



## THE CITY OF SAN DIEGO

June 5, 2012

Via Email to [dgibson@waterboards.ca.gov](mailto:dgibson@waterboards.ca.gov) and  
[bneill@waterboards.ca.gov](mailto:bneill@waterboards.ca.gov)  
and via Hand Delivery

Mr. David W. Gibson, Executive Officer  
San Diego Regional Water Quality Control Board  
9174 Sky Park Court, Suite 100  
San Diego, CA 92123

Mr. Ben Neill, P.E.  
San Diego Regional Water Quality Board  
9174 Sky Park Court, Suite 100  
San Diego, CA 92123

Re: City of San Diego's Comments to Tentative Resolution R9-2012-0045,  
Authorizing 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 (June 13, 2012 Regional Board  
Meeting, Agenda Item 13)

Dear Mr. Gibson and Mr. Neill:

The City appreciates the Regional Board's interest in facilitating remediation of the Qualcomm property and Mission Valley Aquifer. Petroleum contamination from Kinder Morgan's operations at the Mission Valley Terminal has degraded City property and groundwater from which the City intends to develop a potable water source and water storage capacity when remediation is complete. In the meantime, the City cannot afford the ongoing negative impacts of Kinder Morgan's increasing rate of groundwater discharge on City resources. The City has long advocated expeditious clean-up, and has absolutely no interest in delaying clean-up, but clean-up *must* be conducted in a wise and prudent manner that is technically sound and is protective of the City's current and future interests. The Regional Board's desire to accommodate remediation in the manner most convenient to Kinder Morgan does not justify allowing Kinder Morgan to pass the costs of cleaning up the contamination it caused onto the City and its taxpayers by:

- Drawing down the aquifer to which the City holds Pueblo water rights and then wasting that water by discharging it out to sea; and



### Transportation & Storm Water Department

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- Discharging extracted groundwater into the City's municipal separate storm sewer system (MS4), thereby increasing the City's flood control and maintenance costs by causing sedimentation, hydromodification, erosion, and vegetation growth, and decreasing the MS4's capacity to convey flood waters during storm events.

In recognition of the potential adverse effects of groundwater discharge on the receiving MS4, the General Waste Discharge Requirements for this groundwater extraction requires prior approval from the local agency with jurisdiction over the MS4 -- in this case, the City. Kinder Morgan cannot increase its discharge without the City's approval, which it has not yet even tried to achieve because of its untenable position that the City's approval is not necessary.

Kinder Morgan has sought and received increases in groundwater discharge from the Regional Board in 1996, 2005, and 2009, all in the name of meeting its remediation obligations. Since 1994, Kinder Morgan's permitted groundwater discharge rate has increased from 220,000 gallons per day (gpd) to 795,000 gpd, and now Kinder Morgan seeks your approval for a fourth increase to 1,260,000 gpd. Kinder Morgan asserts that its current request is necessary to meet its December 2013 remediation deadline. However, Kinder Morgan has not explained why it has been pumping less than 600,000 gpd when 795,000 gpd is currently permitted.<sup>1</sup> Even more questionable is why Kinder Morgan has only been pumping 60,000 gpd from the MBTE/TBA plume.<sup>2</sup> And, if the SVE system has run its course in the main LNAPL zone, as Kinder Morgan claims, why is Kinder Morgan still pumping 270,000 gpd from that system? If Kinder Morgan requires an increase of roughly 470,000 gpd (1,260,000 – 795,000), then they have enough capacity as is, i.e., the un-used 200,000 gpd plus the 270,000 gpd from the now ineffective SVE system. This discrepancy warrants more scrutiny than simply taking Kinder Morgan at its word based only on computer modeling and not empirical data that this increase is necessary to meet its remediation deadline. It appears they simply need to more effectively use the capacity they currently have.

Given these competing concerns and the questionable need for the increased discharge, the City respectfully requests that the Regional Board continue this item to: (i) allow the City and Kinder Morgan to continue negotiations on the City's proposed conditions of approval; and (ii) require Kinder Morgan to justify its need to pump and waste this huge amount of additional water. A continuance is especially appropriate because the State Water Resources Control Board has not yet acted on the City's petition challenging Time Schedule Order No. R9-2011-0052, which allows Kinder Morgan to discharge groundwater containing levels of Total Dissolved Solids (TDS) that exceed the Basin Plan's receiving water limitations. As the Time Schedule Order establishes an effluent limitation expressed as a concentration of milligrams of TDS per liter of water discharged, these matters are inextricably intertwined and should be heard together because any flow increase will necessarily increase the mass loading of TDS in the receiving water.

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<sup>1</sup> Letter from C. Fredrik Ahlers to Ben Neill, Table 1 (Nov. 16, 2011) (Supporting Document 5b); Kinder Morgan, Groundwater Monitoring and Remedial Progress Report, Fourth Quarter 2011 at 32 (enclosed).

<sup>2</sup> *Id.*

The City appreciates this opportunity to correct the record on several important points.

### **CITY APPROVAL IS REQUIRED**

The applicable General Waste Discharge Requirements which govern Kinder Morgan's discharge expressly require approval from the local agency that operates the MS4. It states: "Without prior approval from the appropriate local agency with jurisdiction over the MS4, the discharger shall not discharge extracted groundwater waste under this WDR into an MS4."<sup>3</sup> Accordingly, in February 2012, Executive Officer David Gibson stated that the Regional Board could not approve Kinder Morgan's request to increase its groundwater discharge to 1.26 million gallons per day (MGD) because Kinder Morgan had been unable to obtain the City's approval.<sup>4</sup>

The Executive Officer's report recognizes that the approval requirement "is based on the provisions contained in San Diego County's MS4 NPDES Storm Water Permit that inform the City (and other co-permittees) that they accept responsibility for discharges into an MS4 that the City does not prohibit or control."<sup>5</sup> Indeed, the City's MS4 permit places responsibility for water quality exceedances in the MS4 and downstream receiving waters on the City, irrespective of the source of the pollutants.<sup>6</sup> The administrative draft of the new MS4 permit goes even further by requiring the City to monitor and identify sources of pollution outside its jurisdiction, and to rehabilitate channels irrespective of the cause of the damage.<sup>7</sup>

In an attempt to evade the clear requirement that it obtain the City's approval, Kinder Morgan has now taken the position that it does not need the City's approval to increase the discharge because Caltrans, not the City, owns the property where the discharge occurs.<sup>8</sup> That assertion is simply wrong. Even if the precise point of discharge is within a Caltrans right-of-way, the City's approval is still required. First, Caltrans is not a "local agency with jurisdiction over the MS4," it is a state agency with no jurisdiction to allow a discharge into the City's MS4. As a practical matter, a mere few hundred feet downstream from the discharge point, the discharge flows unimpeded (and untreated) out of the Caltrans right-of-way, leaving the City responsible for dealing with the ultimate consequences of the discharge, including increased MS4 maintenance costs and potential liability for exceeding receiving water quality limitations.

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<sup>3</sup> San Diego Regional Water Quality Control Board, General Waste Discharge Requirements for Discharges from Groundwater Extraction and Similar Discharges to Surface Waters Within the San Diego Region, R9-2008-0002 § II.D (Mar. 12, 2008) (enclosed).

<sup>4</sup> Executive Officer's Report at 11 (Feb. 8, 2012) (enclosed).

<sup>5</sup> *Id.* at 9.

<sup>6</sup> San Diego Regional Water Quality Control Board, Order No. R9-2007-0001 § A(1) ("Discharges *into and from* [MS4s] in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance (as defined in CWC section 13050), in waters of the state are prohibited.") (emphasis added) (enclosed).

<sup>7</sup> San Diego Regional Water Quality Control Board, Tentative Order No. R9-2012-0011 §§ (D)(1)(a)(1)(v); (B)(3)(a)(3) (administrative draft released April 9, 2012) (enclosed).

<sup>8</sup> Not only is Kinder Morgan's position disingenuous, but it is contrary to arguments made by Kinder Morgan's attorneys in November 2011 that the General Waste Discharge Requirement does not require approval of the MS4 owner at all, and that Murphy Canyon Creek is not part of the City's MS4 system. (Supporting Document 5b.)

