Meeting Minutes

Meeting Subject: Meeting Date: 22 January 2004

Norwalk Tank Farm Meeting Time: 6:30 p.m.

Restoration Advisory Board (RAB) Meeting Place: Norwalk Arts & Sports Complex

Semiannual Meeting

RAB, PROJECT TEAM, AND OTHER ATTENDEES

RAB Community Members

Other Members

Oct Alexander (DESC A

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

B. Hoskins

W. Miller

J. Holdren (City of Cerritos)

W. Sterner

N. Matsumoto (WRD)

A. Townsend (RWQCB)

Other Attendees R. Tweidt (KMEP) (Co-Chair)

S. Chou (Geomatrix)
E. Conard (KMEP)
R. Hassan (Parsons)

T. Ryland (KMEP)
C. Silver (Parsons)
DESC-AMW . Defen

C. Silver (Parsons) DESC-AMW . Defense Energy Support Center

J. Trani (DESC) Americas West

T. Whyte (URS)

GSA....... General Services Administration

KMEP...... Kinder Morgan Energy Partners

F. Wright (DESC)

OCCS...... Offsite Chemicals Cleanup

Subcommittee

M. McIntosh (Co-Chair) RWQCB Regional Water Quality Control Board

J. Rifilato URS...... URS Corporation

WRD Water Replenishment District of

Southern California

Not Attending

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

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.

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1. Introduction Rob Tweidt, KMEP Co-Chair, Meeting Chair

Rob Tweidt called the meeting to order at 6:39 p.m. and asked the meeting attendees to introduce themselves. Nancy Matsumoto announced she would be the new RAB representative for the Water Replenishment District, replacing Hoover Ng.

Mr. Tweidt asked if there were any comments on the October 23, 2003 meeting minutes. Wanda Sterner made a motion to accept the minutes as written. Gene Garcia seconded the motion, and the motion was passed.

2. RBCA Update Shiow-Whei Chou, Geomatrix Consultants, Inc.

Shiow-Whei Chou said the Regional Water Quality Control Board (RWQCB) accepted the responses on July 3, 2003 and the final Risk-Based Corrective Action (RCBA) documents were submitted to the RWQCB on August 5, 2003. In a letter dated October 31, 2003, the RWQCB requested an additional human health risk assessment (HRA) be conducted for the southern portion of the facility. KMEP's proposed approach is to develop a work plan for RAB and RWQCB approval. Then they will conduct the HRA and prepare a draft document for RAB and RWQCB review and approval. This is consistent with the process used for the western off-site plume. Key issues are data evaluation, exposure assessment, toxicity assessment, and risk characterization. They will evaluate available groundwater data, look at chemicals of concern, and evaluate possible health effects.

3. KMEP Update Shiow-Whei Chou, Geomatrix Consultants, Inc.

Remediation Operations Update. Ms. Chou showed a map of the current remediation systems. She said the soil vapor extraction (SVE) system has 17 onsite and 6 offsite wells in the South-Central Plume area and 2 wells in the southeast 24-Inch Block Valve area. The system removed and destroyed 4,335 gallons equivalent of fuel since the October 2003 RAB meeting and 398,245 gallons equivalent of fuel since September 1995. Ms. Chou showed a graph of cumulative fuel removed by vapor extraction. Ms. Chou showed a second cumulative fuel recovered graph, showing the most recent six month period. The recovery rate has increased lately, probably due to the addition of the new SVE well.

Ms. Chou said the groundwater/product extraction system has eight groundwater wells in the West-Side Barrier area, six groundwater/product wells in the South-Central Plume area, and three groundwater/product wells and two groundwater extraction wells in the southeast 24-Inch Block Valve area. Since the October 2003 RAB meeting, a total of approximately 66,800 gallons of groundwater have been extracted from the South-Central Plume area. However, this total is probably slightly less than actual, due to malfunctioning of flow meters. The flow meters are being repaired. A total of 459,900 gallons of groundwater were extracted from the southeast 24-Inch Block Valve area, and approximately 408,200 gallons were extracted from the West-Side Barrier area. No free product was recovered during the period. Total groundwater removed since September 1995 includes 22 million gallons from the South-Central Plume area, 3.9 million gallons from the 24-Inch Block Valve area, and 11.7 million gallons from the West-Side Barrier area, for a total of 37 million gallons. Ms. Chou said 8,745 gallons of free product have been removed since September 1995. Ms. Chou next showed a graph of total groundwater and product extracted.

