State of California Regional Water Quality Control Board San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT May 9, 2012

ITEM: 11

SUBJECT: NPDES Permit Notice of Enrollment Amendment: Kinder

Morgan Energy Partners, Mission Valley Terminal Remediation

Dewatering Discharge, Consideration of a Resolution

authorizing the Executive Officer to amend Kinder Morgan's Notice of Enrollment under Order No. R9-2008-0002, NPDES No. CAG919002, to increase the daily average discharge flow rate limitation. (Tentative Resolution No. R9-2012-0045)

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(Ben Neill)

PURPOSE: To adopt Tentative Resolution No. R9-2012-0045 (Supporting

Document No. 1).

RECOMMENDATION: Adoption of Tentative Resolution No. R9-2012-0045 is

recommended.

**KEY ISSUES:** 

- The dewatering discharge flow rate increase requested by Kinder Morgan Energy Partners (Kinder Morgan) is appropriate and necessary for timely cleanup of the contaminated groundwater. Alternative methods of disposal advocated by the City of San Diego, including reinjection have previously been thoroughly examined and dismissed.
- 2. Order No. R9-2008-0002, the General NPDES Permit regulating groundwater dewatering discharges to surface waters in the San Diego Region, makes prior approval from the appropriate local municipal separate storm sewer system (MS4) agency having jurisdiction over the MS4 at the point of the groundwater dewatering discharge a condition of eligibility for a Notice of Enrollment (NOE). The point of discharge is located within the State of California Department of Transportation (Caltrans) right of way; therefore Caltrans is the local jurisdictional MS4 agency. Caltrans has reported that it would not require a permit or formal authorization in this situation; and therefore the General NPDES Permit requirement for prior approval is satisfied.

- 3. Naturally occurring elevated levels of total dissolved solids, above the surface water quality objective, in the groundwater dewatering discharge are addressed separately in Time Schedule Order No. R9-2011-0052. The San Diego Water Board's amendment of Kinder Morgan's NOE to increase the allowable discharge rate to 1.26 million gallons per day (MGD) would not conflict with the terms and conditions of the Time Schedule Order, which mandates compliance with the TDS water quality objective by November 30, 2015.
- 4. The City of San Diego (City) has rights to the groundwater underlying the Mission Valley Terminal site, including beneath Qualcomm Stadium, and raises four fundamental claims to support its argument that the San Diego Water Board should not allow the discharge flow increase requested by Kinder Morgan. These claims and prior San Diego Water Board responses thereto are discussed below.
- 5. The proposed flow rate increase will not be detrimental to existing surface water quality. Murphy Canyon Creek is a hardened channel at the point of discharge; therefore hydromodification is not a concern. The proposed flow volume increase will not add any new pollutants to the discharge. The mass loading of the pollutants in the discharge, including TDS, will increase as a consequence of the flow increase. The Time Schedule Order, however, requires Kinder Morgan to undertake mitigation measures to compensate for interim TDS loading by the effluent discharge in excess of the Basin Plan TDS water quality objective up to and until final compliance with the Time Schedule Order is achieved.

DISCUSSION:

Kinder Morgan is remediating soil and groundwater contamination at the Mission Valley Terminal aboveground tank storage facility pursuant to Cleanup and Abatement Order No. 92-01 (CAO) using vapor and groundwater extraction and treatment methods. The groundwater treatment system currently discharges 795,000 gallons per day (gpd) of extracted groundwater to Murphy Canyon Creek. This discharge is regulated under Order No. R9-2008-0002 (NPDES No. CAG919002), General Waste Discharge Requirements For Discharges From Groundwater Extraction And Similar Discharges To Surface Waters Within The San Diego Region Except For San Diego Bay (General NPDES Permit).

The Mission Valley Terminal groundwater extraction discharge to Murphy Canyon Creek commenced approximately 18 years ago in 1994. Kinder Morgan has been enrolled under four successive versions of the same General NPDES Permit (NPDES No. CAG919002) for the groundwater extraction discharge since March, 1994 (Order Nos. 91-10, 96-41, 2001-96, and 2008-0002). In March 1994, the San Diego Water Board issued a NOE for the discharge of up to 220,000 gpd from the Mission Valley Terminal remediation site to Murphy Canyon Creek. As required by the General NPDES Permit, Kinder Morgan submitted a Notice of Intent (NOI) in 1996, 2005, 2009, and 2010 for modification of the discharge flow limit prescribed in the NOE and subsequent addenda to the NOE. The San Diego Water Board issued NOEs increasing the allowable discharge flow limit to 300,000 gpd in September 1996, to 505,000 gpd in March 2005, and to 795,000 gpd in December 2009.

By letter dated August 24, 2010 (see Supporting Document No. 4), Kinder Morgan requested an amendment of its NOE under the General NPDES Permit to increase the average daily discharge rate to 1.26 MGD and thereby increase the rate of groundwater extraction in support of groundwater remediation at the Mission Valley Terminal. Kinder Morgan reported that the increased discharge rate will accelerate groundwater cleanup to ensure compliance with the December 31, 2013, deadline date prescribed in the CAO for the portion of the site beyond the terminal property boundary.

In September 2011, the San Diego Water Board adopted Time Schedule Order No. R9-2011-0052 addressing elevated TDS levels in the discharge. Following adoption of the Time Schedule Order, by letter dated October 21, 2011, (Supporting Document No. 5) the San Diego Water Board Executive Officer notified interested parties that written comments on Kinder Morgan's proposed increase in the discharge flow rate would be accepted until November 7, 2011. By letter dated November 3, 2011 (Supporting Document No. 5a) the City of San Diego responded to the notice and described four fundamental claims underlying its argument that the San Diego Water Board should not allow the discharge flow increase requested by Kinder Morgan. The City's claims and San Diego Water Board responses to those claims are summarized below:

1. The City's alleged jurisdiction over the MS4 receiving Kinder Morgan's discharge.

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 the Tentative Resolution.