Second, even if Caltrans had jurisdiction over a portion of the MS4 and even if Kinder Morgan obtained Caltrans' consent to the discharge, that consent would not negate the need for Kinder Morgan to obtain the City's consent as well. Kinder Morgan must obtain "approval from the appropriate local agency with jurisdiction over the MS4," not just any public agency with a right-of-way at the point of discharge. More importantly, Caltrans' NPDES Permit expressly states: "This NPDES Permit does not preempt or supersede the authority of local municipal agencies to prohibit, restrict, or control . . . authorized nonstorm water discharges to storm drain systems or other watercourses within their jurisdictions as allowed by State and federal law."<sup>9</sup> Thus, regardless of whether or not Caltrans "consents" to the discharge, Kinder Morgan still must get the City's consent, which it has failed to do. Consequently, Kinder Morgan has not satisfied the requirement for consent of the MS4 operator. The Regional Board's approval of Kinder Morgan's request without the City's approval would violate the General Waste Discharge Requirements and call into question the Regional Board's authority to regulate the City's discharge from Murphy Canyon Creek under the MS4 NPDES permit.

#### **THE CITY'S PROPOSED CONDITIONS OF APPROVAL**

The City has approached Kinder Morgan to attempt to come to an agreement that would satisfy the City's concerns over the impacts of the increased discharge to City resources. The City has repeatedly offered the following conditions under which it would agree to the increased discharge:

1. Kinder Morgan pays the City for the replacement cost of groundwater Kinder Morgan extracts from the City's Mission Valley Aquifer;
2. Kinder Morgan submits a comprehensive analysis demonstrating why alternatives to discharging extracted groundwater into the MS4 is technically or economically infeasible;
3. Kinder Morgan must discharge to a location other than Murphy Canyon Creek, such as the San Diego River, to avoid causing erosion and maintenance impacts;
4. Kinder Morgan must promptly bring TDS levels in the discharge into compliance with the Basin Plan standard of 1500 mg/L;
5. Kinder Morgan must conduct monthly monitoring (and quarterly reporting to the City) of the extracted groundwater treatment system;
6. Kinder Morgan must provide the City with quarterly reports of all data related to wells, pumping tests, and water quality for all work performed by Kinder Morgan on City property; and

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<sup>9</sup> State Water Resources Control Board, Caltrans NPDES Permit No. 99-06-DWQ at 5 ¶ 17 (July 15, 1999) (enclosed).

7. Kinder Morgan must obtain annual approval from the City for continued discharges into its MS4 system.

The City first offered these conditions in November 2011.<sup>10</sup> Instead of meeting with the City to discuss its concerns and proposed conditions, Kinder Morgan submitted letters to the Regional Board from its consultants and attorneys disputing that the City had any legal basis to ask for any of these conditions.<sup>11</sup> Kinder Morgan has also failed to offer any alternative conditions, instead taking the untenable position that City approval is not needed. At the urging of Executive Officer David Gibson, the City recently approached Kinder Morgan to reopen discussions and met on May 2, 2012. Unfortunately, the parties were unable to reach an agreement on that date.

The reasons why each of these conditions of approval is warranted are summarized below.

- 1. Payment for Replacement Cost of Groundwater Until Remediation Is Complete**

The Mission Valley Aquifer has been in use as a groundwater source for the City since approximately 1914. The City possesses Pueblo rights under which it has priority for the use of that water. Historically, when the City needed to access the aquifer's supply in order to serve its citizens, it did so. In the interim, Kinder Morgan has abrogated the City's right to develop and use this resource for its citizens, first by contaminating the water source and now by dewatering the aquifer.

Kinder Morgan has not presented any evidence that dewatering the aquifer at a rate of 1.26 MGD will not have long-term overdraft effects on this water source. Kinder Morgan has conceded that the aquifer feeds the San Diego River.<sup>12</sup> But even if the opposite were true, Kinder Morgan has not studied how long it would take the aquifer to recover from dewatering at 1.26 MGD. Moreover, Kinder Morgan has not studied other potential future impacts of this significant draw down from the aquifer. Because Kinder Morgan has not studied other potential future impacts of this significant draw down from the aquifer, it cannot deny their probability.

Kinder Morgan has apparently misled Regional Board staff to believe that the City could develop the aquifer now if it wanted to, such that Addendum No. 5 in the Cleanup and Abatement Order sufficiently protects the City.<sup>13</sup> This is not true. The City had conceptual plans to develop the Mission Valley Aquifer as a water source since at least 2004.<sup>14</sup> The City worked as a cooperator

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<sup>10</sup> Letter from Alex Ruiz and Kris McFadden to David W. Gibson and Ben Neill (Nov. 3, 2011) (Supporting Document 5a).

<sup>11</sup> Letter from Scott Martin to Ben Neill (Nov. 16, 2011) (enclosing letters from Kinder Morgan's consultant Arcadis and attorneys at Downey Brand LLP) (Supporting Document 5b).

<sup>12</sup> Presentation by LFR & Arcadis (on behalf of Kinder Morgan) to the Regional Board (Aug. 12, 2009) (enclosed).

<sup>13</sup> San Diego Regional Water Quality Control Board, Tentative Resolution R9-2012-0045 ¶ 6 (Supporting Document 1).

<sup>14</sup> Concept Study Mission Valley Desalting Project (Mar. 2004), submitted to the Regional Board Feb. 2005.

with the United State Geological Survey (USGS) to fund the installation of a multi-completion monitoring well which has continuously been monitoring groundwater levels in Mission Valley since 2005. Most recently, the City installed a test well and monitoring well cluster at 3025 Camino Del Rio North near the intersection of I-8 and I-805 in Mission Valley, in advance of installing a municipal supply well. Water quality test results at both the USGS multi-completion well and the City's test well cluster at 3025 Camino Del Rio North showed appreciable amounts of petroleum contaminants from the Mission Valley Terminal release. Therefore, the City cannot further develop or implement its plans to install municipal supply wells on its property in Mission Valley until Kinder Morgan's remediation is complete. Thus, any offers from Kinder Morgan to provide the City groundwater effluent from the waste recovery facility for beneficial reuse are disingenuous at best, since Kinder Morgan is well aware that the City has no way to accept the groundwater because of the infeasibility of converting tainted groundwater effluent into a drinking water supply. If Kinder Morgan re-injected the groundwater, the City could begin to develop the aquifer. Otherwise, the City must stay out of the way. Any attempt by the City to re-inject water into the aquifer for storage would surely be met with a claim by Kinder Morgan that the City is interfering with its remediation efforts by raising the groundwater level, as the Regional Board staff's position is that "re-injection of extracted groundwater into the aquifer after treatment [is] not feasible . . . because it could potentially displace the contaminant plume to unaffected areas."<sup>15</sup>

In the meantime, water pumped from the aquifer is released into Murphy Canyon Creek, which constitutes waste. The City cannot afford to allow this critical water source to be squandered. Thus, the only remedy available to the City at this time is to seek payment of equal value in the form of compensation for the public's loss of this local water supply, which the Regional Board has authority to require under Water Code section 13304.<sup>16</sup> The requirement in Addendum No. 5 to the Cleanup and Abatement Order, which requires Kinder Morgan to submit a Drinking Water Contingency Replacement Plan only *after* the City installs a municipal supply well, is not sufficient to protect the City's interests *now*. It would be an absurdity for the Regional Board to require the City to install a municipal supply well in an area with known petroleum contamination before being entitled to compensation for the City's wasted water. Any consideration of Kinder Morgan's request for an increase in groundwater discharge should also include a water supply analysis. The ongoing "pumping and dumping" of this precious water resource fails to take into account the City's need for a local water supply.

2. **Analysis of Alternatives to Discharge into MS4**
3. **Discharge to San Diego River**

These conditions are related and are considered together. The General Waste Discharge Requirements require that "[p]rior to discharging into an MS4, the Discharge shall demonstrate

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<sup>15</sup> Tentative Resolution R9-2012-0045 ¶ 10(b) (Supporting Document 1).

