

FINAL

Meeting Minutes

Meeting Subject: Norwalk Tank Farm Restoration Advisory Board (RAB) Quarterly Meeting	Meeting Date: <u>28 October 2004</u> Meeting Time: 6:30 p.m. Meeting Place: Norwalk Arts & Sports Complex
RAB, PROJECT TEAM, AND OTHER ATTENDEES	
<u>RAB Community Members</u> D. Caughey E. Garcia B. Hoskins M. McIntosh (Co-Chair) W. Miller W. Sterner	<u>Other Members</u> Col Alexander (DESC-AMW) (Co-Chair) T. Devoy (City of Norwalk) N. Matsumoto (WRD) A. Townsend (RWQCB) T. Ryland (KMEP) (Co-Chair)
<u>Other Attendees</u> S. Chou (Geomatrix) R. Hassan (Parsons) C. Silver (Parsons) J. Trani (DESC) T. Whyte (URS) T. Winkler (Cerritos Citizen)	DESC-AMW . Defense Energy Support Center Americas West GSA..... General Services Administration KMEP..... Kinder Morgan Energy Partners OCCS Offsite Chemicals Cleanup Subcommittee RAB Restoration Advisory Board RBCA..... Risk-Based Corrective Action RWQCB Regional Water Quality Control Board URS..... URS Corporation WRD Water Replenishment District of Southern California
<u>Absentees</u> J. Holdren (City of Cerritos) J. Rifilato	
<u>Not Attending</u> Dr. Duran (OCCS) Dr. Landolph (OCCS)	
<u>BACKGROUND</u> DESC-AMW and KMEP are conducting environmental cleanup activities at the area in and around the former Defense Fuel Support Point Norwalk, also known as the Tank Farm, located at 15306 Norwalk Boulevard, Norwalk, CA. The RAB is an advisory committee of local citizens and project members that reviews and comments on documents relating to the environmental cleanup. All RAB meetings are open to the public and are scheduled quarterly on the last Thursday of the month at 6:30 p.m. in January, April, July, and October unless otherwise voted on by the RAB community membership.	

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1. Introduction Col Renita Alexander, DESC Co-Chair, Meeting Chair

Col Renita Alexander called the meeting to order at 6:37 p.m. Col Alexander asked if there were any comments on the July 29, 2004, meeting minutes. Gene Garcia clarified his statement on page four of the minutes regarding a citywide vote. He said there was an advisory vote in 1992 and a public meeting held by the City in 1994 to discuss what to do with the Tank Farm after closure. Mary Jane McIntosh made a motion to accept the minutes as amended. Bill Miller seconded the motion. The motion passed without opposition or abstentions.

Col Alexander discussed the application for membership by Tracy Winkler. Ms. McIntosh said that Ms. Winkler is eligible for RAB membership since she is a resident of Cerritos, and the RAB had previously accepted the membership application of a representative of the City of Cerritos. Wanda Sterner moved to accept the application. The motion was seconded. The motion to accept Ms. Winkler's membership passed without opposition. Ms. McIntosh asked that Parsons and Geomatrix be sure to add Ms. Winkler to the distribution list for reports and other mailings.

2. RBCA Update Terri Ryland, KMEP Co-Chair, and Shioh-Whei Chou, Geomatrix Consultants, Inc.

Shioh-Whei Chou said that as discussed by Ann Holbrow at the last meeting, the Regional Water Quality Control Board (RWQCB) requested that Kinder Morgan Energy Partners (KMEP) "conduct an additional human health risk assessment (HRA), including indoor air analysis, primarily for the southern portion of the facility." KMEP reviewed the HRA prepared in 1993. She said that when elevated risk is predicted using soil or groundwater data, current environmental practice is to collect soil vapor data to better predict potential risks. KMEP surveyed the southern offsite residential areas and identified three types of housing construction: 1) constructed on grade; 2) constructed over crawl space; or 3) constructed over garages. Ms. Chou showed a map indicating each type of construction at the southern offsite properties. KMEP identified 17 potential soils gas sample locations based on proximity to the three different housing types, proximity to existing wells, and locations over the plumes. They still need to confirm access with the residents.

