

# THE CITY OF SAN DIEGO P 2: 40

June 25, 2009

Dr. Richard Wright, Chairman San Diego Regional Water Quality Control Board 9174 Sky Park Court, Suite 100 San Diego, CA 92123

Dear Chairman Wright:

Subject:

Contamination of Mission Valley Aquifer and Qualcomm Stadium:

Application for Re-enrollment in NPDES General Permit Kinder Morgan Energy Partners, Mission Valley Terminal

Per Order No. R9 – 2008 – 0002 NPDES Permit No. CAG9 19002 (WDR)

In May of 2009, the City of San Diego (City) once again asked the Regional Water Quality Control Board (RWQCB) staff to cooperate with the City to save a precious local water supply that lies below the San Diego River and surrounding areas and provides one of the few naturally occurring groundwater basins in our region – the Mission Valley Aquifer. This request followed many previous requests by the City which have been dismissed by RWQCB staff. The City seeks the Board's intervention in requesting RWQCB staff to work with the City to explore the feasibility of re-injecting clean, treated groundwater to accelerate remediation of the contaminated aquifer in order to meet clean-up deadlines per Addendum 5 to CAO 92-01. The City believes that a portion, if not all, of the discharger's groundwater-to-surface water permitted waste stream of 505,000 gallons per day of this natural resource should be beneficially put to use through re-injection to further the clean-up efforts at the Qualcomm Stadium site.

### Our challenge

The Governor of the State of California has declared a water emergency. As a result, citizens throughout the state have been ordered to conserve. In San Diego, we are particularly sensitive to this issue. Effective June 1, 2009, the City implemented a Level 2 - Drought Alert that includes mandatory water use restrictions. The responsibility for this program falls on the shoulders of the City's Water Department. The importance of water to our lifestyles, and local economy cannot be overstated. The protection of this resource should be a paramount concern to the Regional Water Quality Control Board.

The aquifer in question, however, was polluted by a discharge of petroleum products that occurred out of sight, below the ground, first detected more than 20 years ago.



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The aquifer has not been nor cannot be developed in its present contaminated state. RWQCB deadlines to clean up the aquifer have been extended several times.

In its June 2009 progress evaluation, the discharger, Kinder Morgan Energy Partners (Kinder Morgan), identified areas of City property adjacent to the Mission Valley Terminal in which the remediation program is not yet sufficiently advanced to ensure successful cleanup before the earliest of the extended deadlines - December 31, 2010. Furthermore, there is a large area near the front gate to the Stadium in which Kinder Morgan reports gasoline contamination that is not yet even under remediation and which is ignored in the June 2009 progress report. Finally, the aquifer to the southwest of the Stadium is showing evidence of MTBE/TBA persistence that also indicates inadequate remedial progress to meet the deadlines.

Since at least 2004, shortly after a determination that Kinder Morgan was solely responsible for the core contamination plume, the City has consistently approached the staff of the RWQCB with requests to cooperate on a program that would enhance and expedite the cleanup of this resource and help assure that Kinder Morgan achieves the cleanup goals within the time set by the RWQCB in Addendum No. 5 to CAO 92-01 for this site. The City has diligently and repeatedly sought to partner with the RWQCB staff by providing the advice and expertise of the City's experts (at the City's expense) to both assist in enhancing and expediting cleanup of the site and providing for reuse and storage of groundwater so that this resource can be available to the community for its use as soon as possible. The City estimates that the Mission Valley Aquifer, if developed, could serve 4000 to 6000 households per year.

Unfortunately, the staff of the RWQCB has not been supportive of these goals. Instead of partnering with the City, the staff recently stated their refusal to meet with the City to discuss ways to achieve this result. The staff has advised the City that these are "old ideas" and that if the City has nothing "new" to tell them, no further discussion is warranted.

The City does not believe that the Board should endorse this position. The City believes that the Board should instead offer guidance to staff, and direct that meetings be held between the City and the RWQCB to determine how to save this local resource in terms of both quality and quantity of the water it contains.

One of a number of actions the City has been advocating is the re-injection of treated ground water into the aquifer in order to flush out the MTBE/TBA contamination which, until recently, has not received any significant attention. The reference number in the subject line at the top of this letter refers to the City's latest effort to get the RWQCB to work cooperatively on a program to clean, store, and re-use the water that Kinder Morgan is withdrawing from our aquifer and discharging into Murphy Canyon Creek that ultimately goes into the ocean. Although the City has yet to receive a formal response to its most recent objections to the continued waste of its water, staff members have indicated that there is no support for re-injection at the San Diego RWQCB. This should

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not be the policy choice given our limited water supply options. The Board should act to compel a complete and thorough evaluation of this option, beginning with requiring senior staff to meet with the City in the next 30 days to begin that process.