<sup>16</sup> This provision provides that a water board may require "the provision of, or payment for, uninterrupted replacement water service . . . to each affected public water supplier or private well owner." Water Code § 13304(a).

alternatives to discharging extracted groundwater waste into an MS4 and why it is technically or economically infeasible to implement these alternatives.”<sup>17</sup>

Regional Board staff, citing a letter from itself to the City in 2009, appears to have accepted Kinder Morgan’s analysis, submitted with its 2009 application, as sufficient evidence of infeasibility for the alternative of reinjecting some or all of the treated groundwater back in the aquifer.<sup>18</sup> The City is perplexed by the reliance on this letter, given that the same letter contradicts itself by noting that the Regional Board “concluded that . . . re-injection of the groundwater may have been a feasible option.”<sup>19</sup>

The City disagrees that Kinder Morgan’s 2009 analysis can possibly suffice to support its current application, which more than doubles the discharge into Murphy Canyon Creek from the pre-2009 conditions.<sup>20</sup> In 2009, the Regional Board’s infeasibility determination was based in part on Kinder Morgan’s claim that re-injection would be too expensive.<sup>21</sup> Surely, the displaced cost Kinder Morgan passes onto the City by doubling the discharge into the MS4 should be part of the cost consideration, and the Regional Board should require a new infeasibility analysis that takes this into account.

In any case, Kinder Morgan has *never* studied the feasibility of discharging into the San Diego River instead of Murphy Canyon Creek. From the point of discharge to the confluence with the San Diego River, Murphy Canyon Creek predominantly has an earthen bottom with rip rap for stabilization. Virtually all of the dry weather flow in Murphy Canyon Creek is from urban runoff, which would be dwarfed by an additional 1.26 MGD that would turn a trickle into a steady flow. The additional discharge into Murphy Canyon Creek will substantially increase the City’s MS4 maintenance costs. The increased velocity in the channel will contribute to erosion and sedimentation by degrading the channel banks. The increased flow also will cause more vegetation to grow in the channel which will increase maintenance costs by requiring more frequent channel clearing to restore its flood control capacity. However, even bigger problems could occur on wet weather days -- especially in large storms like the one that flooded Qualcomm in December 2010 -- where the full capacity of the MS4 is needed to convey flood waters. The additional 1.26 MGD in Murphy Canyon Creek may contribute to severe flooding.

At the City’s May 2 meeting with Kinder Morgan, the only concession Kinder Morgan said it *might* be willing to make is to turn off the groundwater discharge during large storm events. Although this lone concession does not quell the City’s other significant concerns, the City is hopeful that further progress can be made if negotiations are allowed to continue. Since that

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<sup>17</sup> San Diego Regional Water Quality Control Board, General Waste Discharge Requirements for Discharges from Groundwater Extraction and Similar Discharges to Surface Waters Within the San Diego Region, R9-2008-0002 § II.D (Mar. 12, 2008) (enclosed).

<sup>18</sup> San Diego Regional Water Quality Control Board, Tentative Resolution R9-2012-0045 ¶ 10(b) (citing letter from Michael P. McCann to Marsi A. Steirer (July 16, 2009)) (Supporting Document 1).

<sup>19</sup> Letter from Michael P. McCann to Marsi A. Steirer at 5 (July 16, 2009) (Supporting Document 3).

<sup>20</sup> Prior to the 2009 increase, Kinder Morgan was limited to discharging 505,000 gpd in the Notice of Enrollment effective March 2005.

<sup>21</sup> Letter from Michael P. McCann to Marsi A. Steirer at 4 (July 16, 2009) (Supporting Document 3).

meeting, the City has been exploring the possibility of allowing Kinder Morgan to tap into one of the storm drain pipes under the Qualcomm parking lot to route its discharged groundwater directly to the San Diego River. Initial calculations indicate that the Qualcomm storm drain pipe might accommodate Kinder Morgan's requested flow, at least in dry weather. Further analysis is needed to ensure that the storm drain pipe's capacity and condition can accommodate Kinder Morgan's flow. The City requests that the Regional Board require Kinder Morgan to study the San Diego River alternative as well as other alternatives before considering approval the increased discharge into Murphy Canyon Creek.

**4. Kinder Morgan Must Promptly Bring TDS Levels into Compliance with Basin Plan**

The City's position on this matter is set forth in its petition to the State Board challenging Time Schedule Order R9-2011-0052 and is not repeated at length here. In essence, the City asserts that the Time Schedule Order improperly allowed Kinder Morgan to pollute Murphy Canyon Creek with TDS in concentrations that significantly exceed the Basin Plan's receiving water limits. The City maintains that if Kinder Morgan must discharge to a live stream, then it must conform its discharge to surface water quality objectives right now, not at some future date.

**5. Monthly Water Quality Monitoring**

**6. Quarterly Reporting**

These conditions are related and are considered together. The City is simply asking Kinder Morgan to send the City monitoring results. Kinder Morgan's position appears to be that it objects to this condition because this data is already provided to the Regional Board as required as part of the Self Monitoring Report Program, the Cleanup and Abatement Order, and the General Waste Discharge Requirements. If that is the case, then the City does not understand why Kinder Morgan objects to sending a copy to the City.

**7. Annual Approval for Continued Discharges**

Given Kinder Morgan's representation that the increased discharge will only last through 2013, it would be appropriate to require a new amended enrollment in the General Waste Discharge Requirements in 2014, which would trigger the need for the City's approval for discharges in any subsequent years.

**CONCLUSION**

The City has every desire to see this remediation completed as expeditiously as possible and absolutely no interest in delaying it. But, the clean-up *must* be conducted wisely and in a manner that does not harm current and future City interests. The Tentative Resolution does not achieve those objectives, and the City objects to it in its current form. Consequently, the City respectfully

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June 5, 2012

Mr. David W. Gibson and

Mr. Ben Neill

requests that the Regional Board continue this item to allow the City and Kinder Morgan to negotiate mutually acceptable conditions of approval.

If the Regional Board does authorize the increased discharge, the City respectfully requests that the Regional Board:

- Include the City's proposed conditions of approval as additional conditions.
- Include a condition that the approval to discharge 1.26 MGD ends on December 31, 2013, consistent with Kinder Morgan's representation in their initial application that they would be able to decrease the flow to 0.33 MGD by that date.
- Include in the resolution a statement that the Regional Board will hold the City harmless under the applicable MS4 NPDES permit for any water quality exceedances, remediation costs, channel maintenance requirements, or monitoring costs resulting from the Regional Board's approval of the increased discharge.
- Include in the resolution a statement that the Regional Board will name Kinder Morgan as responsible party in any future TMDL regarding TDS in the applicable receiving waters.

Thank you for the opportunity to comment on this very important issue. Please contact us if you have any questions. We look forward to working with you to reach a mutually acceptable resolution.

Sincerely,



Kris McFadden  
Deputy Director  
Transportation & Storm Water Department



Marsi Steirer  
Deputy Director  
Public Utilities Department

Enclosures

cc:

Julie Chan, Regional Board  
John Anderson, Regional Board  
Craig Carlisle, Regional Board  
Robert Morris, Regional Board  
Dr. Paul Johnson  
Dr. Margaret Eggers



**Groundwater Monitoring and  
Remedial Progress Report,  
Fourth Quarter of 2011**

Mission Valley Terminal  
San Diego, California

RW-101 was also shut down on December 7, 2011 during hydraulic pressure testing of the new distal GWE well piping systems. Recently installed distal GWE wells RW-109 to RW-114 were operated briefly during December 2011 for testing and sample collection purposes. These wells were added to the groundwater extraction program at the end of the quarter.

#### 8.1.5 Summary of Operation

Current operational target flow rates and average monthly flow rates for the fourth quarter 2011 reporting period are summarized in the following table.

**Average Operational Extraction Flow Rates, Fourth Quarter 2011 Reporting Period**

Well Name	October 2011 Flow Rate (gpm)	November 2011 Flow Rate (gpm)	December 2011 Flow Rate (gpm)
<b>On-Terminal GWE Wells</b>			
RW-35	39	32	39
RW-36	53	43	56
RW-37	5.0	5.1	5.0
<b>Proximal Off-Terminal GWE Wells</b>			
RW-3A	60	61	60
RW-5A	45	45	46
RW-7A	38	37	33
RW-48	23	22	20
RW-56	25	24	28
RW-107	46	46	48
RW-108	46	46	48
<b>Distal Off-Terminal GWE Wells</b>			
RW-50	0*	11	0*
RW-51	7.6	13	9.3
RW-100	0*	12	6.4
RW-101	8.1	11	14
<b>Total System Target: 420 gpm</b>			
<b>System</b>	397	414	410

**Notes:**

gpm = gallons per minute

GWE = groundwater extraction



Linda S. Adams  
Secretary for  
Environmental Protection

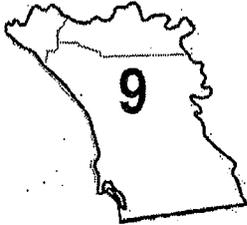
## California Regional Water Quality Control Board

### San Diego Region

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Arnold Schwarzenegger  
Governor



### 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 (WDR)

**ORDER NO. R9-2008-0002**  
**NPDES NO. CAG919002**

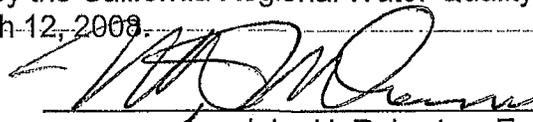
A Discharger, as described in the following table that has complied with the requirements for coverage under this General "Waste Discharge Requirements" (WDR), is subject to waste discharge requirements, once permit coverage is effective, as set forth in this WDR.

