FINAL

Meeting Minutes

Meeting Subject: Norwalk Tank Farm Restoration Advisory Board (RAB) Quarterly Meeting	**Meeting Date**: **26 January 2006** **Meeting Time**: 6:30 p.m. **Meeting Place**: Norwalk Arts & Sports Complex

RAB, PROJECT TEAM, AND OTHER ATTENDEES

RAB Community Members

D. Caughey
E. Garcia
J. Holdren (City of Cerritos)
B. Hoskins
M. McIntosh (Co-Chair)
W. Miller
W. Sterner
T. Winkler

Other Members

A. Figueroa (City of Norwalk)
E. Erickson (RWQCB)
M. Pitta (KMEP) (Co-Chair)
Lt. Col. Ramer (DESC-AMW) (Co-Chair)

Other Attendees

S. Chou (Geomatrix)
R. Hassan (Parsons)
M. Lucas (Parsons)
J. Marquez (Coalition for a Safe Env.)
K. Olowu (DESC)
J. Saucedo (Office of G. Napolitano)
T. Whyte (URS)

Absentees

N. Matsumoto (WRD)

Not Attending

Dr. Duran (OCCS)
Dr. Landolph (OCCS)

DESC-AMW .. Defense Energy Support Center Americas West
GSA ..... General Services Administration
HHRA ..... Human Health Risk Assessment
KMEP ..... Kinder Morgan Energy Partners
MTBE ..... Methyl tertiary butyl-ether
OCCS ..... Offsite Chemicals Cleanup Subcommittee
1,2-DCA 1,2-dichloroethane
RAB ..... Restoration Advisory Board
RBCA ..... Risk-Based Corrective Action
RWQCB ..... Regional Water Quality Control Board
SVE ..... Soil Vapor Extraction
TPH ..... Total petroleum hydrocarbons
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 **26 January 2006**

1. Introduction Lt. Col. Jon Ramer, DESC Co-Chair, Meeting Chair

Lt. Col. Jon Ramer called the meeting to order at 6:42 p.m. Lt. Col. Ramer introduced Elizabeth Erickson, who is the new project manager for the Regional Water Quality Control Board (RWQCB), replacing Kwang-il Lee. Mary Lucas is a new project member for Parsons. Jesse Saucido from Congresswoman Napolitano's office was also in attendance. Mary Jane McIntosh later introduced Jessie Marquez from Coalition for a Safe Environment. There were no comments on the October 27, 2005, meeting minutes. Ms. McIntosh made motion to accept the minutes as written. Bill Miller seconded the motion. The motion passed without opposition.

The Community Co-Chair election was held after being postponed from the previous meeting. Eugene Garcia made a motion to re-elect Ms. McIntosh to another two-year term. Mr. Miller seconded the motion. Lt. Col. Ramer asked if there were any other nominations. Seeing none, Lt. Col. Ramer called for a vote on the motion. The motion passed without opposition.

Mr. McIntosh gave an update on Congresswoman Napolitano's suggestion to give a presentation about the Tank Farm cleanup to the adjacent Dolland Elementary School. Ms. McIntosh said she recently met with Principal Bart MacNeil. Principal MacNeil suggested that a 15 to 20 minute presentation could be given to the 8 fourth grade science classes. The presentation would need to be fun, interactive, and conform to State education standards. In addition, the teachers would need to be given four to five weeks' advance notice. Ms. McIntosh said she would research the State standards. Ms. Erickson said she gives presentations to second graders and would volunteer to help.

2. KMEP Update Mike Pitta, KMEP, and Shiow-Whei Chou, Geomatrix Consultants, Inc.

HHRA Update

Shiow-Whei Chou said that the RWQCB requested a Human Health Risk Assessment (HHRA) be performed for the southern portion of the site. A draft Work Plan was submitted to the RWQCB and the Off-Site Chemicals Cleanup Subcommittee (OCCS) for review on July 15, 2005. The deadline for receiving comments was extended to August 22, 2005. They met with RWCQB on October 14, 2005, to finalize the scope of work. The final work plan was submitted to RWQCB on January 24, 2006. The HHRA will be implemented upon RWQCB's approval of the work plan. Residents will be notified in writing prior to beginning field work.

