

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

TENTATIVE RESOLUTION NO. R9-2012-0045

AUTHORIZING THE EXECUTIVE OFFICER TO INCREASE THE DAILY AVERAGE DISCHARGE FLOW RATE LIMITATION UNDER ORDER NO. R9-2008-0002, NPDES NO. CAG919002, FOR THE KINDER MORGAN ENERGY PARTNERS' MISSION VALLEY TERMINAL REMEDIATION DEWATERING DISCHARGE TO MURPHY CANYON CREEK

WHEREAS:

1. **DISCHARGER.** SFPP, L.P., operating partnership of Kinder Morgan Energy Partners, L.P. (hereinafter Kinder Morgan or Discharger) discharges up to 795,000 gallons per day of treated groundwater to the San Diego River via Murphy Canyon Creek (Mission San Diego Hydrologic Area, 907.11) pursuant to waste discharge requirements prescribed in Order No. R9-2008-0002, NPDES No. CAG919002 (General NPDES Permit). On August 24, 2010, Kinder Morgan requested an amendment of its Notice of Enrollment (NOE) under the General NPDES Permit to increase the allowable discharge rate to 1.26 million gallons per day (MGD) to increase the rate of groundwater extraction in support of groundwater remediation at the Mission Valley Terminal (MVT) site. After receipt of additional information, the application for NOE amendment was deemed complete on February 28, 2012.
2. **FACILITY.** The MVT is a 10.5 acre aboveground storage tank (AST) facility located in Murphy Canyon at 9550 and 9966 San Diego Mission Road, San Diego, CA. MVT is located in an area bounded by Interstate 15 and San Diego Mission Road in the City of San Diego within the Mission San Diego Hydrologic Subarea 907.11. The MVT has been in operation since 1962. Gasoline releases from MVT resulted in a groundwater contamination plume extending off-Terminal approximately 2,000 feet to the south and southwest beneath Friars Road and the Qualcomm Stadium parking lot.
3. **GROUNDWATER BASIN CHARACTERISTICS.** The Mission Valley Groundwater Basin (Mission San Diego Hydrologic Subarea 907.11) underlies an east-west trending valley, which is drained by the San Diego River. The basin is bounded by the contacts of alluvium with the semi-permeable San Diego and Poway Formations and the impermeable Lindavista Formation. Significant interchange can occur between surface flow in the San Diego River and the alluvial groundwater within Mission Valley. Groundwater beneficial uses designated for the Mission San Diego Hydrologic Subarea 907.11 in the *Water Quality Control Plan for the San Diego Basin* (Basin Plan) include existing beneficial uses for agricultural supply (AGR), industrial service supply (IND), industrial process supply (PROC) and a potential beneficial use for municipal and domestic supply (MUN).
4. **CLEANUP AND ABATEMENT ORDER REQUIRMENTS.** Cleanup and Abatement Order (CAO) 92-01, as amended in 2005, requires Kinder-Morgan to:
 - a. Clean up contaminated soil;
 - b. Remove, to the extent technically practicable, residual light non-aqueous phase petroleum liquid (liquid gasoline referred to as LNAPL) from subsurface soil and groundwater beyond the MVT property by December 31, 2013; and

- c. Reduce concentrations of dissolved phase petroleum hydrocarbon waste constituents in groundwater to attain background water quality conditions beyond the MVT property by December 31, 2013.

Effective and timely cleanup of the groundwater in accordance with the terms and conditions of the CAO is essential to the restoration and protection of the existing and potential designated beneficial uses of water resources in the lower San Diego River watershed (Mission San Diego Hydrologic Subarea 907.11).