## City's efforts for RWQCB support

The City of San Diego has been consistent in its requests to the RWQCB since it first took an active role to try and address the contamination that the Kinder Morgan pipelines have caused. The following represents excerpts from City documents provided to the RWQCB over the past five years.

1) The City's "Statement of Remedial Criteria", was a document presented to the RWQCB by the City in February 2004, to suggest the context for decision making and urge that saving the aquifer be made a primary goal. The following are excerpts from that document:

"In addition, the City has pueblo rights to the water of the San Diego River, and has historically had production wells in the area threatened by the release at this Site. The City is now planning for groundwater storage and extraction as part of a groundwater management program, and its plans for this aquifer will be directly impacted by RWQCB decisions for remediation at this Site." (p.3)

"The Working Group wishes to make it very clear that the City's goal is to achieve conditions of decontamination of the subsurface beneath the Qualcomm Stadium parking lot so that the process for development of the aquifer can begin in 2005, not the long-term capture and incomplete removal of gasoline that is the unstated objective that emerges from the July 2003 Technical Evaluation Report (TER) on the MVT remediation system. Consequently, references in the TER suggesting the impracticability of further gasoline removal once vapor recovery reaches asymptotic levels are simply unacceptable to the Working Group and should be unacceptable to the RWQCB." (p.5)

"The City and other public agencies have been studying the Mission Valley aquifer for some time. Historic production records for this aquifer establish that it was used for production wells by the City during the 1930s through the 1940's and likely as early as 1914. The City of San Diego is currently evaluating groundwater management options for the aquifer systems that occur within the San Diego River. A recent study entitled

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"San Diego River System Conceptual Groundwater Management Plan", dated May 2003, provides a detailed assessment of the known and potential water uses for the aquifer system currently impacted by the discharge of fuel contaminants from Mission Valley Terminal." (p.8)

"Conjunctive groundwater uses offer a number of economic and operational opportunities to the City of San Diego:

- 1. Operational storage capacity of an estimated 11,000 acre-feet of water out of a total storage estimated to be 30,000 acre-feet.
- 2. Seasonal purchase of imported water to take advantage of lower water rates when available.
- 3. Controlled artificial recharge of reclaimed and poor quality import water or storm water provides for secondary water treatment.
- 4. Emergency storage
- 5. Routine storage in concert with adjacent surface water reservoirs within the San Diego River System (for example El Capitan Reservoir, San Vicente Reservoir, and Lake Jennings)." (p.9)
- 2) The following year found the City making the same comments, which were delivered by Water Department Deputy Director, Ms. Steirer, to RWQCB staff at a meeting on March 9, 2005:
  - "The City's interest in how the Mission Valley aquifer can be used has been the subject of study by the Department for many years. Engineering firms have been hired to assess the best approach to development of the water supply, and a consultant who used to work for this very Board has helped design a plan that we have started to implement. We are now working with the USGS and have an application to the state for use of special funding for these projects." (the 'application' refers to a grant proposal submitted to California Department of Water Resources in 2004).
- 3) During 2005, Kinder Morgan's consultants estimated the remaining gasoline in soils beneath the Qualcomm Stadium Parking Lot was  $50,000 \pm 10,000$  gallons. This was significantly higher than the ~20,000 gallons that was estimated in January 2005 by Eggers Environmental for the Board. Consequently, the City asked its consultant, INTERA, Inc. (INTERA) to evaluate the progress of the remediation. INTERA produced an Assessment of LNAPL Remediation for the City dated April 6, 2006, which was forwarded to the RWQCB:

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In its April 2006 report, INTERA reviewed the current condition of the site and recommended that the treated effluent be re-injected "to enhance clean-up on both off- and on-Terminal, e.g., injecting it down-gradient of the (Qualcomm Stadium Parking Lot) capture zone to enhance the removal of MTBE and TBA." (p.19) Figure B-1 attached to this report is shown below.

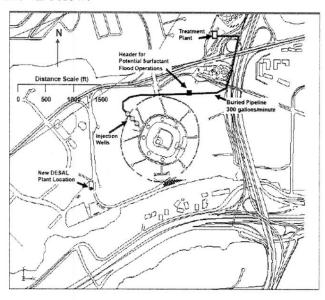


Figure B-1. Site map showing location of proposed pipeline and injection Wells.

During 2007, LFR on behalf of Kinder Morgan indicated that "natural attenuation may not be sufficient to achieve clean-up goals for TBA" (LFR Work Plan, dated December 28, 2007) in the MTBE/TBA plume by the December 2013 deadline. This was very clearly the result of the anoxic state of this plume inhibiting the natural attenuation of both MTBE and TBA. Consequently, the City began requesting that this uncertainty be addressed by employing the treated water to oxygenate the MTBE/TBA plume.