3. KMEP Update Terri Ryland, KMEP Co-Chair, and Shioh-Whei Chou, Geomatrix Consultants, Inc.

Remediation Operations Update. Ms. Chou showed a map of the remediation systems. She added the two phytoremediation tree plots to the map. She said there are 17 onsite and 6 off-site vapor extraction wells in the South-Central Plume area and 2 vapor extraction wells in the Southeastern 24-Inch Block Valve area. Approximately 4,530 gallons equivalent of fuel were removed from the soil and destroyed by thermal oxidation since the July 2004 RAB meeting. Approximately 412,500 gallons equivalent of fuel were removed from the soil and destroyed by thermal oxidation since September 1995. Ms. Chou next showed graphs of the fuel removed by vapor extraction. Then she said there are 8 groundwater extraction wells in the West Side Barrier area, 8 groundwater/product extraction wells in the South-Central Plume area, and 3 groundwater/product extraction wells and 2 groundwater extraction wells in the Southeastern 24-Inch Block Valve area.

Total groundwater extracted since the July 2004 RAB meeting includes 61,900 gallons from the South-Central Plume area, 344,500 gallons from the Southeastern 24-Inch Valve area, and 197,200 gallons from the West Side Barrier area. No free product was recovered. Total groundwater extracted since September 1995 includes 22.2 million gallons from the South-Central Plume area, 5 million gallons from the Southeastern 24-Inch Block Valve area, and 13.8 million gallons from the West Side Barrier area, for a total of 41 million gallons. In addition, 8,745 gallons of free product were removed. Ms. Chou showed a graph of groundwater remediation and total free product extracted.

Phytoremediation Update. Ms. Chou showed a layout of the phytoremediation trees. The figure indicated the locations of the nine stunted or stressed trees that were replaced in July 2004. KMEP also installed 2 transducers in July, at wells PZ-6 and GMW-27. She next showed a slide of the phytoremediation process. She described that the roots extract groundwater and take in VOCs (volatile organic compounds). The VOCs are then volatilized through the trees. The trees were planted in July 1999. KMEP performed sampling in the area in July 2003, April 2004, and July 2004. The transducers were installed in the summer when the trees are more active. They gauged wells in the area to observe the effects of the trees on groundwater elevation. They did not see a decrease in groundwater elevation. However, they did find evidence of enhanced biodegradation. Nitrate concentrations were found to be higher in wells within and downgradient of the phytoremediation area. Higher sulfate concentrations were found within and downgradient of the area. Higher/positive ORP (oxidation reduction potential) values were found within and downgradient of the area. Also, decreased or lower concentrations of benzene, 1,2-DCA (1,2-dichloroethane), and MTBE (methyl tertiary butyl ether) were found within and downgradient of the area since the trees were planted. The effects of the trees on groundwater elevation have seasonal variations. They observed a mound within the phytoremediation area due to the capillary action of the roots. Diurnal effects were observed in wells PZ-6 (within the area) and GMW-27 (outside the area). Groundwater elevation appeared flat or towards the northwest in January 2004. In July 2004, the trees were more active, and a mound around the area was observed. Ms. Chou showed a graph of transducer data from well PZ-6 showing an overall decrease in groundwater elevation. Transducer data for well GMW-27 showed daily fluctuations in groundwater elevation, which is believed to be natural, not due to the trees. In well PZ-6, the diurnal effects of the trees cancel out the natural effects, such as shown in GMW-27.

Groundwater Monitoring Data Review. Ms. Chou said she reviewed the groundwater monitoring data in response to questions raised at the previous RAB meeting. There was a question about THPfp (total petroleum hydrocarbons as fuel product) detected in wells EXP-5, GMW-O-16, and GMW-O-19. These wells were resampled in July 2004. The results were non-detected. She spoke with the lab about the previous results. The chromatograms did not match the standards, so the original results could have been from biogenic causes.

Ms. Chou also looked at TPH in northern offsite wells WCW-4 and WCW-7. Concentrations at the wells were near the detection limit. TPH had also been detected at this well in the past. Therefore, the detections were not a surprise.

Ms. Chou addressed a question on wells GMW-4 and MW-9, which are located south of the Truck Fill Stand in the south-central area. During the past five years, GMW-4 often had a thin layer of product (between 0.00 and 0.08 feet), and they do not sample wells containing product. Therefore, there is not a lot of data for the well. From 1999 to 2003, concentrations of TPH decreased from 5,800 ppb (parts per billion) to 1,600 ppb. Concentrations of benzene decreased from 67 ppb to 8 ppb. 1,2-DCA and MTBE remained non-detect. They will attempt to purge the product from the well so they can sample it and get new data in November 2004. In well MW-9, product thickness has varied between 0.00 and 0.09 feet during the past 5 years. Concentrations of TPH decreased from 6,300 ppb in November 1999 to 5,200 ppb in May 2000. Concentrations of benzene decreased from 24 ppb to 12 ppb. MTBE was detected at 1.8 ppb in May 2000. 1,2-DCA was non-detect. They will also attempt to purge the product from the well so they can sample it and get new data in November 2004. Ms. Sterner asked why there is product there now. Ms. Chou said that product appears to disappear when the groundwater levels rise. Ms. Chou next showed graphs for wells MW-SF-4 and GMW-36 showing groundwater elevation and product thickness over time. Overall thickness has decreased in well MW-SF-4. They may add a skimmer in this well. It currently is a soil vapor extraction well. Well GWM-36 is in the southeast area. It previously had no free product, but when the groundwater elevation decreased, free product appeared.