5. **GASOLINE CONSTITUENTS IN GROUNDWATER.** The cleanup currently is focusing on two gasoline constituents in groundwater, methyl tertiary butyl ether (MTBE), and tertiary butyl alcohol (TBA). During the fourth quarter 2011 monitoring event, Kinder Morgan reported that no total petroleum hydrocarbons, benzene, toluene, ethylbenzene, or xylenes were detected in the off-Terminal groundwater monitoring wells, except at two locations. The fuel additive MTBE detected in groundwater remained at relatively low concentrations, below 5 micrograms per liter (ug/L), in portions of the off-Terminal area, except for two monitoring wells that detected MTBE at 6.8 and 8.4 ug/L. Concentrations of TBA ranging from non-detect to 250 ug/L were reported. The frequency and magnitude of TBA detections in the off-terminal area have generally decreased over time.
6. **WATER SUPPLY REPLACEMENT.** The City of San Diego (City) reports that insufficient clean-up efforts by Kinder-Morgan have impeded the City's ability to implement plans for developing a project in Mission Valley to use the groundwater to augment its drinking water supply. Should the City install a drinking water production well in the area of the MVT groundwater pollution, Addendum No. 5 to the CAO requires Kinder-Morgan to submit a Drinking Water Replacement Contingency Plan that includes a provision to provide uninterrupted replacement water service, which may include wellhead treatment, for the public water purveyor or private well owner. Kinder-Morgan reported that it has offered to provide the treated groundwater, which is currently being discharged to Murphy Canyon Creek, to the City for beneficial re-use, but reports that the City has never responded to its offers. Kinder-Morgan further reports that a water supply well does not exist and that to their knowledge, the City has not provided a plan to develop the aquifer with water supply wells or sought a permit from the California Department of Health Services for such water supply wells.
7. **PROPOSED GROUNDWATER EXTRACTION RATE INCREASE.** Kinder-Morgan plans to continue operating the primary soil vapor extraction system in a bioventing mode until the December 31, 2013 groundwater CAO directive is met. The groundwater extraction system continues to operate to maintain the hydraulic barrier at the MVT property boundary and to remove concentrations of dissolved-phase petroleum hydrocarbons in off-Terminal groundwater to comply with the December 31, 2013 cleanup deadline. Kinder-Morgan used new data collected in the off-terminal area to update a groundwater flow and contaminant transport model. The groundwater model was used to evaluate well locations, proposed pumping rates, and to simulate future dissolved-phase MTBE and TBA concentration reductions over time in the down gradient off-Terminal area. Based on the modeling simulations, Kinder-Morgan determined that a groundwater discharge increase to 1.26 MGD is needed to increase the rate of groundwater extraction to achieve the cleanup goals established by the December 31, 2013 CAO deadline. Kinder-Morgan has constructed a second groundwater treatment plant and installed six additional groundwater extraction wells southwest of Qualcomm Stadium to accommodate the proposed groundwater discharge flow rate increase.

8. **DISCHARGE TO CALTRANS MUNICIPAL SEPARATE STORM SEWER (MS4).** Murphy Canyon Creek and the lower San Diego River, to which Murphy Canyon Creek flows, are defined as both receiving waters and a municipal separate storm sewer system (MS4). The General NPDES Permit makes prior approval from the appropriate local agency with jurisdiction over the MS4 at the point of the groundwater discharge a condition of eligibility for an NOE under the General NPDES Permit. On February 28, 2012, Kinder Morgan submitted documentation that the MS4 at the point of discharge was located within the Caltrans right of way and that Caltrans has indicated it does not need to issue a permit or formal authorization for the discharge. Caltrans's MS4 discharges are regulated under State Water Resources Control Board Order No. 99-06-DWQ. Kinder Morgan's submittal satisfies the General NPDES Permit requirement that an applicant for enrollment include documentation that the local agency has authorized the proposed discharge to its MS4 as part of the Notice of Intent to discharge.
9. **TIME SCHEDULE ORDER.** The San Diego Water Board's Order No. R9-2011-0052 (Time Schedule Order) prescribes a time schedule for Kinder-Morgan to assess the potential for the total dissolved solids (TDS), which are naturally high in the groundwater discharge to cause, or contribute to, an in-stream excursion above the Basin Plan surface water quality objective of 1500 mg/L and to assess any impact of the discharge on the downstream beneficial uses. The Time Schedule Order further requires Kinder Morgan to develop and implement a plan to address compliance with the Basin Plan TDS surface water quality objective and undertake mitigation measures to compensate for interim TDS loading by the effluent discharge in excess of the TDS surface water quality objective up to and until final compliance with the Time Schedule Order is achieved. The Time Schedule Order also contains an interim TDS effluent limitation of 2400 mg/L and requires Kinder-Morgan to achieve the TDS surface water quality objective by November 30, 2015. The San Diego Water Board's amendment of Kinder Morgan's NOE to increase the allowable discharge rate to 1.26 MGD would not conflict with the terms and conditions of the Time Schedule Order and will be conditioned upon Kinder Morgan's continued compliance with the Time Schedule Order.
10. **CITY OF SAN DIEGO.** Murphy Canyon Creek downstream of the Caltrans right of way is located within the City of San Diego. By letter dated November 3, 2011 the City described four fundamental claims to support its argument that the San Diego Water Board should not allow the discharge flow increase requested by Kinder Morgan:
 - a. The City argues that it has not approved of Kinder Morgan's discharge into the MS4 which is a prerequisite of the General NPDES Permit. This argument is moot because the MS4 receiving the discharge is owned and operated by Caltrans as described in Finding 8 of this Resolution.
 - b. The City argues that that the General NPDES Permit expressly requires the discharger to demonstrate alternatives to discharging extracted groundwater waste into the MS4, such as the City's preference of reinjection, and to demonstrate why it is technically or economically infeasible to implement these alternatives before any such discharge is permissible. This argument is moot because the San Diego Water Board has previously dealt with this issue by letter to the City dated July 16, 2009 describing Kinder Morgan's evaluation of the economic and technical feasibility of re-injecting treated groundwater into the aquifer along with other alternatives. In that