Remediation Operations Update

Ms. Chou displayed a map of the current remediation systems which was updated to include DESC's latest biosparge wells and Truck Fill Stand area remediation.

She said the Soil Vapor Extraction (SVE) System has 17 onsite and 6 off-site vapor extraction wells in the South-Central Plume area. There are two vapor extraction wells in the Southeastern 24-Inch Block Valve area. Approximately 5,100 gallons of equivalent fuel were removed from soil and destroyed by thermal oxidation since the October 2005 RAB meeting. Approximately 449,200 gallons equivalent of fuel were removed from soil and destroyed by thermal oxidation since September 1995. The SVE system has operated for approximately 49,900 hours since September 1995. Ms. Chou showed a graph of the cumulative fuel recovered by SVE. The graph showed some decrease in recovery rates, but then an increase over the past few months.

Mike Pitta said that the SVE system's stack was blown over by strong winds in early January 2006. Therefore, they are no longer able to pump from the South-Central and Southeastern areas. The West Side Barrier System continues to operate separately. Repair options and interim remedial measures are being evaluated. Since it is such a large piece of equipment, a crane needs to be brought in to place it on a truck to take in for repairs. They hope for an estimate for duration of repairs from the manufacturer this week. Alternatives for operation during the repair time include reconfiguring the total fluids extraction system to

operate independently of the SVE system; installation of vapor-phase carbon vessels after the air stripper; installation of additional liquid-phase carbon vessels; or installation of a temporary soil vapor extraction unit. Mr. Pitta said using more carbon filters would be less efficient. Bypassing the system may require a new Air Quality Management District (AQMD) permit. Wanda Sterner suggested sending the vapors to DESC's remediation system. Mr. Pitta said that could also be an alternative, depending on if DESC's system has excess capacity.

Ms. McIntosh asked if RWQCB has a timeline for its review of the HHRA. Ms. Erickson said she would like to get it settled prior to the next RAB meeting. She said that RWQCB protects groundwater. They conduct vapor sampling to see if there may be a health concern. The HHRA work plan shows soil gas sampling around the homes. RWQCB wants to have soil gas sampling beneath the slab of the homes. While they recognize it is intrusive, sub-slab sampling would give them the data right away so they can assure residents it is safe. Mr. Garcia asked if KMEP would compensate homeowners for the work. Mr. Pitta said yes. Mr. Pitta explained the rationale for the work plan. He said this initial soil gas sampling step was intended to be targeted to see if further evaluation would be needed. Mr. Pitta and Ms. Erickson agreed to meet to discuss potential locations for sub-slab sampling. Mr. Hoskins and Ms. Sterner volunteered their properties for sampling.

Ms. Chou said there are 8 groundwater extraction wells in the West Side Barrier area; 3 total fluids (product and groundwater) extraction wells and 5 groundwater extraction wells in the South-Central Plume area; and 2 total fluids extraction wells and 1 groundwater extraction well in the Southeastern 24-Inch Block Valve area. They are down to one groundwater extraction well (from two) in the Southeastern 24-Inch Block Valve area due to the decrease in MTBE (methyl tertiary butyl-ether) in the area. Total groundwater extracted by the Groundwater/Product Extraction System since the October 2005 RAB meeting included: 125,500 gallons from the South Central Plume area; 140,000 gallons from the Southeastern 24-inch Valve Area; and 836,700 gallons from the West Side Barrier area. No free product was measured during the period. Total groundwater extracted since September 1995 includes: 22.9 million gallons from the South Central Plume area; 6.8 million gallons from the Southeastern 24-inch Block Valve Area; and 19.5 million gallons from the West Side Barrier area. A total of 49.3 million gallons of groundwater have been extracted, and 8,745 gallons of free product have been removed. Ms. Chou also showed a graph of the cumulative groundwater and product extracted.