Phytoremediation Update. Ms. Chou showed a chart of the phytoremediation process. Next she showed a plot map showing the layout of the trees. She added squares to the map to represent the sturted trees. They are going to re-irrigate the trees to let them grow and get down to the groundwater. Next she showed three photographs of the trees, and she pointed out the stunted trees versus the healthy trees.

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Ms. Matsumoto asked how they were quantifying the phytoremediation. Ms. Chou said they would be able to quantify it in June, when they plan to install transducers in the groundwater to observe daily fluctuations. They will also collect samples to see if enhanced biodegradation is taking place. Bob Hoskins asked what happens to the green waste; are the leaves examined? Ms. Chou said she was not sure if anything would show up in the leaves, but she will look into it. Mr. Garcia asked why no free product was recovered in the past quarter. Ms. Chou said that they have not recovered much in the past year. The free product thickness in many wells is just a sheen, and it gets dissolved by the time it gets to the remediation system, so it would not be recorded. Mr. Garcia said we should be doing something to get it out of there and move on to something else. Ms. Chou said sometimes they hand-bail the total fluids wells. They also check free product thicknesses once per quarter. She also said they sometimes purge wells to see if they can remove some free product. Mr. Hoskins ask if when the air sparging filters get clogged when the microbes do too well, is there any way to introduce those microbes to help reduce the sheen? Mr. Tweidt said that introducing air through air sparging helps promote microbes and insitu biodegradation. However, if the system is not properly designed, there is the potential that air sparging can cause the contamination to spread out by being displaced by the injected air. Overall, air sparging is a possibility and KMEP will review it since KMEP is always looking for ways to optimize the existing system.

4. DESC-AMW Update Redwan Hassan, Parsons

Central Plume Remediation System Update. Redwan Hassan said that during the last quarter, the Central Plume remediation system removed a total of approximately 1,678 gallons of hydrocarbon mass. Approximately 830 gallons of fuel were recycled and destroyed, including 829 gallons through soil vapor extraction and less than one gallon of dissolved phase hydrocarbons. No free product was recovered during the quarter. An estimated 848 gallons were removed through bioremediation. Approximately 0.44 million gallons of water were treated and discharged offsite.

Cumulative totals since April 1996 include 257,994 gallons of hydrocarbon mass removed. Approximately 142,670 gallons of fuel have been recycled and destroyed, including 55,536 gallons through free product recovery, 85,737 gallons through soil vapor extraction, and 1,397 gallons of dissolved phase hydrocarbons. In addition, an estimated 115,324 gallons have been removed through bioremediation. Approximately 41.9 million gallons of water have been treated and discharged offsite. Mr. Hassan showed a graph of the free product and soil vapor extraction summary.

Mr. Hassan said that recent DESC remedial optimization includes an adjustment of the pumping intake levels. In addition, DESC is reviewing Parsons' proposals to expand biosparging and to install two eastern boundary wells.

Mr. Hassan said that they investigated an odor complaint at well WCW-8. The well was resampled on December 30, 2003. No odor was identified. The analytical results were consistent with last year. They suspect the odor was from the vacuum truck exhaust.

Mr. Hassan next gave an update on the three areas of concern discussed at the last meeting. First, the proposal for SVE in the truck fill station area has been approved and a work plan is being prepared. Second, two soil borings were installed in the oily waste area. Samples were taken to 30 feet below ground surface, and they are awaiting analytical results. Third, the Economic Cost Analysis for the Tank Farm area was approved and a copy was placed in the information repository. The report recommends soil remediation with tanks in place. Two options analyzed include sampling from around the periphery, and cutting openings in the tanks to allow for direct access sampling. The most feasible option is to cut openings in the tanks, drive a rig inside, and sample directly. A third option, remove the tanks, was found to be more costly. A cost proposal is underway. Theresa Devoy asked if the tanks have concrete bottoms. Mr. Hassan said yes, the bottoms are concrete

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reinforced with rebar. Mr. Hassan also said that there was not much difference in cost between the options of sampling around the periphery and direct sampling.

