CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. R6V-2013-(TENTATIVE)
WDID 6B152087001

RESCISSION OF WASTE DISCHARGE REQUIREMENTS BOARD ORDER NO. 6-82-131 FOR COLUMBIAN CHEMICALS COMPANY MOJAVE PLANT NO. 55

Kern County

The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

1. Discharger

   Columbian Chemicals Company, now a subsidiary of Freeport McMoRan Copper and Gold, operated a carbon black manufacturing facility near Mojave in Kern County (Mojave Plant No. 55). For the purposes of this Water Board Order (Order), Columbian Chemicals Company is referred to as the "Discharger" and Mojave Plant No. 55 is referred to as the "Facility."

2. Facility Location

   The Facility is located at 12701 United Street, approximately 3 miles south of Mojave in part of Section 33, Township 11 North, Range 12 West, San Bernardino Baseline and Principal Meridian. The Facility is located within the Chaffe Hydrologic Area of the Antelope Hydrologic Unit and overlies a portion of the Antelope Valley Groundwater Basin.

3. Facility

   The Facility operated as a carbon black manufacturing facility from 1969 to 1989. The waste management units consisted of three clay lined surface impoundments (evaporation ponds), which were the designated disposal sites for industrial wastewater. The industrial wastewater included boiler blowdown, wash water from the carbon black manufacturing unit, and onsite stormwater. The wastewater contained total filterable residue and chloride at concentrations in the range of 4,000 milligrams per liter (mg/L) and 2,000 mg/L, respectively, as well as detectable concentrations of polyaromatic hydrocarbons (PAHs) and volatile and semi-volatile organic compounds (VOC and SVOC).

TENTATIVE

The three evaporation ponds were lined with a minimum of 18-inches of clay compacted to a permeability of $1x10^{-6}$ centimeters per second. The wastewater was conveyed to the ponds via concrete lined diversion channels. Each pond was equipped with a leakage detection system, which consisted of a network of perforated pipe underdrains and associated upgradient and downgradient leakage detection wells.

Groundwater monitoring was not a requirement of Board Order No. 6-82-131. Depth to groundwater has been in excess of 180 feet below ground surface for the life of the Facility. In lieu of groundwater monitoring, the Discharger monitored the vadose zone by periodic inspection of the leakage detection wells.

4. Waste Discharge Requirements

On April 14, 1977, the Water Board adopted Waste Discharge Requirements (WDRs) for the Facility under Board Order No. 6-77-29 to allow for the disposal of industrial wastewater to two surface impoundments onsite. On December 15, 1982, the Water Board adopted Board Order No. 6-82-131 that revised the WDRs to authorize the construction of a third surface impoundment, to reflect a change in ownership of the Facility, and to rescind the previous Board Order No. 6-77-29.

5. Reasons for Action

The Discharger ceased operation of the Facility in May 1989. Since that time, the Discharger has implemented the Site Closure Plan (May 1997) and the Revised Site Closure Workplan (July 2002), both of which were reviewed and accepted by Water Board staff. All salvageable equipment and remaining products were removed from the Site and transported for reuse at other facilities or sold. The remaining manufacturing facilities were demolished and the three evaporation ponds were closed in place by infilling with clean soil. In May 2005, the former pond area was capped and graded to prevent ponding or stormwater run-on. The capped area was subsequently hydroseeded and stabilized with native vegetation to prevent erosion. At the time of closure, the evaporation ponds contained up to 3.5 feet of dry sludge consisting of carbon black material in the deeper portions of the ponds.

On November 30, 2005, the Discharger submitted a Closure Report and Supplemental Site Assessment that documented closure activities at the Site. Analytical data contained in that report indicated that the dry sludge buried within the former evaporation ponds contained detectable concentrations of PAHs. Specifically, benzo(a)anthracene and chrysene were detected at soluble concentrations of 0.52 micrograms per liter (ug/L) and 0.22 ug/L, respectively, in soils collected just above the clay liner from the middle evaporation pond. Due to a lack of groundwater monitoring data, a soil investigation was subsequently performed in October 2012 to evaluate the potential threat to groundwater quality resulting from the buried waste. The results of that investigation were detailed in a Vadose Zone Soil Investigation Report dated December 17, 2012. The analytical data from that report show that there is no evidence of downward migration of PAH in the soil beneath the clay liners, and

TENTATIVE

supports the conclusion that the waste buried in the former evaporation ponds is contained and does not pose a threat to groundwater quality.

PAHs may pose a threat to water quality if exposed to stormwater or surface water. The vegetated soil cap combined with positive grading to prevent ponding or stormwater run-on is an effective control in preventing erosion and subsequent exposure of the buried waste to stormwater. Therefore, maintaining the integrity of the soil cap is necessary to ensure that the remaining waste will not pose a threat to the quality of surface waters. To ensure that the cap over the former pond area remains protected in perpetuity and to preclude the potential for excavation and exposure of the buried waste to stormwater, the Discharger will implement a land use restriction to prevent future redevelopment of the former evaporation ponds.

Based on site conditions, depth to groundwater, and the imposed land use restriction, the Water Board finds that the wastes remaining in the former pond area do not pose a threat to water quality and it is appropriate to rescind Board Order No. 6-82-131 for the Mojave Plant No. 55 facility.

6. California Environmental Quality Act (CEQA)

This action is being taken by the Water Board to rescind WDRs issued pursuant to the California Water Code, and as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with the California Code of Regulations (CCR), title 14, section 15321, subsection (a)(2).

7. Right to Petition

Any person aggrieved by this action of the Water Board may petition the State Water Board to review the action in accordance with California Water Code, section 13320, and CCR, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality, or will be provided upon request.

8. Public Notification

The Water Board has notified the Discharger and interested agencies and persons of its intent to rescind WDRs for the Facility. The Water Board, in a public meeting, heard and considered all comments pertaining to the rescission of these WDRs.

TENTATIVE

IT IS HEREBY ORDERED that Board Order No. 6-82-131, be rescinded.

I, Patty Z. Kouyoumdjian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on June 19, 2013.

_____
PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

S:\Board Orders 2013\Mojave Plant 55_CCC\TENTATIVE\Resc_6-82-131_Mojave55.docx

TENTATIVE