Ms. Chou said that groundwater changes in the South-Central and Southeastern areas have resulted in free product changes. In November 2005, total petroleum hydrocarbon (TPH) concentrations increased in well GMW-O-3; however, concentrations of primary constituents of concern remained similar or non-detect. MTBE was detected in well PZ-5 (in the southeastern area) at 2100 parts per billion (ppb). Cross-gradient well GWM-O-18 contained 1.4 ppb of MTBE. Overall, groundwater conditions in the southeastern area continue to improve: benzene was not detected in this area during November 2005 and the dissolved MTBE plume continues to decrease. Mr. Garcia asked why there was an increase in TPH. Ms. Chou said she was not sure. Last year there was a lot of rain which increased groundwater fluctuations. In addition, there was an increase in remediation system pumping rates. These events shifted things around and may have resulted in the redistribution of certain concentrations. Mr. Garcia said they had no data to support that idea. Mr. Marquez said it also could be that the contamination was underestimated. Leaching from the soil could be the cause, and there may need to be additional soil sampling to get an accurate picture. Mr. Garcia suggested a study on the rate of migration. Lt. Col. Ramer said that such a study would be a tremendous cost, which may be better spent on cleanup. Mr. Hoskins said that he is trying to refinance his property, and the lender wants written assurances that the contamination is not under his home. Ms. Erickson said that looking at the remediation progress chart shows that other technologies may be better. In addition, she said that RWQCB is now very interested in cleanup timelines. Ms. McIntosh requested that well GMW-O-3 be included in the Sentry Event monitoring and that the results be sent to the RAB members. She also requested that KMEP and DESC look at data from the last 10 years and prepare maps with overlapping plumes, to see how things have changed. She also requested to add wells where houses are to the Sentry Event monitoring. Ms. Chou next

showed a groundwater elevations and free product map. She said that the free product plume in the South-Central area appeared larger than previous sampling events. Ms. Sterner asked Ms. Erickson if she could predict groundwater flow by looking at the map. Ms. Erickson said it is possible, but she would need to know more background information. Also, not all free product is created equal (and therefore may move differently). She said it is worth looking at.

Eastern Area Update

KMEP and DESC are jointly conducting the next phase of investigation to delineate the dissolved plume in the Eastern Boundary area. A work plan prepared by Parsons was approved by RWQCB on August 30, 2005. They are currently waiting for the City of Norwalk to issue permits and for access to Holifield Park.

3. DESC-AMW Update Redwan Hassan, Parsons

Central Plume Remediation System Update

Performance results for the fourth quarter of 2005 indicate that 5,866 gallons of total hydrocarbon mass were removed. Of this amount, 1,292 gallons were recycled and destroyed and 4,575 gallons of hydrocarbons were destroyed by enhanced biodegradation. No free product or dissolved phase hydrocarbons were recovered in the period due to the treatment system being down.

Since April 1996, approximately 297,937 gallons of total hydrocarbon mass were removed: 55,538 gallons of free product were recovered; 1,397 gallons of dissolved phase hydrocarbons were recovered; 100,799 gallons of volatile hydrocarbons were recovered through soil vapor extraction; and estimated 140,203 gallons of hydrocarbons were destroyed due to enhanced biodegradation. Approximately 42.2 million gallons of groundwater were treated. Lt. Col. Ramer asked when was the last time any free product was recovered. Mr. Hassan said it was five or six years ago. There is some product sheen recovered, but otherwise it has been stable. Ms. Sterner said she thought groundwater pumping is a waste, and biosparging is better. Mr. Hassan said that he has recommended stopping groundwater pumping at the past few meetings. RWQCB wants them to continue groundwater pumping on the total fluids wells. The focus for now, though, is on biosparging and biodegradation. Mr. Hassan next showed a graph of free product and SVE recovery. It shows that free product recovery has been stable since about 2000 or 2001. The graph does not show biodegradation.

Remediation Optimization

Mr. Hassan said with the expanded remediation in the Tank Farm area, they removed over 4,500 gallons through biodegradation. SVE removed about 700 gallons within the Tank Farm and the water tank area. SVE removed over 500 gallons from the former Truck Fill Stand (TFS) area. Biosparging continues. They are working to update the Central Plume groundwater treatment system PLC controls to allow continued extraction from the total fluid (TF) wells. Mr. Hassan then showed a map with the layout of the expanded Central Plume remediation system, with the soil vapor extraction (SVE) wells in the TFS area, east and west SVE wells along with the horizontal vapor extraction wells in the tank farm area, and the biosparging wells throughout the tank farm all connecting to the treatment system in the north-central area of the Tank Farm.

