



California Regional Water Board  
San Diego

June 13, 2012;  
Item No. 13  
Supporting Document No. 3



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July 16, 2009

In reply refer to:  
**SL607392800:ccarlisle**

Ms. Marci A. Steirer, Deputy Director  
City of San Diego Water Department  
600 B Street, Suite 600, MS 906  
San Diego, CA 92101

Dear Ms. Steirer:

**SUBJECT: RESPONSE TO CITY OF SAN DIEGO'S LETTER, DATED JUNE 25, 2009, MISSION VALLEY TERMINAL, CLEANUP AND ABATEMENT ORDER NO. 92-01 AND ADDENDA THERETO**

This letter is in response to your letter to Dr. Richard Wright, Chairman of the Regional Board, dated June 25, 2009, regarding cleanup of the soil and groundwater impacted by discharges of petroleum hydrocarbons and associated compounds from the Mission Valley Terminal Aboveground Fuel Tank Farm, located at 9550 and 9966 San Diego Mission Road, San Diego, CA. In your letter you have requested intervention by the Regional Board to have the Regional Board staff work with the City of San Diego to explore the feasibility of re-injecting treated groundwater to accelerate the remediation of the contaminated aquifer to achieve compliance with Cleanup and Abatement Order No. 92-01 and addenda thereto.

Your letter, presented formally to the Regional Board Members at the July 1, 2009 Board meeting in Dana Point, expressed the following assertions:

1. Regional Board Staff has repeatedly refused to meet with the City<sup>1</sup> and has not been willing to partner with the City in seeking the City's advice and expertise for the purpose of enhancing and expediting the remediation of the groundwater aquifer;

<sup>1</sup> City of San Diego, June 25, 2009 Letter, page 1, paragraph 1; page 2, paragraph 4; page 7, paragraph 3

2. Regional Board staff has not supported the City's request to require alternative or additional remedial approaches, including re-injection of treated groundwater; and<sup>2</sup>
3. Regional Board staff has not responded to the City's request for "...RWQCB not to re-enroll Kinder-Morgan in its NPDES permit...[and] to mandate water re-injection...."<sup>3</sup>

The facts detailed in this letter and provided in the enclosures clearly demonstrate that these assertions are unfounded and fail to acknowledge Regional Board staff's efforts to include the City of San Diego as a key stakeholder in the groundwater remediation process.

Although the City discounts the many meetings and levels of communication between the City and Regional Board staff, the City's central issue appears to be over a technical disagreement whether the treated groundwater re-injection approach would enhance and expedite the existing remediation project. Board staff, Board's expert consultants, and Kinder-Morgan and its consultants do not agree on a technical basis with the requests by the City to require alternative remedial approaches, such as re-injection of treated groundwater. This point is discussed in detail below in the section titled "City's Request to Require Alternative and Additional Remedial Approaches."

### **Background**

The Regional Board officially issued a cleanup and abatement order and five addenda, collectively referred to herein as the CAO, directing Kinder-Morgan to cleanup and abate the effects of the discharge. The CAO established deadlines for completing the removal of the constituents from the subsurface soil and from the groundwater. To meet these cleanup deadlines, Kinder-Morgan is implementing a Corrective Action Plan as required by the CAO (and approved by the Regional Board staff).

### **Regional Board Staff's Reported Refusal to Meet with City of San Diego**

Throughout the remediation project, the Regional Board staff has offered to meet with the City representatives to discuss all aspects of the project. All Regional Board documents and all the reports prepared by Kinder-Morgan have been provided to the City for review and comment. Since 2001, the Regional Board staff has had over 30 meetings, conference calls, email exchanges, and telephone conversations with the City of San Diego representatives regarding the Mission Valley Terminal cleanup project. Enclosure 1 lists these various interactions with the City and includes 18 attachments providing details (e.g. letters, emails, agendas).

