: Ms. Jennifer Pinkerton, Los Angeles Department of Water and Power **(Via E-mail Only)**