Dischargers	Any person with discharges from ground water extraction activities to surface waters within the San Diego Region, except for San Diego Bay that do not cause, have the reasonable potential to cause, or contribute to an instream excursion above any applicable State or federal water quality objectives/criteria or cause acute or chronic toxicity in the receiving water.
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This WDR was adopted by the Regional Board on:	March 12, 2008
This WDR shall become effective on:	March 12, 2008
This WDR shall expire on:	March 12, 2013
The U.S. Environmental Protection Agency and the California Regional Water Quality Control Board, San Diego Region have classified these discharges as minor discharges.	

IT IS HEREBY ORDERED that Order No. 2001-96 is rescinded upon the effective date of this WDR except for enforcement purposes, as specified elsewhere in this Order, and; in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted therein, and the provisions of the federal Clean Water Act, and regulations and guidelines adopted therein, Dischargers shall comply with the requirements in this WDR.

I, John H. Robertus, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region on March 12, 2008.

  
for John H. Robertus, Executive Officer

**California Environmental Protection Agency**

Recycled Paper



**SANITARY SEWER** - Discharges to a sanitary sewer. These discharges do not need coverage under the NPDES Program. Contact the agency controlling the sanitary sewer for approval prior to discharging to its conveyance system.

**UTILITY VAULTS** - Discharges from utility vaults and underground structures. These activities may be covered under the statewide general NPDES permit for discharges from utility vaults and underground structures to surface water Order No. 2006-0008-DWQ (CAG990002).

**HYDROSTATIC/ POTABLE WATER** – Discharges from drinking water well development. These discharges are covered under Order No. R9-2002-0020 (CAG679001).

**D. Discharge to a Municipal Separate Storm Sewer System (MS4)**

Prior to discharging into an MS4, the Discharger shall demonstrate alternatives to discharging extracted groundwater waste into an MS4 and why it is technically or economically infeasible to implement these alternatives.

Without prior approval from the appropriate local agency with jurisdiction over the MS4, the discharger shall not discharge extracted groundwater waste under this WDR into an MS4.

Local agencies responsible for operating the MS4s may not passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to waters of the U.S., the MS4 operator essentially accepts responsibility for discharges into the MS4 that it does not prohibit or control. These discharges may cause or contribute to a condition of contamination or a violation of water quality standards.

Therefore, at least 30 days prior to initiating an extracted groundwater discharge to an MS4, the Discharger shall notify and receive authorization from the appropriate local agency with jurisdiction over the MS4. This requirement encourages communication between Dischargers enrolled under this WDR and local agencies responsible for MS4s in an effort to reduce misunderstandings and concerns over the types of discharges covered by this WDR.

**E. Termination of Discharges**

Dischargers shall submit a written request referred to as a "Notice of Termination (NOT)" to this Regional Board when coverage under this WDR is no longer required. The NOT letter constitutes a notice that the owner (and his/her agent) of the site has ceased the discharge of ground water associated with the groundwater extraction activities at the site under this WDR.

The NOT should include "Notice of Termination (NOT)" in the subject line, the Waste Discharge Identification Number (WDID) assigned to the project by the Regional Board when enrolled in the WDR, the name and address of the owner, and be signed and dated by the owner in accordance with the signatory requirements of the WDR. The Discharger shall continue to comply with the

**California Regional Water Quality Control Board  
San Diego Region  
David Gibson, Executive Officer**



**Executive Officer's Report  
February 8, 2012**

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Recruitment

Recruitment is ongoing for a Water Resource Control Engineer and a Staff Services Analyst. We hope to announce appointments for those positions in February or early March.

Follow this link to see the announcements:

[http://www.spb.ca.gov/employment/wvpos\\_index.htm](http://www.spb.ca.gov/employment/wvpos_index.htm).

Vacant positions for the State and Regional Boards are also posted on the State Board web page at [http://www.waterboards.ca.gov/about\\_us/employment/](http://www.waterboards.ca.gov/about_us/employment/)

## **Part B – Significant Regional Water Quality Issues**

### **1. Status Report: Kinder Morgan Energy Partners – Mission Valley Terminal Cleanup Project and Associated Dewatering Discharge (Attachment B1a-d)**

*Staff Contacts: Robert Morris, Sean McClain, Ben Neill*

The San Diego Water Board has been evaluating its regulatory options to restore, preserve, and maintain groundwater and surface water quality in the vicinity of Qualcomm Stadium in light of continuous objections from the City of San Diego about the Kinder Morgan Energy Partners' (Kinder-Morgan) cleanup and its associated discharge of treated groundwater. As a result of the City's objections, the San Diego Water Board is precluded from authorizing Kinder-Morgan's requested increase in the discharge flow rate of treated groundwater from the cleanup project to the adjacent Murphy Canyon Creek under Order No. 2008-002, NPDES Permit No. CAG919003, the *General Waste Discharge Requirements for Groundwater Extraction to Surface Waters within the San Diego Region* (the NPDES Permit). Kinder-Morgan is unable to provide proof, required by the NPDES Permit, of the City's authorization to accept increased discharges. Kinder-Morgan requested the flow rate increase to expedite the cleanup operation. For the reasons contained in the Administrative Record for this matter, as more fully set forth below, the San Diego Water Board Executive Officer should deny Kinder-Morgan's request for an increase in the permitted discharge flow rate.