letter the San Diego Water Board concurred with Kinder Morgan's determination that re-injection of extracted groundwater into the aquifer after treatment was not feasible based on cost considerations and because it could potentially displace the contaminant plume to currently unaffected areas. The San Diego Water Board also concluded that it would not require Kinder Morgan to implement any of the City's alternative remedial approaches at the MVT site.

- c. The City argues that the San Diego Water Board should order Kinder Morgan to pay the City for the cost to replace the water Kinder Morgan extracts from the City's aquifer on the basis of California Water Code section 13304(a) and the existence of pueblo rights to the use of the groundwater of the Mission Valley Aquifer. The argument pertaining to Water Code Section 13304 (a) is moot in part because as described in Finding 9 of this Resolution, CAO Addendum No. 5 already requires Kinder Morgan to provide uninterrupted replacement water service, which may include wellhead treatment should the City install a drinking water production well in the area of the MVT groundwater pollution. Furthermore the San Diego Water Board has previously concluded by letter dated July 16, 2009 that groundwater elevation data from the MVT site does not show that Kinder Morgan's groundwater extraction is creating a condition of near or long term overdraft of the aquifer. Moreover the San Diego Water Board does not have the jurisdiction or authority to require Kinder Morgan to compensate the City for water removed from the aquifer during remediation efforts and the City is attempting to seek damages from Kinder Morgan through litigation in another forum.
 - d. The City argues that Kinder Morgan has not demonstrated how the proposed increase in the groundwater discharge flow rate will aid in expediting remediation. This argument is moot because by letter dated November 16, 2011 Kinder Morgan provided a detailed analysis by its consultant, Arcadis, describing groundwater modeling performed in support of the proposed increase in the daily average discharge rate from the remedial extraction system currently operating in the on- and off-Terminal areas for the MVT site. Arcadis reported that preliminary simulations at the current ground water extraction rate indicated the potential that some localized areas of the simulated plume may not reach the cleanup goals by the December 31, 2013 CAO deadline. Additional simulations predicted that increasing the rate of ground water extraction using newly available extraction wells and locations would provide a high degree of confidence in meeting the CAO remedial goals ahead of schedule to account for uncertainty in model predictions.
11. **EXECUTIVE OFFICER DELEGATION OF AUTHORITY.** The issuance of notices of enrollment for the General NPDES Permit is delegated to the San Diego Water Board Executive Officer under the terms and conditions of the General NPDES Permit. The San Diego Water Board by prior resolution has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to Water Code section 13223. Therefore, the Executive Officer is authorized to act on the San Diego Water Board's behalf on any matter within the General NPDES Permit unless such delegation is unlawful under Water Code §13223 or the General NPDES Permit explicitly states otherwise.

12. **CALIFORNIA ENVIRONMENTAL QUALITY ACT.** This Resolution authorizing the Executive Officer to amend Kinder Morgan's Notice of Enrollment in the General NPDES Permit to allow an increase in discharge rate by Kinder Morgan is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000, et seq.) in accordance with Water Code Section 13389.
13. **PUBLIC NOTICE.** The San Diego Water Board has notified the Discharger and interested agencies and persons of its intent to authorize the Executive Officer to amend the Notice of Enrollment for the increased discharge flow rate. Written comments on Kinder Morgan's request for an increased discharge flow rate were accepted, and in a public meeting, the San Diego Water Board heard and considered all written and oral comments pertaining to the proposal to increase the discharge flow rate.

THEREFORE BE IT RESOLVED THAT: The San Diego Water Board authorizes the Executive Officer to amend Kinder Morgan's Notice of Enrollment to increase the discharge flow rate limitation to 1.26 million gallons per day to Murphy Canyon Creek in order to increase the rate of ground water extraction in support of ground water remediation at the Mission Valley Terminal Site.

I hereby certify that the above Resolution is a true and correct copy of Resolution No. R9-2012-0045 adopted by the San Diego Water Board on June 13, 2012.

David W. Gibson, Executive Officer