5. Semi-Annual Monitoring Event Redwan Hassan, Parsons

Mr. Hassan said that the semiannual monitoring was conducted with KMEP in October 2003. It included the sampling of 94 wells, including 5 Exposition wells. No contaminants were detected in the Exposition wells. Free product was observed in 18 of the 161 wells that were gauged. Free product plumes were similar in size to those measured in the past two years. The plumes were isolated to individual wells or areas. The maximum thickness in the North-Central area was 1.25 feet, observed in well PZ-03. The maximum thickness in the South-Central area was 1.19 feet, observed in well MW-O-2. Most other wells observed with free product contained only a sheen or less. Next Mr. Hassan showed a map of the groundwater flow and free product plumes. He said DESC may be pumping more than KMEP, which may account for the difference in the map from October 2003 as compared to the map from April 2002. Ms. Chou said that KMEP was not pumping during the sampling event, which may have influenced the groundwater contours on the map.

The North-Central TPH (total petroleum hydrocarbons) plume distribution changed. The 10,000 ug/L contour expanded south, while contracting from the east. The non-detect contour (~200 ug/L) expanded west, south, and east. TPH distribution in the South-Central plume remained largely unchanged. Mr. Hassan showed October 2003 and April 2002 TPH plume maps.

The North-Central benzene plume extent was similar to previous events. No benzene was detected west of the site. A decreasing trend was identified in the biosparging area, as no benzene was detected in well GMW-47. The South-Central benzene plume was also consistent with previous events. The highest benzene concentration (15,000 ug/L) was detected in well GMW-O-21, adjacent to GMW-O-14. In the southeastern 24-Inch Block Valve area, benzene was only detected in well PZ-05. The trend near this well has not changed too much, except for a few areas. No benzene was detected in wells MW-8 or GMW-O-16. Mr. Hassan showed October 2003 and April 2002 benzene plume maps.

1,2-DCA (1,2-dicholoethane) was again detected above the Risk-Based Corrective Action concentration of 70 ug/L. It was also detected in the same three off-site wells west of the site. It was detected at about 84 ug/L in well WCW-7. The South-Central 1,2-DCA plume extended farther south. 1,2-DCA was detected in wells GMW-O-9 and GMW-O-14. No 1,2-DCA was detected in the southeastern 24-Inch Block Valve area. Mr. Hassan showed October 2003 and April 2002 1,2-DCA plume maps.

MTBE (methyl tertiary butyl ether) was detected in two off-site monitoring wells west of the site. It was detected for the first time in well WCW-1. The South-Central MTBE plume was similar in extent to previous events. MTBE concentrations in well MW-19 (MID) continued to decrease to 1 ug/L. The MTBE plume in the southeastern portion of the site is narrower from east to west. The highest MTBE concentration was found in well PZ-5. Mr. Hassan showed October 2003 and April 2002 MTBE plume maps.

Bill Miller asked about the tank removal cost estimate. Was the possibility of scrap dealers taking the tank metal included? Cannon Silver of Parsons said yes, that was included. The tanks contain high quality steel, but the removal costs would still be high. Ms. Devoy asked if they had a timetable for cutting holes in the tanks for the sampling. Mr. Hassan said that it depends on approvals, but it should begin within one or two months.

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6. Set Date and Agenda for Next Meeting

The next RAB meeting will be held **Thursday**, **April 22**, **2004**, **at 6:30 p.m.** in the Norwalk Arts & Sports Complex.

7. Public Comment Period

Mr. Tweidt announced that Col Alexander was recently promoted to a full Colonel. Mr. Hoskins said David Caughey is in the hospital for knee surgery, so he may also miss the next meeting. Mr. Tweidt said Mary Jane McIntosh has pancreatitis, but her prognosis is good. Tracy Winkler asked if KMEP had gained access to wells in the condominium project south of the site. Mr. Tweidt said yes, and those wells were included in the recent monitoring event. Mr. Garcia asked about the phrase "…historical value ranges…" as stated in the monitoring report. He said that it was ambiguous and should be changed. Mr. Silver suggested in the future using a phrase such as "…similar to levels within the past 'x' number of years…" Mr. Garcia said that would be acceptable.

Mr. Hoskins moved to adjourn the meeting. The motion was seconded. The motion was passed, and Mr. Tweidt adjourned the meeting at 7:30 p.m.

ACTION ITEMS		
Item	Responsible Party	Due Date
Phytoremediation question	KMEP	4/22/04
Next RAB meeting	All	4/22/04