FINAL

Meeting Minutes

Meeting Subject: Norwalk Tank Farm Restoration Advisory Board (RAB) Quarterly Meeting	**Meeting Date**: **27 January 2005** **Meeting Time**: 6:30 p.m. **Meeting Place**: Norwalk Arts & Sports Complex

RAB, PROJECT TEAM, AND OTHER ATTENDEES

RAB Community Members
D. Caughey
B. Hoskins
M. McIntosh (Co-Chair)
W. Miller
T. Winkler

Other Members
T. Devoy (City of Norwalk)
J. Holdren (City of Cerritos)
N. Matsumoto (WRD)
A. Townsend (RWQCB)
T. Ryland (KMEP) (Co-Chair)

Other Attendees
B. Cardenas (Office of G. Napolitano)
S. Chou (Geomatrix)
R. Hassan (Parsons)
K. Olowu (DESC)
M. Pitta (KMEP)
C. Sandidge (Arcadis)
C. Silver (Parsons)
J. Trani (DESC)
T. Whyte (URS)

Absentees
Col Alexander (DESC-AMW) (Co-Chair)
E. Garcia
W. Sterner

Not Attending
Dr. Duran (OCCS)
Dr. Landolph (OCCS)

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

BACKGROUND

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.

MEETING MINUTES **27 January 2005**

1. Introduction Mary Jane McIntosh, Community Co-Chair, Meeting Chair

Mary Jane McIntosh called the meeting to order at 6:37 p.m. Ms. McIntosh asked if there were any comments on the October 28, 2004, meeting minutes. Bob Hoskins made a motion to accept the minutes as written. Bill Miller seconded the motion. The motion passed without opposition.

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

To recap what was said at the previous RAB (Restoration Advisory Board) meeting, Shiow-Whei Chou said that 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, the current environmental practice is to collect soil vapor data to better predict potential risks. KMEP identified potential soil gas sample locations based on availability of existing groundwater data, proximity of different types of housing construction, and relativity to plumes. To finalize the sampling locations and the work plan, KMEP needs to confirm property access, which is in progress. Ms. Chou showed a map indicating types of construction at the southern offsite properties.

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

Remediation Operations Update. Ms. Chou showed a map of the remediation systems. 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 4,373 gallons equivalent of fuel were removed from the soil and destroyed by thermal oxidation since the October 2004 RAB meeting. Approximately 416,890 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.

Ms. Chou 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 October 2004 RAB meeting includes 117,400 gallons from the South-Central Plume area, 713,000 gallons from the Southeastern 24-Inch Valve area, and 1,413,200 gallons from the West Side Barrier area. No free product was recovered. Total groundwater extracted since September 1995 includes 22.3 million gallons from the South-Central Plume area, 5.8 million gallons from the Southeastern 24-Inch Block Valve area, and 15.2 million gallons from the West Side Barrier area, for a total of 43.3 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. Ms. Chou said that the phytoremediation trees are currently dormant. They will continue to monitor groundwater conditions in the area. They will continue to monitor the health of the trees.

Update on Wells GMW-1, GMW-O-14, and PZ-10 (Review of Intermediate Block Valve Area). Ms. Chou said that at the previous RAB meeting, Ms. McIntosh had some questions about wells GMW-1, GMW-O-14, and PZ-10 in the intermediate block valve area. Ms. Chou said that KMEP performed pipeline testing in January and February 2003. They exposed and repaired the intermediate block valve, located near the South-Central area, in February 2003. Geomatrix sampled wells in the area in March 2003. They also performed a site assessment and installed well PZ-10 in April 2003. Next Ms. Chou showed a map of the area that included historical sampling data from 2002-2004 for wells GMW-1, PZ-1, MW-SF-4, MW-SF-9, and GMW-O-14, as requested by Ms. McIntosh during the previous RAB meeting. In the past three years, Well

GMW-1 had no product detected. Total petroleum hydrocarbon (TPH) concentrations remained within historical limits. The highest TPHg concentration was observed in April 2004. Benzene concentrations remained within historical limits. The highest benzene concentration was observed in November 2004. 1,2-dichloroethane (1,2-DCA) was not detected above detection limits. Methyl tertiary butyl ether (MTBE) concentrations remained similar. Ms. Chou also showed a graph of these concentration changes.

In the past 2 years, Well PZ-10 had no product detected. TPH concentrations ranged from 4,900 ug/l (January 2004) to 19,300 ug/l (April 2004). The highest benzene concentration was observed in April 2004. 1,2-DCA was not detected above detection limits. MTBE concentrations remained similar. Ms. Chou showed a graph showing concentrations were fairly stable. There was an increase in 2004, but the concentrations dropped during the Sentry Event and stayed the same in the Semiannual monitoring.