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Ms. Chou next showed updated plume maps. TPH has shown a decrease. Ms. McIntosh asked about the benzene increase in the southern offsite area in GMW-O-14. Ms. Chou said they will look at the historical data and evaluate it and report back at the next meeting. Ms. McIntosh requested they look into wells GMW-1 and PZ-10 as well. Compared to one year ago, 1,2-DCA is similar in the northern area, and the lateral extent to the south has decreased. The southeastern MTBE plume has decreased in width. MTBE detections appeared in the northern area. This was not surprising, since the wells in that area were not previously sampled. Also, many of the detections were low, and in the past, detection limits were higher. In the main MTBE plume, there were not many changes. There was a slight increase in the lower end. The northern area concentrations were around the detection limits.

4. DESC-AMW Update Redwan Hassan, Parsons

Central Plume Remediation System Update. Mr. Hassan said that since the last RAB meeting, the Central Plume remediation system removed a total of approximately 6,221 gallons of hydrocarbon mass. Approximately 3,525 gallons of fuel were recycled and destroyed through soil vapor extraction. No free product was recovered during the quarter. A small amount (0.04 gallons) of dissolved phase hydrocarbons were recovered. An estimated 2,696 gallons were removed through bioremediation. Approximately 60,088 gallons of water were treated and discharged offsite.

The overall system performance since April 1996 includes 271,550 gallons of hydrocarbon mass removed. Approximately 147,923 gallons of fuel have been recycled and destroyed, including 55,536 gallons through free product recovery, 90,990 gallons through soil vapor extraction, and 1,397.1 gallons of dissolved phase hydrocarbons. In addition, an estimated 123,627 gallons have been removed through bioremediation. Approximately 42.2 million gallons of water have been treated and discharged offsite. Mr. Hassan then showed a graph of the free product and soil vapor extraction recovery.

Mr. Hassan next showed graph of hydrocarbons removed through vapor extraction since November 2003. The graph shows about 2,000 gallons removed from the Truck Fill Stand area. It also showed the amounts removed by the horizontal wells and through biodegradation. The total removed by the thermal oxidizer and by biodegradation equals over 6,000 gallons of hydrocarbons.

Tank Farm Remedial Activities. Mr. Hassan said that they have installed 10 new biosparge points and installed 12 vertical vapor extraction wells (VEWs) in and around the aboveground storage tanks. The VEWs will be connected into the main remediation system and thermal oxidizer in November 2004. He showed some photos of the VEW connection piping. He said that hopefully this will lead to an increase in hydrocarbon recovery, just as happened in the Truck Fill Stand area.

Sidewalk Clearing and Tree Trimming. Mr. Hassan said that an issue bought up by the City was the trees around the perimeter of the Tank Farm obstructing the sidewalks. The trees were recently trimmed back to just above the fence line. Mr. Hassan showed some before, during, and after photos of the tree trimming.

5. Set Date and Agenda for Next Meeting

The next RAB meeting will be held **Thursday, January 27, 2005, at 6:30 p.m.** in the Norwalk Arts & Sports Complex. The agenda is to include an update on wells GMW-1, GMW-O-14, and PZ-10.

6. Public Comment Period

Ms. Winkler asked if they have cut into any more tanks. Mr. Hassan said no. They are putting wells in at the three tanks that were cut into; if they see a good response, then they may conduct similar activities at the other tanks.

Ms. McIntosh requested that the plume maps be updated to include historical data for the wells near the

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Interim 24-Inch Block Valve release area. Wells such as PZ-10 and GMW-O-14 should include detections limits and time period, from three months prior to the release to the most recent data.

David Caughey asked about the remediation at the gas station at Norwalk and Rosecrans. Terri Ryland said that it was not connected and is totally separate from the Tank Farm. Ana Townsend said she would look into the current status.

Bob Hoskins moved to adjourn the meeting. The motion was seconded. The motion was passed, and Col Alexander adjourned the meeting at 7:52 p.m.

ACTION ITEMS

Item	Responsible Party	Due Date
Update on wells GMW-1, GMW-O-14, and PZ-10	KMEP	1/27/05
Next RAB meeting	All	1/27/05