Most recently, the Regional Board staff and the Regional Board's expert consultants met with the City in August 2008 and in March 2009.<sup>4</sup> The topics discussed included

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<sup>2</sup> Ibid., page 1, paragraph 1; page 2 paragraph 4; page 2, paragraph 6

<sup>3</sup> Ibid., page 7, paragraph 2

questions and comments raised by the City's consultant INTERA about the effectiveness of the various remedial approaches being implemented.<sup>5</sup> These questions and comments were generally the same ones submitted by the City and discussed prior to August 26, 2008.<sup>6</sup> All of the City's 14 meeting agenda items were evaluated and considered by the Regional Board staff, the Regional Board's expert consultants, and by Kinder-Morgan and its consultants.

To facilitate the communication and technical discussions, the Regional Board staff requested that Kinder-Morgan and its consultants attend these meetings, including the 2008 and 2009 meetings.<sup>6</sup> Board staff explained to the City that future discussions would be more productive with Kinder-Morgan and its experts present as they are the party implementing the cleanup activities, they have the latest information from the field, and they have the burden of ultimately complying with the Cleanup and Abatement Order. The City, however, citing pending litigation concerns, stated its refusal to meet with the Regional Board if Kinder-Morgan was also attending.

After the March 9, 2009 meeting, consisting of a discussion of topics already covered in the August 26, 2008, March 19, 2008, June 26, 2006, and April 28, 2006 meetings, the City requested another meeting. Regional Board staff did not refuse to meet but instead offered to meet if the City had any new topics or information to discuss, and if Kinder-Morgan was also invited to participate since that would allow the City to hear directly from the discharger and its consultants on the details of the various technical considerations associated with the multi-phased remedial actions being implemented.<sup>7</sup> The City did not propose any new topics/information and again refused to attend a meeting if Kinder-Morgan was present. The issues and input the City proposed to discuss were the same as those previously submitted and fully evaluated, considered, and discussed in several of the previous meetings since early 2006.

In the absence of new information, the City's requests to modify the remedial approaches implemented by Kinder-Morgan have been fully discussed and evaluated by the Regional Board staff, the Regional Board's expert consultants, and Kinder-Morgan and its consultants.

#### **City's Request to Require Alternative and Additional Remedial Approaches**

The Regional Board cannot specify how Kinder-Morgan complies with Cleanup and Abatement Order (CAO) No. 92-01 and subsequent addenda. Porter-Cologne Water Quality Control Act, section 13360 states:

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<sup>4</sup> See Enclosure 1 and the attachments to Enclosure 1 for details.

<sup>5</sup> See section "Staff Not Supporting City's Request to Require Alternative and Additional Remedial Approaches" for more details.

<sup>6</sup> For example in meetings held April 28, 2006; June 26, 2006; and March 19, 2008. See Enclosure 1 for details.

<sup>7</sup> Telephone conversations between the City's outside counsel Richard Opper and Regional Board staff Sean McClain and Craig Carlisle.

“No waste discharge requirement or other order of a regional board or the state board or decree of court issued under this division shall specify the design, location, type of construction, or particular manner in which compliance may be had with that requirement, order, or decree, and the person so ordered shall be permitted to comply with the order in any lawful manner.”

As required by the CAO, Kinder-Morgan conducted a feasibility study to evaluate remedial alternatives, including cost and effectiveness of each alternative, and then implemented the preferred alternative in accordance with its Corrective Action Plan.<sup>8</sup> Kinder-Morgan is implementing the Corrective Action Plan as approved by Regional Board and required by the CAO. During the remediation, Regional Board staff has continued to meet with the City and consider its alternative remedial input. In meetings with the City, on March 2008 and March 2009, the topics discussed included re-injection of treated groundwater, remedial progress, SVE system upgrades, and the City's recommended alternative remedial approaches.<sup>9</sup> Regional Board staff informed the City that Kinder-Morgan had initially evaluated the economic and technical feasibility of re-injecting treated groundwater into the aquifer along with other alternatives (Enclosure 2). Kinder-Morgan determined that re-injection of extracted groundwater into the aquifer after treatment was not feasible for several reasons including:

1. Re-injection of groundwater could potentially displace the plume to currently unaffected areas;
2. Dewatering (i.e. lowering of the water table) enhances the effectiveness of the soil vapor extraction and hydraulically controls the migration of contaminants; and
3. Re-injection of groundwater is relatively expensive and would require a different infrastructure than that of the existing system;

Upon consideration of all input from the City and its consultants, input from the Regional Board's expert consultants, and input from Kinder-Morgan, the Regional Board staff agreed with Kinder Morgan's determination and does not recommend the implementation of the City's proposed alternative remedial approaches.