Ms. McIntosh said she had a concern with the talk of "historical limits" and that we do not have a good handle on remediation in some areas. Terri Ryland said she and Ms. Chou spoke about attacking some areas more aggressively, and that conditions are stable. Ms. McIntosh said that stable was not good enough, since contamination is near homes, and on the eastern side is near a park and school. Mr. Miller said that when one well goes up in concentration, another should go down in concentration. Nancy Matsumoto asked if a correlation graph of water levels versus concentrations had been prepared. Changes could be due to seasonal variations. Ms. Ryland said that there could be variations from rainfall.

Ms. Chou said that in the past three years, Well GMW-O-14 had no product detected. TPH concentrations remained within historical limits. The highest TPHg concentration was observed in July 2004. Benzene concentrations increased. The highest benzene concentration was observed in January and July 2004. 1,2-DCA had not been detected since November 1996 and was recently detected again since July 2003. MTBE concentrations remained similar. Ms. Chou said they are keeping a close watch on this well. She also showed a graph of these concentration changes. The sharp decrease in March 2003 may have been due to different purging methods used during sampling. Joe Holdren asked if the purging methods have now been standardized at the site. Ms. Chou said yes, during the routine groundwater monitoring events, everyone uses the same purging methods to ensure consistency. Ms. McIntosh asked why there was a decrease between June and August 2003, but then an increase after that. Ms. Chou said that we will see fluctuations over time, but overall the trend should be decreasing. Theresa Devoy asked why has this well not changed, shouldn't it be decreasing? Ms. Chou said that overall, it has been decreasing. Ana Townsend pointed out that concentrations may not have decreased due to the recent release in the intermediate block valve area. Ms. Townsend also suggested next time plotting out longer time periods. Ms. McIntosh agreed, suggesting including data from 1996 or 1998, as available, in a figure similar to Figure 1 (slide 17). Mr. Hoskins said that for a long time, he has heard speculation that rain affects the amount of pollution. He said therefore with the historical rainfall we just had, there should be a dramatic increase or decrease of pollution in the groundwater during the next sampling event.

Ms. Chou said that they looked at groundwater elevations for wells MW-SF-4 and MW-SF-9. In the past three years, product thickness in well MW-SF-4 varied between 0 and 1.05 feet. Chemicals detected include TPH, benzene, and MTBE. She next presented a graph of the well data that showed that when groundwater elevations decreased, free product levels increased. In the past three years, product thickness in well MW-SF-9 varied between 0 and 0.03 feet. Chemicals detected include TPH, benzene, and MTBE, and 1,2-DCA. She next presented a graph of the well data. She said that the depth to groundwater might not have been gauged from the correct well, because two points on the graph appear to be anomalous.

4. DESC-AMW Update Redwan Hassan, Parsons

Central Plume Remediation System Update. Redwan Hassan said that since the last RAB meeting, the Central Plume remediation system removed a total of approximately 3,464 gallons of hydrocarbon mass. Approximately 2,037 gallons of fuel were recycled and destroyed through soil vapor extraction. Two gallons of free product were recovered from well PZ-3, located in the Central area. A pump was recently put into well PZ-3. No dissolved phase hydrocarbons were recovered. An estimated 1,425 gallons were removed through bioremediation. No groundwater was treated this period due to system shutdowns during the Semiannual sampling and during the connection of the new biosparge wells to the remediation system.

The overall system performance since April 1996 includes 275,014 gallons of hydrocarbon mass removed. Approximately 149,962 gallons of fuel have been recycled and destroyed, including 55,538 gallons through free product recovery, 93,026 gallons through soil vapor extraction, and 1,397.1 gallons of dissolved phase hydrocarbons. In addition, an estimated 125,052 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.

Tank Farm Remedial Activities. Mr. Hassan said that in October 2004, they began operations of soil vapor extraction in the former Truck Fill Stand (TFS) area. In November, the soil vapor extraction system was turned off for groundwater monitoring and for making connections to 12 new vertical vapor extraction wells. These new wells are grouped as VW East and VW West. VW East and VW West commenced operation on November 18, 2004. Next Mr. Hassan showed a photograph showing the lines from the TFS to the remediation system. He also showed two photographs of wells located inside tanks. He then showed a map of the layout of the new DESC vapor extraction systems. He also said that they have added 10 new biosparge wells that they hope to have operational by February 2005. Mass extracted during the 4th quarter 2004 totaled 2,037 gallons, including 1,046 gallons from the TFS area (from October through December); 605 gallons from VW East (November and December only); and 386 gallons from VW West (November and December only). Extraction from these areas will continue during the next quarter. He next showed a graph of the soil vapor extraction hydrocarbon removal. The graph shows a decrease during the system shutdown. They hope to see an increase at the next meeting.

