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Meeting Minutes

Meeting Subject: Norwalk Tank Farm Restoration Advisory Board (RAB) Quarterly Meeting	Meeting Date: <u>30 July 2009</u> Meeting Time: 6:30 p.m. Meeting Place: Norwalk Arts & Sports Complex
RAB, PROJECT TEAM, AND OTHER ATTENDEES	
<u>RAB Community Members</u> M. McIntosh (Co-Chair) B. Hoskins T. Winkler E. Garcia	<u>Other Members</u> C. Emig (City of Cerritos) A. Figueroa (City of Norwalk) J. Hu (RWQCB) S. Osborn (KMEP) (Co-Chair) Lt. Col. Ramer (DESC-AMW) (Co-Chair)
<u>Other Attendees</u> S. Chou (AMEC Geomatrix) S. Defibaugh (KMEP) R. Hassan (Parsons) M. Lucas (Parsons) K. Olowu (DESC) A. Padilla (AMEC Geomatrix) Leticia Hernandez (URS)	<u>Acronyms:</u> CHHSLs..... California Human Health Screening Levels DESC-AMW .. Defense Energy Support Center Americas West DTSC Department of Toxic Substances Control GSA..... General Services Administration HHRA Human Health Risk Assessment KMEP Kinder Morgan Energy Partners LNAPL..... Light non-aqueous phase liquids MTBE Methyl tertiary-butyl ether OCCS Offsite Chemicals Cleanup Subcommittee OEHHA..... Office of Environmental Health Hazard Assessment 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 VOCs..... Volatile organic compounds WRD Water Replenishment District of Southern California
<u>Absentees</u> N. Matsumoto (WRD) W. Miller M. Pitta (KMEP)	
<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 surrounding 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** Lt. Col. Ramer, DESC Co-Chair, Meeting Chair

Lt. Col. Jon Ramer called the meeting to order at 6:37 p.m. and asked for comments on the draft minutes from the April 30, 2009, RAB meeting. Charles Emig from the city of Cerritos was reintroduced at the meeting. Mary Jane abstained on the motion as she was not present at the April meeting. Bob Hoskins made a motion to accept the minutes as written, and Tracy Winkler seconded the motion. The minutes were approved without opposition.

2. **KMEP Update** Steve Osborn, KMEP, and Shioh-Whei Chou, AMEC Geomatrix, Inc.

Remediation Operations Update

Shioh-Whei Chou displayed a map of the remediation systems and pointed out the cleanup wells and piping in four areas: the Westside Barrier area, the South Central area, the Southeastern 24-inch Block Valve area, and DESC's remediation system in the north central and truck fill stand areas.

Ms. Chou said that KMEP's Soil Vapor Extraction (SVE) System has 30 vapor extraction wells in the South-Central Plume area (24 on-site and 6 off-site) and two vapor extraction wells in the Southeastern 24-Inch Block Valve area. She said that during the second quarter of 2009, approximately 351 gallons equivalent of fuel were removed from the soil and destroyed by catalytic oxidation. Approximately 454,200 gallons equivalent of fuel have been removed from the soil and destroyed since September 1995. The SVE system has operated for approximately 66,200 hours since September 1995.

The SVE system operated continuously during the second quarter of 2009 with the following exceptions:

- SVE system was shut down for approximately eight days due to malfunctioning water level sensors. Water level sensors were cleaned and the system was restarted.
- SVE system was shut down for approximately 43 days for groundwater monitoring and rebound testing.
- SVE system was shut down for approximately two days due to motor starter alarms. The motor starter was reset each time.
- SVE system shut down without any alarms for approximately nine total days.

The SVE system operated 32 percent of the time during this quarter (or 60 percent excluding the planned shutdown period for rebound testing).

Regarding the SVE rebound testing, Ms. Chou said that the SVE system was shut-down on April 16, 2009, for groundwater monitoring and remained shut-down through May 29, 2009, for rebound testing. An increase in influent vapor VOC (volatile organic compound) concentrations was observed at system restart on May 29 following the rebound test and resulted in increased mass removal relative to monitoring prior to the April 16 shutdown. Additional SVE rebound tests will be performed when VOC concentrations decrease and remain low. This explanation was the answer to Ms. McIntosh's question as why rebound testing is done at the site.

Ms. Chou provided two graphs showing the SVE system operations summary of cumulative fuel removed by vapor extraction. The first graph indicates over 450,000 gallons of fuel were removed from September 1995 through June 2009. The second graph shows the cumulative fuel removed by vapor extraction between June 2007 and June 2009. This graph shows increased mass recovery rates following rebound test periods.