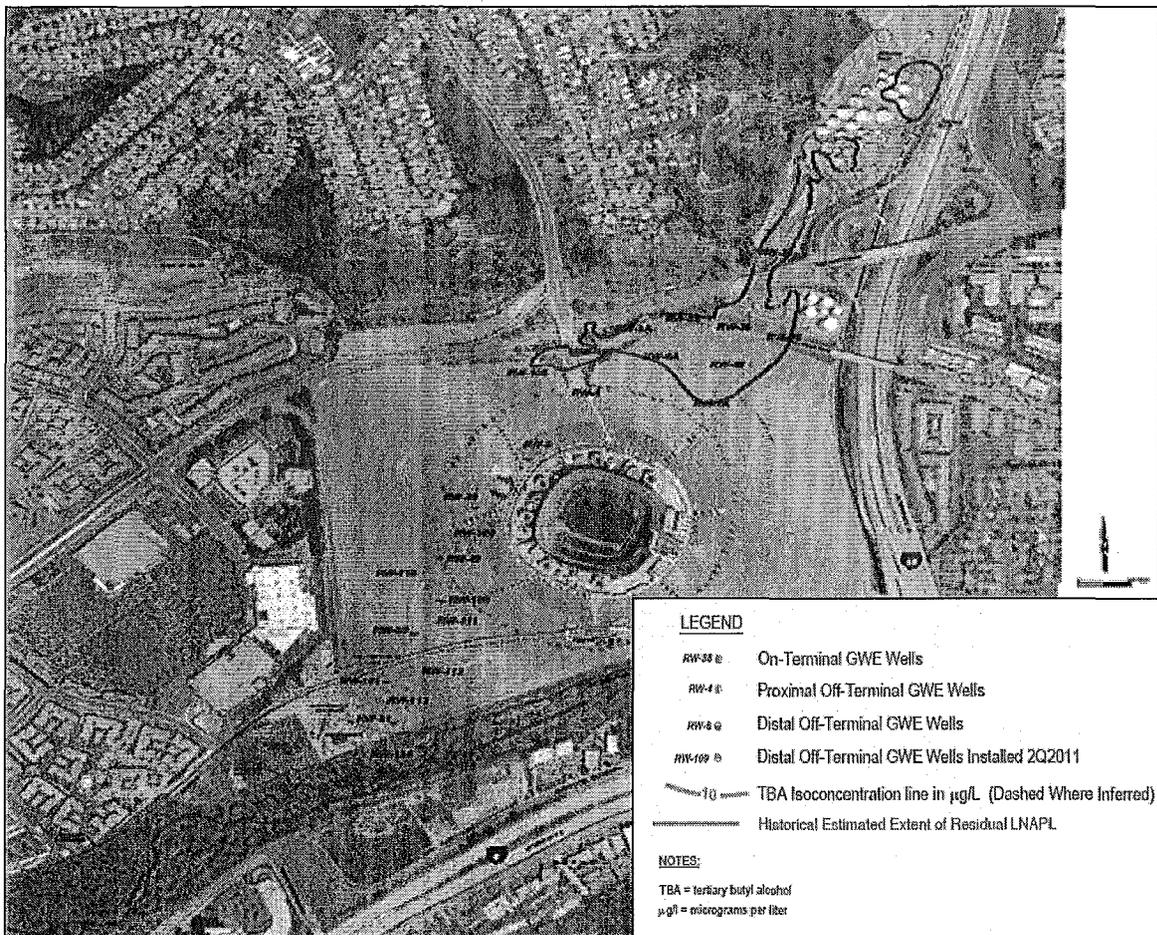
#### **CLEANUP BACKGROUND**

The Mission Valley Terminal (MVT) is a 10.5 acre aboveground storage tank (AST) facility located in Murphy Canyon in an area bounded by Interstate 15 and San Diego Mission Road in the City of San Diego (Figure 1). The MVT has been in operation since 1962. Gasoline releases from the terminal 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.

The San Diego Water Board issued an amended Cleanup and Abatement Order (CAO)<sup>1</sup> in 2005 requiring Kinder-Morgan to clean up the soil and to meet the following directives by the deadline dates:

- December 31, 2010: "...to the extent technically practicable remove residual light non-aqueous phase petroleum liquid (liquid gasoline referred to as LNAPL) from subsurface soil and groundwater beyond the MVT property."
- December 31, 2013: "...shall reduce concentrations of dissolved phase petroleum hydrocarbon waste constituents in groundwater to attain background water quality conditions beyond the MVT property."



Kinder-Morgan implemented a Corrective Action Plan to satisfy the CAO directives and meet the cleanup deadlines. The remedial strategy selected to clean up the soil and groundwater in the off-terminal area includes:

1. Soil vapor extraction (SVE) coupled with localized lowering of the groundwater table (dewatering) to effectively expose the entire LNAPL zone to the influence of SVE. There are approximately 192 SVE wells and 19 groundwater extraction wells operating in the primary off-terminal LNAPL zone to remove gasoline constituents from the soil and groundwater.
2. Placement of a hydraulic containment barrier at the property boundary to prevent petroleum hydrocarbons in groundwater from migrating of beyond the terminal property (Figure 1).
3. Implementation of a monitoring and reporting program to optimize LNAPL removal and evaluate whether the remediation system is capable of meeting the remedial goals within the required time frame.

The City of San Diego is a key stakeholder in this cleanup because it owns property at Qualcomm Stadium overlying the contaminated soil and groundwater, and because it plans to develop a water supply project in the area impacted by the gasoline spill. 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 the creek, to the City for beneficial re-use, but reports that the City has never responded to its offers.<sup>2</sup> 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.<sup>3</sup>

All San Diego Water Board documents and reports prepared by Kinder-Morgan on this matter have been provided to the City for review and comment. The San Diego Water Board staff meets with the City's representatives periodically to obtain their input and discuss their comments.

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<sup>2</sup> Letter dated November 16, 2011 from Kinder-Morgan to the San Diego Water Board.

<sup>3</sup> Ibid.

**STATUS OF OFF-TERMINAL CLEANUP**

**Rebound Study June 2010.** Kinder-Morgan performed confirmatory soil sampling and a soil vapor rebound study during April through June 2010. The goal of the evaluation was to provide confirmation of where LNAPL has been removed from the primary off-Terminal LNAPL Zone to the extent technically practicable. Based on this evaluation, Kinder-Morgan determined that large portions of the primary off-terminal LNAPL Zone had been remediated to the extent technically practicable. There are four areas, however, that the San Diego Water Board likely may find did not comply with the December 31, 2010 cleanup deadline. In addition, a new area of LNAPL-affected soil, which was discovered in July 2009 in the northwestern off-terminal LNAPL area, adjacent to the western limits of the previously known extent of the primary LNAPL zone, will not comply with the December 31, 2010 cleanup deadline.

**Soil Excavation August through October 2010.** Kinder-Morgan excavated four areas within the primary off-Terminal LNAPL zone to achieve further assurance of compliance with the December 31, 2010 deadline. Excavation was performed by large diameter auger pattern drilling. Six- and four-foot diameter augers were advanced to depths below the bottom of LNAPL-affected soil in an overlapping grid pattern. Each borehole was backfilled with Portland cement slurry immediately following excavation. A total of approximately 6,000 cubic yards (10,671 tons) of soil was excavated from the selected areas and transported off-site for treatment and recycling.

**Northwestern off-terminal LNAPL Area, August through December 2010.** Kinder-Morgan expanded the SVE system into the northwestern off-terminal LNAPL zone to include a network of 51 additional SVE wells and a second SVE system to remediate the LNAPL-affected soil. The new system started in December 2010 and Kinder-Morgan expects cleanup of soil in the northwestern off-terminal area will be complete by December 31, 2013.

**Second Rebound Study February through April 2011.** Kinder-Morgan performed a 61-day soil vapor rebound test by shutting down all SVE systems from February 23, 2011 through April 24, 2011. Soil vapor monitoring during rebound and subsequent restart was used to evaluate whether significant petroleum hydrocarbons remain in the soil. The results indicated that that by December 31, 2010, the LNAPL-affected soil in the primary off-Terminal zone had reached a condition where continued remedial efforts were providing small incremental benefit (i.e. LNAPL had been removed to the extent technically practicable).

**Compliance with December 31, 2010 CAO cleanup deadline.** Kinder-Morgan reported that the remediation had met the December 31, 2010 cleanup criteria for the primary off-terminal LNAPL zone. However, the northwestern off-terminal LNAPL area did not meet the 2010 cleanup deadline. Active remediation of the northwestern off-Terminal LNAPL zone commenced in late 2010, and LNAPL removal in this area remains ongoing. Kinder-Morgan expects the northwestern off-Terminal LNAPL zone to be complete prior to December 31, 2013.

**Compliance with December 31, 2013 CAO cleanup deadline.** Kinder-Morgan plans to continue operating the primary SVE system in a bioventing mode until the December 31, 2013

groundwater cleanup 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.

#### **CURRENT AND FUTURE ISSUES WITH CLEANUP**

**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 (Figure 1). The frequency and magnitude of TBA detections in the off-terminal area have generally decreased over time.

**Increase Groundwater Discharge Request.** 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 downgradient off-Terminal area. Based on the modeling, Kinder-Morgan determined that a flow increase to 1.26 MGD is needed to achieve the cleanup goals established by the December 31, 2013 CAO cleanup deadline. Kinder-Morgan has constructed a second groundwater treatment plant and installed six additional groundwater extraction wells southwest of Qualcomm Stadium in anticipation that the San Diego Water Board would approve the groundwater discharge flow rate increase.

#### **REGULATION OF THE DISCHARGE TO MURPHY CANYON CREEK - BACKGROUND**

Discharges from groundwater extraction projects to surface waters within the San Diego Region except for San Diego Bay have been regulated by the San Diego Water Board since 1991 pursuant to general waste discharge requirements prescribed in the NPDES Permit. To obtain coverage under the NPDES Permit, a discharger must submit a complete Notice of Intent (NOI), including proof of authorization from the local agency with jurisdiction over the affected MS4 that demonstrates pollutant concentrations in the discharge comply with the applicable discharge specifications contained in the NPDES Permit. Upon receipt of a complete NOI, a Notice of Enrollment (NOE) is provided to the discharger by the San Diego Water Board which prescribes the allowable discharge flow limit and any additional or increased monitoring or other requirements.