5. Semiannual Monitoring Event Redwan Hassan, Parsons

Mr. Hassan said that the Sentry Event was conducted in July 2004 and the Semiannual Event was conducted in November 2004. He said they created a series of maps to compare conditions from 2003 and 2004. The first two maps shown were groundwater flow. It was generally consistent in both years. Flow was generally in a northwest direction, but they did not see any mounding in 2004 as they did in 2003. There was not a significant change in the TPH plume maps. There was some decrease in size on the west, but an increase on the east. They had added MW-60 and MW-61 in the east, which were installed in April 2004 as requested by the RWQCB. Benzene was generally the same, with some increase on the east. There were not much change to the 1,2-DCA and MTBE maps.

Tracy Winkler asked about the increases on the east. Mr. Hassan said they sampled to the north and west of the wells, took soil borings, and conducted hydropunch sampling in the area. They found nothing, so they ruled out the tanks as a source. Ms. McIntosh asked if they ruled out the recent construction activities. Mr. Hassan said yes, because they would have seen effects in other wells. There were increased concentrations in this eastern area in November 2004. Ms. McIntosh asked that these wells be added to the Sentry Event. Ms. Townsend said these wells are as close to the property fence as possible. Ms. McIntosh asked about the KMEP pipeline. Ms. Ryland said it was right along the eastern boundary. She will check into when it was last tested. Ms. McIntosh asked that she send that information via e-mail, including what type of testing. Mike Pitta requested that KMEP receive the hydropunch data from DESC. Ms. McIntosh stressed that there should

be a sense of urgency regarding the eastern area, since it is near an elementary school and a park. She said there needs to be a concentrated effort to speed up remediation.

Ms. Winkler said the alley on the southeastern side needs the weeds cleared. Mr. Hassan said they would take care of it. Mr. Miller said that the Offsite Chemicals Cleanup Subcommittee (OCCS) was supposed to come to an agreement with the RWQCB to reach a cleanup goal, since we will not be able to remove it all. Ms. Townsend said that is correct, but we can still remove more. She said we have had improvements, the central area is doing well, and while there have been some increases on the boundaries, a lot of wells are non-detect. Mr. Hoskins asked about the vapor extraction beneath the tanks, and if there has been enough evidence to open up the other tanks. Cannon Silver said that they did not find much contamination beneath tanks 1 and 9. Tank 8 may have had leaks before the double bottoms were installed. There were other soil borings done on the other tanks, and based on those results, they do not think there is a need to open up the other tanks. Mr. Hassan said the three tanks that were selected were the tanks more suspected to have contamination based on the 2002 tank investigation. Ms. Townsend said all tanks have been tested at least once.

Mr. Hoskins asked where the treated groundwater goes. Mr. Hassan said that after treatment, it goes into the storm drain, which takes it to the ocean. The water is tested prior to release under the stringent requirements of a NPDES (National Pollutant Discharge Elimination System) permit (from RWQCB). Mr. Hoskins asked if that water could be used as reclaimed water. Ms. Townsend said that was looked into previously, but found to be not feasible. Joe Trani said they use a portion of the discharge water at their San Pedro site for irrigation, but that is not needed at this site. Mr. Hassan said that the sheen of free product is hard to remove. However, they hope that the increase in biosparging will eliminate the need for groundwater pumping.

6. Set Date and Agenda for Next Meeting

The next RAB meeting will be held **Thursday, April 28, 2005, at 6:30 p.m.** in the Norwalk Arts & Sports Complex. The agenda is to include an update of Figure 1; Eastern pipeline testing; KMEP and DESC ideas on increasing remediation; wells GMW-60 and GMW-61 quarterly testing; and KMEP to get better handle on the southeastern plume.

7. Public Comment Period

Mr. Hoskins moved to adjourn the meeting. Mr. Miller seconded the motion. The motion was passed, and Ms. McIntosh adjourned the meeting at 8:06 p.m.

ACTION ITEMS		
Item	**Responsible Party**	**Due Date**
Update Figure 1 using data from 1996 or 1998 (for the Intermediate Block Valve area release site)	KMEP	4/28/05
Information via e-mail on the eastern pipeline testing (when tested, method, and whether it needs tested again)	KMEP	Prior to the 4/28/05 meeting
DESC to get eastern data to KMEP	DESC	Prior to the 4/28/05 mtg.
KMEP and DESC brainstorm on ideas they would be willing to initiate to increase remediation	KMEP and DESC	Prior to the 4/28/05 meeting
Add wells GMW-60 and GMW-61 to Sentry Event list and tested every quarter (treat like the Exposition wells)	KMEP and DESC	Quarterly
Next RAB meeting	All	4/28/05