 Kinder Morgan's alleged noncompliance with the General NPDES Permit requirement to demonstrate, and if feasible, implement alternatives to discharging extracted groundwater waste into the MS4.

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 previously dealt with this issue by letter to the City dated July 16, 2009 (Supporting Document No. 3) describing Kinder Morgan's evaluation of the economic and technical feasibility of re-injecting treated groundwater into the aguifer 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 aguifer 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 none of the City's alternative remedial approaches should be implemented at the Mission Valley Terminal site.

3. The San Diego Water Board's jurisdiction or authority to require Kinder Morgan to compensate the City for water removed from the aquifer during remediation efforts.

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 most in part because, as described in Finding 6 of the Tentative 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 Mission Valley Terminal groundwater pollution. Furthermore the San Diego Water Board has previously concluded by letter dated July 16, 2009 (Supporting Document No. 3) 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 City is attempting to seek damages from Kinder Morgan through litigation in another forum and 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 aguifer during remediation efforts.

4. Kinder Morgan's alleged failure to demonstrate how the proposed increase in the groundwater discharge flow rate will aid in expediting remediation.

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 (Supporting Document No. 5b) 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 Mission Valley Terminal site. Arcadis reported that preliminary model simulations at the current ground water extraction rate indicated the potential that a few 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.

The Tentative Resolution concludes in its Findings that none of the City's claims provide a basis for the San Diego Water Board to deny Kinder Morgan's request to increase the allowable discharge rate under the General NPDES Permit. The City also indicated in their November 3, 2011 letter (Supporting Document No. 5a), it would consider approval of the increased discharge rate for a period of one year under the following six conditions:

- 1. Kinder Morgan must pay the City for replacement cost of extracted groundwater.
- 2. Kinder Morgan must provide to the City and the San Diego Water Board a comprehensive analysis demonstrating infeasibility of alternatives to discharging extracted groundwater to surface waters.
- Kinder Morgan must change the discharge location to a location other than Murphy Canyon Creek, such as the San Diego River.
- Kinder Morgan must promptly comply with the Basin Plan Water Quality Objective for TDS. Kinder Morgan must monitor and report to the City on the extracted groundwater.
- Kinder Morgan must provide the City all data related to wells, pumping test, and water quality for all work conducted on City property.
- 6. Kinder Morgan must obtain annual approval from the City for continued discharges to its MS4 system.

By letter dated November 16, 2011 (Supporting Document No 5b) Kinder Morgan objected to the City's conditions for approval. By letter dated November 30, 2011 (Supporting Document No. 6a) the City submitted a subsequent request for the San Diego Water Board to conduct a public hearing on the matter and Kinder Morgan then submitted a December 7, 2011 (Supporting Document No.6b) letter asking the Executive Officer to deny the City's request for a hearing.

By letter dated February 28, 2012, (Supporting Document No. 7) Kinder Morgan submitted documentation that their groundwater discharge location is within the right of way for Caltrans's MS4. Kinder Morgan reported that communications were made to seek guidance on any procedures Caltrans may have for accepting the discharge within their right of way. Following discussions with various Caltrans departments,

including NPDES Stormwater (Constantine. Kontaxis, NPDES Program Manager), Maintenance (Cory Binns, Deputy Director of Maintenance), and Permits (John Markey, Branch Chief), Kinder Morgan determined that Caltrans would not require a permit or formal authorization in this situation. Caltrans provided verbal confirmation by phone with San Diego Water Board staff that it has no need to issue a permit or formal authorization for the discharge to its MS4 (Ben Neill personal communication with Caltrans, March 23, 2012). Caltrans has been given an opportunity to submit written comments on the Tentative Resolution and to present their comments at today's meeting.

Following the submittal and review of the above letters, the San Diego Water Board determined that approval of the proposed flow rate increase would be in conformance with the requirements prescribed in the General NPDES Permit and the Time Schedule Order. Accordingly, the San Diego Water Board should adopt the Tentative Resolution authorizing the Executive Officer to amend Kinder Morgan's NOE for an increase in the discharge flow rate limitation to 1.26 million gallons per day to Murphy Canyon Creek in order to increase the rate of groundwater extraction in support of groundwater remediation at the Mission Valley Terminal Site. The draft letter amending Kinder Morgan's NOE is included as Supporting Document No. 2.

## LEGAL CONCERNS: None

## SUPPORTING DOCUMENTS:

- 1. Tentative Resolution No. R9-2012-0045.
- 2. Draft Notice of Enrollment Amendment letter.
- 3. San Diego Water Board letter regarding cleanup of soil and groundwater at MVT, dated June 25, 2009.
- 4. Kinder Morgan letter requesting an increase in flow rate, dated August 24, 2010.
- 5. San Diego Water Board request for comments on flow rate increase, October 21, 2011.
  - a. City of San Diego response, November 3, 2011.
  - b. Kinder Morgan's response, November 16, 2011.
- 6. a. City of San Diego Request for Public Hearing, November 30, 2011.
  - b. Kinder Morgan's response to City's Request, December 7, 2011.
- 7. Kinder Morgan letter to Caltrans, February 28, 2012.

## SIGNIFICANT CHANGES:

None.