In March 1994, the San Diego Water Board issued a NOE for a discharge of up to 220,000 gallons per day (gpd) from the Mission Valley Terminal remediation site to Murphy Canyon Creek. The treatment system for the discharge consisted of an oil/water separator and carbon adsorption unit. The treatment system was subsequently upgraded to address elevated levels of

manganese, and total nitrogen, which violated the NPDES Permit's Discharge Specifications. The treatment system upgrades included a manganese oxidation/filtration removal system, a biological denitrification system, an oxygen generator, a residual sulfite monitor and an auto chlorine titrator.

As required by the NPDES Permit, Kinder-Morgan submitted NOIs 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.

The discharge is likely to continue well beyond the December 31, 2013 cleanup deadline as the operation of the groundwater extraction system will be necessary to maintain the hydraulic barrier at the MVT property boundary and to remove concentrations of dissolved-phase petroleum hydrocarbons in on-site Terminal groundwater.

#### **TIME SCHEDULE ORDER NO. R9-2011-0052**

In September 2011, the San Diego Water Board issued an enforcement time schedule order to Kinder-Morgan to ensure that the discharge from the dewatering project does not cause, have a reasonable potential to cause, or contribute to an in-stream excursion above the water quality objective for Total Dissolved Solids (TDS). This action was taken in response to a statement in a report<sup>4</sup> that the treated water in the discharge to Murphy Canyon Creek is typically over 2000 milligrams per liter (mg/L). The enforcement order establishes a compliance schedule for Kinder-Morgan to assess the potential for the discharge to cause, or contribute to, an in-stream excursion above the Basin Plan water quality objective of 1500 mg/L and to assess any impact of the discharge on the downstream beneficial uses. The enforcement order further requires the development and implementation of a plan to address compliance with the Basin Plan standards and mitigation to compensate for TDS loading by the effluent discharge in excess of the Basin Plan water quality objective. Kinder-Morgan must document that the discharge does not cause, or contribute to, an in-stream excursion above the water quality objective for TDS by November 30, 2015.

#### **CURRENT REQUEST FOR MODIFICATION TO NOE**

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<sup>4</sup> Document in Support of August 12, 2009 RWQCB Meeting Agenda Item 11:

Information Item: Mission Valley Terminal Cleanup Status Report, submitted by LFR, Inc. on behalf of Kinder-Morgan, dated August 5, 2009.

On August 24, 2010, Kinder-Morgan requested an increase in the allowable discharge flow limit to 1.26 MGD. Kinder-Morgan reports that the proposed flow limit increase will expedite the removal of contaminated groundwater in the Qualcomm Stadium area and will ensure compliance with the groundwater cleanup deadline of December 31, 2013. The San Diego Water Board delayed taking action on the request until the enforcement time schedule order discussed above was issued. In written comments and at the hearing on the enforcement time schedule order in September 2011, the City raised several objections to not only the time schedule, but also to the proposal for increasing the discharge flow rate limit.

In an effort to address the City's concerns, the San Diego Water Board Executive Officer met with the City and unsuccessfully attempted to schedule a subsequent meeting with all parties. As a result, the Executive Officer requested and received letters outlining the respective positions of the City and Kinder-Morgan. The City and Kinder-Morgan also provided extensive legal analyses supporting their respective positions. (See Attachments 1, 2, 3 and 4).

### ISSUES

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 (MS4).<sup>5</sup> The NPDES Permit makes prior approval from the appropriate local agency with jurisdiction over the MS4 (the City of San Diego in this case) a condition of eligibility for a NOE under the NPDES Permit. The NPDES Permit further requires an applicant to include documentation that the local agency has authorized the proposed discharge to its MS4 as part of the NOI.<sup>6</sup> This requirement is based upon provisions contained in San Diego County's MS4 NPDES Storm Water Permit that inform the City (and other copermittees) that they accept responsibility for discharges into an MS4 that the City does not prohibit or control. Previously in March 2009, when Kinder-Morgan submitted an application and obtained a modification of the NOE to increase the flow limit to 505,000 gpd, the City did not object to the discharge, but requested that the discharge be limited to ".....only that water which cannot be re-injected into the aquifer." With respect to the issue of re-injection of treated groundwater, Kinder-Morgan contends that the risks posed by such a strategy at the site far outweigh the potential benefits that may be realized.

In light of the disclosure that the discharge contains elevated concentrations of TDS, the City contends that the San Diego Water Board's enforcement time schedule order improperly allows

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<sup>5</sup> Order No.2007-0001, NPDES No. CAS0108758, the San Diego County MS4 NPDES Storm Water Permit. Finding D.3.c. provides that urban streams used as conveyances for urban runoff are both an MS4 and receiving water.

<sup>6</sup> Notice of Intent Form, Attachment B1 to Order No. R9-2008-002, NPDES Permit No. CAG91002

Kinder-Morgan to pollute Murphy Canyon Creek and that the TDS concentrations in the discharge must be reduced to a level not exceeding 1500 mg/L. Elevated concentrations of TDS are a widespread problem throughout the lower San Diego River watershed<sup>7</sup> and the City and the other MS4 copermitees have identified TDS as a priority pollutant. No best management practices have been identified to date to specifically address TDS and best management practices designed to address a broad spectrum of pollutants have not been implemented long enough to determine their effectiveness. The studies being conducted by Kinder-Morgan under the enforcement time schedule order would provide an opportunity for the City to assess the TDS issue more fully if the City were able to resolve its differences with Kinder-Morgan.

The City has identified the following terms as prerequisites for Kinder-Morgan to obtain and maintain the City's approval to discharge at an increased flow of 1.26 MGD:

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.
3. Kinder-Morgan must change the discharge location to a location other than Murphy Canyon Creek, such as the San Diego River.
4. Kinder-Morgan must promptly comply with the Basin Plan Water Quality Objective for TDS. (As noted above, the San Diego Water Board's enforcement order allows Kinder-Morgan until November 30, 2015 to fully assess the issue and to implement appropriate measures to achieve compliance. The City has filed a petition for review of the time schedule order with the State Water Resources Control Board).
5. Kinder-Morgan must monitor and report to the City on the extracted groundwater.
6. Kinder-Morgan must provide the City all data related to wells, pumping test, and water quality for all work conducted on City property.
7. Kinder-Morgan must obtain annual approval from the City for continued discharges to its MS4 system.

## CONCLUSION

Kinder-Morgan's projected completion of the dissolved-phase MTBE and TBA cleanup in the downgradient off-Terminal area by the December 31, 2013 CAO compliance date is finally in sight after almost two decades of effort. Kinder-Morgan reports, however, that an increase in the discharge flow rate is necessary to accommodate higher groundwater extraction rates to achieve compliance with the CAO compliance deadline. Kinder-Morgan's proposal to increase the extraction of contaminated groundwater may facilitate and expedite the cleanup. Unfortunately

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<sup>7</sup> Final Clean Water Act sections 303(b) and 303(d) 2008 Integrated Report for the San Diego Region, dated Feb. 9, 2010.

the City and Kinder-Morgan have been unable to agree on the conditions that must be satisfied to secure the City's approval under the existing NPDES permit. Until this apparent impasse is resolved and Kinder-Morgan is able to provide the required proof of the City's authorization to increase its discharge flow rate to Murphy Canyon Creek, the San Diego Water Board has determined that it is unable to approve Kinder-Morgan's request to increase its discharge flow rate. For all of these reasons, following the February 8, 2012 Board meeting, the San Diego Water Board Executive Officer plans to issue a letter to Kinder-Morgan denying their request to modify the NOE for an increase in the groundwater discharge flow rate.

#### Attachments

- B1a. City of San Diego Letter dated November 3, 2011, City of San Diego's Comments on Kinder-Morgan Energy Partners Proposed Flow Increase for its Mission Valley Terminal Remediation-Dewatering Discharge to Murphy Canyon Creek.
- B1b. Kinder-Morgan Letter dated November 16, 2011, Kinder-Morgan's Response to Written Comments Regarding Amendment of Enrollment under Order No. R9-2008-0002, Proposed Flow Increase at Kinder-Morgan Energy Partners, Mission Valley Terminal Remediation Dewatering Project, Mission Valley Terminal, San Diego, California
- B1c. City of San Diego Letter dated November 30, 2011, City of San Diego's Request for Hearing on Matters Subject to Regulatory Oversight, Kinder Morgan Energy Partners, Mission Valley Terminal
- B1d. Kinder-Morgan Letter dated December 7, 2011, Kinder-Morgan's Response to City of San Diego Request for Hearing on Matters Subject to Regulatory Oversight, SFPP, L.P., an operating partnership of Kinder Morgan Energy Partners, Mission Valley Terminal Remediation Dewatering Project, San Diego, California.