General Site Activities

Since the last RAB meeting, Parsons conducted demolition activities and the removal of an underground storage tank (UST) in the Powerine (north-central) area. Two sheds, a 500-gallon UST, and associated piping were removed from the site. TPH as fuel products was detected in the soil sample from beneath the UST at a concentration of 330 milligrams per kilogram (mg/kg), which is below the site cleanup goal for TPH (1,000 mg/kg) as established by the RWQCB. BTEX (benzene, toluene, ethylbezene, and total xylenes) and MTBE and other fuel oxygenates were not detected in the soil sample. The UST was intact and generally in good condition. The excavated area was backfilled per the approval of the Department of Public Works (DPW). A closure report has been submitted to the DPW and RWQCB for final approval. Mr. Hassan showed some before and after photographs of the area.

DESC and KMEP are working to finalize an agreement with City of Norwalk to access Holifield Park. An

off-site well (PO-7, owned by Thrifty Oil) to the east of the site was sampled for groundwater, and no analytes were detected, including TPH and volatiles (Method 8260B). In addition, shrub clearance at and around the front entrance to the site was conducted, of which Mr. Hassan showed before and after photographs.

4. Semiannual Monitoring Event Redwan Hassan, Parsons

Mr. Hassan said that Parsons and Geomatrix jointly conducted the quarterly Sentry Event sampling from August 1 through August 4, 2005, and the Semiannual Monitoring event from October 31, 2005, though November 8, 2005. Mr. Hassan showed groundwater flow maps from November 2004 and October/November 2005. The new map showed a slight change. Flow is still generally to the northwest, but there has been some shifting. The free product looks spread out, but it is in the same general areas as the previous year. This could be due to rain impacts causing the spread of groundwater. Also, there was no pumping in the northern area, which could have affected groundwater recharge.

The TPH stretched out to the northwest from 2004 to 2005, with detections in some offsite wells. The TPH in these offsite wells were just under the detection limit in 2004 and just above the detection limit in 2005. This may have been due to no pumping in the area. When pumping resumes, it is hopeful that the plume will be retracted back. Otherwise, the TPH plume map did not change much. The benzene map shows similar trends in 2005 as in 2004. It also shows the effect of new wells and remediation in the Eastern area. The 1,2-DCA (1,2-dichloroethane) plume has not changed much. It is controlled by KMEP pumping. It has split, but it is overall consistent with the previous year. The MTBE map shows the plume spread out in some areas, but it is generally the same in 2005 as in 2004. There were a couple of detections in the northwest area. Hopefully the sampling next month will shed light on these detections, if they were a one-time event or something that needs more attention.

Ms. Sterner requested that well MW-14 be added to the next Sentry Event and that pumping resume on GW-3. Tracy Winkler asked when KMEP stopped using MTBE. Mr. Pitta said in about 2003, but he would check on it. Ms. McIntosh said she has concerns with the South-Central area and the houses in the area. She is very concerned with the Eastern boundary area, but she is glad that they have ruled out a release in the area. She wants the Eastern work plan to move forward. She requested that the Eastern wells (GMW-57, GMW-58, GMW-59, GMW-60, GMW-61, MW-8, and PZ-5) be added (if not already included) to the Sentry Event so they can get a handle on the area.

5. Set Date and Agenda for Next Meeting

The next RAB meeting will be held **Thursday, April 27, 2006, at 6:30 p.m.** in the Norwalk Arts & Sports Complex. The agenda is to include Sentry Event, 10-year maps, HHRA update, Eastern Boundary area update, school presentation update, and KMEP and DESC remediation updates.

6. Public Comment Period

Mr. Hoskins made a motion to adjourn the meeting. David Caughey seconded the motion. The motion passed without opposition. Lt. Col. Ramer adjourned the meeting at 8:42 p.m.

Continued….

ACTION ITEMS		
Item	**Responsible Party**	**Due Date**
Add GMW-O-3 (South-Central off-site well), MW-14 (North-West), and GMW-57, GMW-58, GMW-59, GMW-60, GMW-61, MW-8, and PZ-5 (Eastern area wells) to the Sentry Event monitoring.	KMEP/DESC	4/27/06
10-year master map/plume activity in progress	KMEP/DESC	4/27/06
School presentation research	Mary Jane McIntosh	4/27/06
Next RAB meeting	All	4/27/06