The Regional Board staff also does not agree with the City's contention that re-injection of groundwater would enhance the quantity of water in the Mission Valley aquifer. No evidence has been submitted that demonstrates that the remedial activities are diminishing the quantity of this resource. The aquifer is in hydrologic contact with the San Diego River and is recharged in part by the San Diego River. Groundwater elevation data from the site does not show that Kinder Morgan's groundwater extraction is creating a condition of near or long term overdraft of the aquifer. Furthermore, the City's statement that the aquifer cannot be developed in its present contaminated state

<sup>8</sup> See subsection Remedial Activities for details.

<sup>9</sup> Enclosure 1, Attachments 5 and 16.

is simply untrue. Addendum No. 5 to the CAO requires Kinder Morgan to submit a Drinking Water Replacement Contingency Plan that includes a provision for Kinder Morgan to provide uninterrupted replacement water service, which may include wellhead treatment, if the City were to develop a water supply project before the cleanup is complete. In fact, Kinder Morgan has stated numerous times that they would provide wellhead treatment to any off-terminal area that could be impacted by petroleum releases from the Mission Valley Terminal.

**Responses to City's request for "...RWQCB not to re-enroll Kinder-Morgan in its NPDES permit...[and] to mandate water re-injection**

The discharge of treated groundwater from the Mission Valley Terminal cleanup project to Murphy Canyon Creek, a tributary to the San Diego River, was previously regulated under the San Diego Regional Board Order No. 2001-96, NPDES No. CAG919002, *General Waste Discharge Requirements For Groundwater Extraction Waste Discharges From Construction, Remediation, And Permanent Groundwater Extraction Projects To Surface Waters Within The San Diego Region Except For San Diego Bay*. The Regional Board adopted Order No. R9-2008-0002, which supersedes and replaces Order No. 2001-96. In order to continue discharging, all dischargers enrolled under Order No. 2001-96, including Kinder-Morgan, were required to re-enroll under Order No. R9-2008-0002 no later than March 12, 2009. By letter dated January 30, 2009, Kinder-Morgan was notified by the Regional Board of this requirement.

Kinder-Morgan submitted an application, dated March 11, 2009 and received March 12, 2009, for enrollment under Order No. R9-2008-0002, NPDES Permit No. CAG919002. The permit application included a Notice of Intent (NOI) and Form 200 as required by Order No. R9-2008-0002.<sup>10</sup> Kinder-Morgan submitted additional information dated April 10, 2009 and received April 13, 2009. The Regional Board reviewed the complete application and determined that Kinder-Morgan's groundwater discharge meets the conditions for coverage under Order No. R9-2008-0002.

During the re-enrollment process, representatives of the City expressed their desire to submit formal comments to the Regional Board regarding the application for Mission Valley Terminal. The City submitted written comments by letter dated May 1, 2009, including a supplemental April 29, 2009 technical analysis by INTERA Engineering LTD on the feasibility of re-injecting extracted groundwater into the aquifer after treatment. In summary, the City urged the Regional Board to condition the Board's approval of Kinder-Morgan's re-enrollment in Order No. R9-2008-0002 by allowing the "live stream discharge" of only that quantity of water which cannot otherwise be re-injected due to potential effects of mounding. The Regional Board fully considered these comments prior to issuing the Board's final enrollment letter to Kinder-Morgan and concluded that while re-injection of the groundwater may have been a feasible option, there are other options including live stream discharge that Kinder-Morgan can use to lawfully comply with the Board's cleanup and abatement order. Moreover the Board lacks the legal

<sup>10</sup> See Enclosure 2, Attachment 2 for details

authority to mandate a specific re-injection method of compliance in view of Kinder-Morgan's request for enrollment under a general NPDES permit.