## 2. Post-Fire Study

*Staff Contact: Lillian Busse*

Severe wildfires burned large portions of San Diego County and San Bernardino County in October 2003 and October 2007. After the 2003 wildfires, the San Diego Water Board funded a project to study the impacts of the wildfires on biological conditions in southern California streams. The study was conducted by the Department of Fish and Game Aquatic Bioassessment Laboratory. The study was designed to answer the following questions: (1) To what extent do wildfires affect biological conditions? (2) How long does it take for biological conditions to recover after a wildfire? (3) Does recovery in developed and undeveloped watersheds differ? and (4) What are the primary mechanisms by which wildfires affect biological conditions?

Between 2004 and 2009, fifty sites in developed and undeveloped watersheds in San Diego and San Bernardino Counties were sampled once per year for benthic macroinvertebrates. Since the San Diego Water Board had already established a biological condition monitoring program before the 2003 wildfires, pre-wildfire data were available. The biological data were supplemented with a suite of physical habitat data. Biological data were analyzed using two

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**  
**SAN DIEGO REGION**  
**ORDER NO. R9-2007-0001**  
**NPDES NO. CAS0108758**  
**WASTE DISCHARGE REQUIREMENTS**  
**FOR DISCHARGES OF URBAN RUNOFF FROM**  
**THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**  
**DRAINING THE WATERSHEDS OF THE COUNTY OF SAN DIEGO,**  
**THE INCORPORATED CITIES OF SAN DIEGO COUNTY,**  
**THE SAN DIEGO UNIFIED PORT DISTRICT,**  
**AND THE SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY**

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Attachment A – Basin Plan Prohibitions

Attachment B – Standard Provisions, Reporting Requirements, and Notifications

Attachment C – Definitions

Attachment D – Scheduled Submittal Summary

RECEIVING WATERS AND URBAN RUNOFF MONITORING AND REPORTING  
PROGRAM NO. R9-2007-0001

specified in the TMDL.

8. This Order establishes WQBELs and conditions consistent with the requirements and assumptions of the WLAs in the TMDLs as required by 40 CFR 122.44(d)(1)(vii)(B).
9. Requirements in this Order that are more explicit than the federal storm water regulations in 40 CFR 122.26 are prescribed in accordance with the CWA section 402(p)(3)(B)(iii) and are necessary to meet the MEP standard.
10. Urban runoff treatment and/or mitigation must occur prior to the discharge of urban runoff into a receiving water. Federal regulations at 40 CFR 131.10(a) state that in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S. Authorizing the construction of an urban runoff treatment facility within a water of the U.S., or using the water body itself as a treatment system or for conveyance to a treatment system, would be tantamount to accepting waste assimilation as an appropriate use for that water body. Furthermore, the construction, operation, and maintenance of a pollution control facility in a water body can negatively impact the physical, chemical, and biological integrity, as well as the beneficial uses, of the water body. This is consistent with USEPA guidance to avoid locating structural controls in natural wetlands.
11. The issuance of waste discharge requirements and an NPDES permit for the discharge of urban runoff from MS4s to waters of the U.S. is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (CEQA) (Public Resources Code, Division 13, Chapter 3, section 21000 et seq.) in accordance with the CWC section 13389.

#### **F. PUBLIC PROCESS**

1. The Regional Board has notified the Copermittees, all known interested parties, and the public of its intent to consider adoption of an Order prescribing waste discharge requirements that would serve to renew an NPDES permit for the existing discharge of urban runoff.
2. The Regional Board has, at public meetings on (date), held public hearings and heard and considered all comments pertaining to the terms and conditions of this Order.

**IT IS HEREBY ORDERED** that the Copermittees, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the Clean Water Act (CWA) and regulations adopted thereunder, shall each comply with the following:

#### **A. PROHIBITIONS AND RECEIVING WATER LIMITATIONS**

1. Discharges into and from municipal separate storm sewer systems (MS4s) in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance (as defined in CWC section 13050), in waters of the state are prohibited.
2. Discharges from MS4s containing pollutants which have not been reduced to the maximum extent practicable (MEP) are prohibited.<sup>2</sup>

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<sup>2</sup> This prohibition does not apply to MS4 discharges which receive subsequent treatment to reduce pollutants to the MEP prior to entering receiving waters (e.g., low flow diversions to the sanitary sewer).

**ADMINISTRATIVE DRAFT****CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION****TENTATIVE  
ORDER NO. R9-2012-0011  
NPDES NO. CAS0109266****NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT  
AND WASTE DISCHARGE REQUIREMENTS FOR  
DISCHARGES FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)  
DRAINING THE WATERSHEDS WITHIN THE SAN DIEGO REGION**

The San Diego County Copermittees in Table 1a are subject to waste discharge requirements set forth in this Order.

**Table 1a. San Diego County Copermittees**

City of Carlsbad	City of Oceanside
City of Chula Vista	City of Poway
City of Coronado	City of San Diego
City of Del Mar	City of San Marcos
City of El Cajon	City of Santee
City of Encinitas	City of Solana Beach
City of Escondido	City of Vista
City of Imperial Beach	County of San Diego
City of La Mesa	San Diego County Regional Airport Authority
City of Lemon Grove	Unified Port District of San Diego
City of National City	

The Orange County Copermittees in Table 1b are subject to waste discharge requirements set forth in this Order upon expiration of Order No. R9-2009-0002, NPDES No. CAS0108740 on December 16, 2014.

**Table 1b. Orange County Copermittees**

City of Aliso Viejo	City of Ranch Santa Margarita
City of Dana Point	City of San Clemente
City of Laguna Beach	City of San Juan Capistrano
City of Laguna Hills	City of Laguna Woods
City of Laguna Niguel	County of Orange
City of Lake Forest	Orange County Flood Control District
City of Mission Viejo	

**ADMINISTRATIVE DRAFT**

- (1) Final numeric targets must be based on measureable criteria or indicators, to be achieved in the receiving waters and/or MS4 discharges for the highest water quality priorities which will result in the restoration and/or protection of water quality standards in receiving waters;
- (2) Interim numeric targets must be based on measureable criteria or indicators that can demonstrate incremental progress toward achieving the final numeric targets in the receiving waters and/or MS4 discharges; and
- (3) Schedules must be adequate for measuring progress toward achieving the interim and final numeric targets required for Provisions B.2.d.(1) and B.2.d.(2). Schedules must incorporate the following:
  - (a) Interim dates for achieving the interim numeric targets,
  - (b) Compliance schedules for any applicable TMDLs in Attachment E to this Order,
  - (c) Compliance schedules for any ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-001X (see Attachment A),
  - (d) Achievement of the final numeric targets in the receiving waters and/or MS4 discharges for the highest water quality priorities must be as soon as possible, and
  - (e) Final dates for achieving the final numeric targets must not extend more than 10 years beyond the date this Order is adopted, unless the schedule includes an applicable TMDL in Attachment E to this Order.

**3. Water Quality Improvement Strategies and Schedules**

The Copermittees must develop specific water quality improvement strategies to address the highest water quality priorities identified within a Watershed Management Area. The water quality improvement strategies must address the highest water quality priorities by preventing or eliminating non-storm water discharges to and from the MS4, reducing pollutants in storm water discharges from the MS4 to the MEP, and restoring and/or protecting the water quality standards of receiving waters.

**a. WATER QUALITY IMPROVEMENT STRATEGIES**

The water quality improvement strategies must prioritize and implement the following measures to achieve the interim and final numeric targets in accordance with the schedules required for Provision B.2.c:

**ADMINISTRATIVE DRAFT**

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- (1) Structural and/or non-structural BMPs that are designed to achieve the interim and final numeric targets in the receiving waters and/or MS4 discharges;
  - (2) Retrofitting projects for areas of existing development known or suspected to contribute to the highest water quality priorities, and where retrofitting will contribute to reducing or eliminating non-storm water discharges to the MS4 and/or reducing pollutants in storm water discharges from the MS4 to the MEP;
  - (3) Stream and/or habitat rehabilitation or restoration projects where stream and/or habitat rehabilitation or restoration are necessary for, or will contribute to demonstrable improvements in the physical, chemical, and biological receiving water conditions and restoration and/or protection of water quality standards in receiving waters; and
  - (4) Other water quality improvement strategies that will result in preventing or eliminating non-storm water discharges to and from the MS4, reducing pollutants in storm water discharges from the MS4 to the MEP, and restoring and/or protecting the water quality standards of receiving waters.