4) Letter of Deputy City Attorney (Grace Lowenberg) to Executive Officer, Water Board (John Robertus) dated January 25, 2008:

"We are informed that Kinder Morgan might profitably re-inject that water, and not waste it using a live stream discharge, but cause it to be both stored and used to help clean and flush the aquifer of MTBE and the increasing amounts of TBA southwest of the Qualcomm Stadium in order to more timely effect its remediation." (p.20)

5) Letter of Deputy City Attorney (Grace Lowenberg) to Water Board (Kelly Dorsey) dated April 10, 2008:

"In order to enhance and accelerate the cleanup of MTBE and TBA beneath the Qualcomm Stadium Parking Lot, the City recommends the injection of the 300 gpm of treated, oxygenated wastewater from the treatment plant operated by [Kinder Morgan], into the contaminated aquifer on the west side of the Stadium. The completion of the six new extraction wells there this year will allow the treated and oxygenated water to be injected in order to promote the degradation of MTBE and TBA." (p.3)

6) In a recent March 9, 2009 meeting with RWQCB staff the matter was again brought up, and documented in a letter from Deputy City Attorney (Grace Lowenberg) to Water Board (Sean McClain) dated March 19, 2009:

"First, we emphasized that it is our desire that Kinder Morgan re-inject the water they pump and treat from the City's aquifer so that it is not wasted, as it now is, being discharged to flow out to ocean. This treated groundwater could be used to accelerate the cleanup of the MTBE/TBA plume." (p.1)

During the March meeting with staff, the City was informed that the RWQCB was considering approval of an extension of Kinder Morgan's NPDES permit and requested an opportunity to comment. The RWQCB provided the opportunity, and in a letter to the RWQCB, dated May 1, 2009, the City again stated:

"In these times of water scarcity and with media attention focused on our use of water, discharging this water to either Murphy Canyon Creek, or to the sewer system of the City, is a waste of a precious local resource. The regulations which govern the operation of the sewer system do not permit the discharge of this treated water to the sewer, and we believe that only that water which cannot be re-injected into the aquifer from which it was withdrawn for treatment should be allowed to be discharged in this manner, so that the RWQCB can assist in preserving this precious local resource." (p.1)

Although the NPDES process and the cleanup process are overseen by separate branches of the RWQCB, the City believes that we can and should work together to achieve goals that are protective of water quality (and quantity) here in the San Diego region. Re-injection of the water Kinder Morgan withdraws from the City's aquifer is fair, appropriate, and good for the environment. By conditioning the pending application for re-enrollment by allowing the discharge of *only* such water as cannot be re-injected due to the effects of mounding, the RWQCB will be taking action

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that will benefit us all. We look forward to working with you to that end."
(2)

The above letter was accompanied by a Technical Report from the City's consultants that evaluated the feasibility of reinjection, concluding it was technically feasible and eminently practical in this instance. (INTERA report dated April 29, 2009)

#### Status today

As of today, the City has been advised that the RWQCB is neither interested in further discussion about the possibility of reinjection, nor willing to meet to discuss it further. The City has received no response to its request to the RWQCB not to re-enroll Kinder Morgan in its NPDES permit, but to use the powers available to the RWQCB to mandate water reinjection to enhance the quality and volume of water stored in the aquifer as a condition to re-enrollment.

Moreover, the RWQCB staff has now refused to meet with the City unless Kinder Morgan is included, effectively precluding any further discussion because of the fact (well known by the RWQCB) that the City, consistent with the advice of the RWQCB's Executive Director, sued Kinder Morgan for damages arising from Kinder Morgan's contamination. However, the City understands that the RWQCB staff meets with Kinder Morgan and their consultants without involving the City. The City's claims for monetary and injunctive relief should not prevent the RWQCB from working with the City to construct a viable program.

#### Request for action

As it stands, the RWQCB staff has indicated no interest in helping to hasten the cleanup of this aquifer or preventing the waste of water that occurs when Kinder Morgan treats it and discharges it, where it ultimately flows to the ocean. The Board should redirect these policy decisions made by staff.

- 1) The Board should compel a complete and thorough evaluation of re-injection of the treated ground water and direct senior staff to meet with the City's team (without requiring the presence of the discharger and litigant, Kinder Morgan) to evaluate how reinjection might be used to accomplish a cleanup that is compliant with the deadlines in Addendum No.5 and which stores and saves water now wasted.
- 2) The Board should direct that this meeting occur within the next 30 days, as the water supply situation in our region is worsening as the summer progresses.
- 3) The Board should advise its different divisions (site mitigation, NPDES, groundwater and reinjection staff) to work together cooperatively with the City to accomplish these goals.

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## Conclusion

In these times of limited and depleted resources, both of the public purse and of the shared water resource, it is a mistake for public agencies not to work closely together to accomplish mutual goals. The goals stated in this letter should be shared by the RWQCB. We sincerely hope that this effort will result in a renewed sense of shared commitment to protect these shared resources. Thank you for your consideration of this request.

Sincerely,

Marsi A. Steirer Deputy Director

GL/GC/tf