As discussed above, under Water Code section 13360, the Regional Board may not specify the design, location, type of construction, or particular manner of compliance with waste discharge requirements or other orders, and dischargers can comply in any lawful manner. The NPDES permit does not prevent Kinder-Morgan from using any available appropriate discharge strategy to comply with all water quality regulations and requirements. The Regional Board did qualify its decision to provide general permit coverage for Kinder-Morgan's groundwater discharge in the June 23, 2009 enrollment letter as follows:

"Although this enrollment authorizes a discharge of up to 505,000 gallons per day of groundwater to the San Diego River, it is recommended that you utilize alternative methods of disposal of the groundwater that optimize reuse and beneficial use such as conveying the treated water to the City of San Diego's North City Reclamation plant for reclamation and/or re-injection of the groundwater on the west side of Qualcomm Stadium. It is our understanding that based on hydrogeologic and engineering studies, re-injection of all of the treated groundwater is not feasible, but we urge you to attempt re-injection of some of the treated groundwater."

### **Conclusion**

Based on this letter and the enclosed record, the City has not established a basis for its contention that the Board staff has no interest in hastening the groundwater remediation effort. Just the opposite is true. Board staff has been and will continue to be focused on the effectiveness of the existing cleanup project. Ironically, the alternative--re-injection--proposed by the City has the potential of retarding the remediation project and adversely impacting groundwater quality.

Specifically, a thorough and exhaustive evaluation of the re-injection of treated groundwater has been done by Board staff. To continue on with an evaluation using the same set of data would seem pointless.

Your request to meet with Board staff within 30 days can be met with a meeting that I am arranging with all parties to coordinate the information presented to the Regional Board at the August 12 Board meeting on the status of the Mission Valley Terminal project. At this meeting there may be the opportunity for the City to meet just with Board staff, but my preference is for the City to agree to meet with all parties and to speak openly and forthrightly on the technical issues of the remediation project.

I am looking forward to the report to the Regional Board on August 12 on the effective progress already made in remediating the groundwater aquifer and in achieving compliance with the cleanup and abatement order.

The heading portion of this letter includes a Regional Board code number noted after "In reply refer to." In order to assist us in the processing of your correspondence please include this code number in the heading or subject portion of all correspondence and reports to the Regional Board pertaining to this matter.

If you have any questions or require further information, please contact Mr. Craig L. Carlisle of my staff at (858) 637-7119 or via email at [ccarlisle@waterboards.ca.gov](mailto:ccarlisle@waterboards.ca.gov).

Sincerely,



Michael P. McCann  
Assistant Executive Officer

Enclosures:

1. Meetings and Correspondence with the City of San Diego
2. Reports Discussing Treated Groundwater Re-injection

cc:

Mr. Jim Barrett, Director, Water Department , City of San Diego, 600 B Street,  
Suite 600, San Diego, Ca 92101.

Ms. Grace Lowenberg, Deputy City Attorney, Office of the City Attorney, City of  
San Diego, 1200 Third Avenue, Suite 1100, San Diego, Ca 92101

Mr. Richard G. Opper, Opper and Varco, 225 Broadway, Suite 1900, San Diego,  
CA 92101

Mr. Scott Martin, Kinder-Morgan, Manager, EHS-Remediation, via email  
[MartinS@kindermorgan.com](mailto:MartinS@kindermorgan.com)

Ms. Margaret Eggers, Eggers Environmental, via email w/o enclosures.  
[meggers@eggersenv.com](mailto:meggers@eggersenv.com)

Mr. Paul Johnson, Arizona State University, via email w/o enclosures.  
[PAUL.C.JOHNSON@asu.edu](mailto:PAUL.C.JOHNSON@asu.edu)

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