**b. IMPLEMENTATION SCHEDULES**

- (1) The Copermittees must develop schedules for implementing the water quality improvement strategies identified under Provision B.3.a to achieve the interim and final numeric targets in the receiving waters and/or MS4 discharges for the highest water quality priorities in the Watershed Management Area. Schedules must be developed for both the water quality improvement strategies implemented by each Copermittee within its jurisdiction and for strategies that will be implemented by multiple Copermittees on a collaborative basis.
- (2) The Copermittees must incorporate the implementation compliance schedules for any ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-001X (see Attachment A).

**4. Water Quality Improvement Monitoring and Assessment**

The Copermittees in each Watershed Management Area must develop an integrated program to assess the progress toward achieving the numeric targets and schedules, and the progress toward addressing the highest water quality priorities for each Watershed Management Area. The water quality improvement monitoring and assessment program must include the monitoring and assessment requirements of Provision D. For Watershed Management Areas with applicable TMDLs, the water quality monitoring and assessment program must incorporate the specific monitoring and assessment requirements of Attachment E. For Watershed

**ADMINISTRATIVE DRAFT**

- (ii) At least one non-storm water MS4 monitoring station must be selected in each cell containing a segment of the Copermittee's MS4, which must consist of one of the following:
  - [a] A major outfall,
  - [b] Other outfall point, or
  - [c] Other point of access (e.g., manhole);
- (iii) Each non-storm water MS4 monitoring station should be located downstream of any areas that are known or suspected to be sources of non-storm water discharges and/or illicit discharges or connections to the MS4;
- (iv) Each non-storm water MS4 monitoring station must be located to the degree practicable at the farthest outfall, manhole, or other accessible location downstream in the MS4, within each cell;
- (v) In addition to the non-storm water MS4 monitoring stations identified in accordance with Provisions D.1.a.(1)(a)(i)-(iv) above, each Copermittee must identify stations that will be screened and monitored during dry weather days to identify non-storm water discharges from sources not directly under the jurisdiction of the Copermittee.<sup>7</sup> These stations must be selected in accordance with the following guidelines and criteria:
  - [a] Stations should be located at or prior to the point of discharge into the Copermittee's MS4, but may be located downstream of the source as long as the station remains appropriate for characterizing the discharge from the source not within the authority of the Copermittee to control,
  - [b] Any non-storm water MS4 monitoring station identified in accordance with Provisions D.1.a.(1)(a)(i)-(iv) and located at the point of discharge or directly downstream of a known or suspected source of non-storm water discharges not within the authority of the Copermittee to control may also be utilized as a station to monitor the source not within the authority of the Copermittee to control;
- (vi) The following factors should be considered in determining the location of each non-storm water MS4 monitoring station:
  - [a] Safety of personnel and accessibility of the location,
  - [b] Total area draining to the location,
  - [c] Population density of the area draining to the location,
  - [d] Traffic density,
  - [e] Age of the structures or buildings in the area,

<sup>7</sup> Sources not directly under the jurisdiction of and subject to regulation by the Copermittee may include lands or areas under the jurisdiction of other Copermittees, owners or operators of federal and state lands or facilities, tribal lands, special districts, etc.

## **FOOTNOTE 9**

**STATE WATER RESOURCES CONTROL BOARD**

ORDER NO. 99 - 06 - DWQ  
NPDES NO. CAS000003

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT  
STATEWIDE STORM WATER PERMIT  
AND  
WASTE DISCHARGE REQUIREMENTS (WDRs)  
FOR THE  
STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS)

The State Water Resources Control Board (SWRCB) finds that:

- 1. NPDES PERMIT APPLICATION:** On September 5, 1996, Caltrans, located at 1120 N Street, Sacramento, California 95814 submitted an NPDES Permit application for storm water discharges from the Caltrans highways, properties, facilities, and activities throughout the State of California for Caltrans headquarters and for the District offices including: the North Coast region (District 1), Northern Central Valley and Far Northeastern region (District 2), Sacramento area (District 3), San Francisco Bay area (District 4), Central Coast (District 5), Lower Central Valley (District 6), Los Angeles Basin (District 7), San Bernardino area (District 8), Mono/Inyo area (District 9), Middle Central Valley (District 10), San Diego area (District 11), and Orange County (District 12). The application was accepted on October 4, 1996. As part of the application, Caltrans submitted a Storm Water Management Plan (SWMP) and Monitoring Plan. The SWMP and Monitoring Plan were amended in March 1997 and again in April 1998. The application is considered an application for permit reissuance because Caltrans is currently under permit in all of the parts of the State for which a Municipal Separate Storm Sewer System (MS4) permit is currently required. The MS4 permits that Caltrans holds, the permitting agency, the adoption date, and expiration date are shown in Table 1.

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Where the SWMP was found to be inadequate, this NPDES Permit directs Caltrans to fulfill additional requirements and specifies what these requirements are.

Caltrans SWMP must be revised in accordance with the Provisions of this NPDES Permit to address concerns about the scope, detail of proposed actions, and time frame for implementation.

Caltrans began implementation of this SWMP in March 1997.

15. **ENFORCEABILITY OF THE SWMP:** The SWMP and modifications or revisions to the SWMP that are approved, in accordance with Provision F.1 of this NPDES Permit, and future year workplans to be submitted, in accordance with the SWMP and Provision F.1 of this NPDES Permit, are integral to and an enforceable component of this NPDES Permit.
16. **LOCAL MUNICIPALITIES:** The RWQCBs have issued NPDES Permits for the discharge of storm water from municipal storm water conveyance systems to municipalities in California which require these permits. Caltrans operates highways and highway-related properties, activities, and facilities that cross through all of these permitted areas. Some storm water discharges from Caltrans-owned rights-of-way, properties, facilities, and activities discharge to storm water conveyance systems managed by these municipalities. Some storm water discharges from these municipalities discharge to storm water conveyance systems managed by Caltrans.
17. **LOCAL CONTROL:** This NPDES Permit does not preempt or supersede the authority of local municipal agencies to prohibit, restrict, or control storm water discharges and authorized nonstorm water discharges to storm drain systems or other watercourses within their jurisdictions as allowed by State and federal law.
18. **CALTRANS CONSTRUCTION PROGRAM:** Caltrans performs construction activities that are required to have NPDES Permits for storm water discharges from the construction site. This NPDES Permit will effectively regulate storm water discharges from construction projects within the Caltrans rights-of-way. Caltrans will not be required to obtain coverage under the State NPDES General Permit for Construction Activities (Construction General Permit), SWRCB Board Order 92-08 DWQ.
19. **DREDGE AND FILL MATERIALS:** This NPDES Permit does not authorize discharges of fill or dredged material regulated by the U.S. Army Corps of Engineers under CWA section 404 and does not constitute a waiver of water quality certification under CWA section 401.
20. **RECEIVING WATER LIMITATIONS:** The impact of storm water runoff from highway facilities on the water quality of receiving waters is highly variable. For this reason, this NPDES Permit does not include numeric effluent limitations. Instead, this NPDES Permit will emphasize the use of BMPs to control storm water pollution and the establishment of a monitoring program to determine the impact of storm water runoff from highways on receiving water bodies. The Lahontan RWQCB does have numeric effluent limits for storm water discharges for the Tahoe Basin in the Basin Plan. These numeric effluent limits also appear in their Regional Construction Permits (RWQCB Board Orders 6-91-31 and 6-93-

**FOOTNOTE 12**

# Cleanup Status Update

Kinder Morgan Energy Partners, L.P.  
Mission Valley Terminal  
9950 San Diego Mission Road  
San Diego, CA

Water Quality Control Board  
San Diego Region  
Regional Board Meeting  
August 12, 2009



1



- Groundwater Cleanup Progress
- Soil Cleanup Progress
- Evaluation of Potential ReInjection of Treated Groundwater



2