Ms. Chou next discussed KMEP's Groundwater/Product Extraction System which consists of 18 total fluids (product and groundwater) extraction wells and 2 groundwater extraction wells in the South-Central Plume area, and 2 total fluids extraction wells in the Southeastern 24-Inch Block Valve area. Operation of the West Side Barrier system was discontinued in August 2008 due to low concentrations of the chemicals of concern in groundwater west of the site.

Total groundwater extracted during the second quarter of 2009 included 2,368,000 gallons from the South-Central Plume area and 486,000 gallons from the Southeastern 24-Inch Block Valve area. There was no

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activity on the West Side Barrier area as it has been shut-down since August 2008. In addition, total groundwater extracted since September 1995 includes: 36.9 million gallons from the South-Central Plume area; 9.6 million gallons from the Southeastern 24-Inch Block Valve area; and 26.9 million gallons from the West Side Barrier area. A total of 73.4 million gallons of groundwater has been extracted from all three areas, and 8,917 gallons of free product have been removed.

Ms. Chou said that the Groundwater/Product Extraction System operated continuously during the second quarter of 2009 with the following exceptions:

- The system was shut down temporarily on April 3, 2009, for servicing of the bag filter valves and was restarted the same day.
- The system was shut down between April 17 and May 5, 2009, for groundwater monitoring and liquid-phase granulated activated carbon changeout (approximately 34 days).
- The system was shut down temporarily on May 8 and May 29, 2009, for flow totalizer servicing and was restarted the same day after each shutdown.

The system operated for 80 percent of the time during the quarter. The system operated for approximately 99 percent of the time excluding the planned shutdown period for the groundwater monitoring. Ms. Chou then showed a graph of the cumulative product extracted and water treated for the three areas mentioned above.

Ms. Chou said that KMEDP's planned remediation activities include:

- Continue total fluids extraction (TFE), groundwater extraction and SVE in the South-Central and Southeastern areas.
- Continue to monitor concentrations of dissolved 1,2-DCA (1,2-dichloroethane) and MTBE (methyl tertiary-butyl ether) in western area.
- Continue routine system inspections.
- Continue data collection for monitoring and evaluation of remediation systems.
- Continue adjustments to remediation wells to optimize remediation.
- Continue SVE rebound testing as appropriate.

Mr. Emig inquired about the threshold levels for the start of a rebound test. Ms. Chou stated that if the system influent concentrations decrease and remain below 100 ppm (parts per million), the SVE system would be shut off to evaluate rebounds in soil vapor concentrations. If concentrations rebound, the system would be restarted and operated until concentrations decreased below threshold levels. This is a more efficient method of operation.

First Semi-Annual 2009 Groundwater Monitoring Event

Ms. Chou stated that during second quarter 2009, and more specifically in April, 104 wells were sampled, including five wells screened in the Exposition aquifer. Since October 2008, groundwater elevations increased by approximately 0.8 feet in shallow groundwater at the site. Free product was observed in eleven wells located in the north-central south-central southeastern and truck rack areas. Two maps were shown; the first was dated April 2009 and the second was dated April 2008 indicating groundwater elevations and liquid-phase hydrocarbons. The map dated April 2009 indicates free product has decreased since last year.

During this groundwater monitoring event, VOCs were detected at low concentrations in samples collected from wells EXP-2, EXP-3, and EXP-4. These detections are suspected to be false positives, based on non-detect VOC results in duplicate samples collected from EXP-2 and EXP-3. These three wells were sampled last week (July 20). Preliminary results indicated no VOCs in EXP-2 and EXP-3, and a low detection of one miscellaneous compound in EXP-4.

In most areas, the lateral extents of TPH, benzene, MTBE, and 1,2-DCA in groundwater remain similar to those interpreted during recent monitoring events. TBA (tert-butyl alcohol) was generally detected in groundwater samples collected from the same wells that contained MTBE, including wells in the southeastern area, south-central area, north-central area, and truck rack area.

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Ms. Chou further stated that with the exception of 1,2-DCA in GMW-O-14, detected concentrations of 1,2-DCA were below the conservative risk-based clean up goal of 70 µg/L. With the exceptions of MTBE in MW-SF-1 in the south-central area, PZ-5 in the southeastern area, and GMW-6 in the north-central area, the detected concentrations of MTBE were below the conservative risk-based cleanup goal of 40 µg/L. Based on 1,2-DCA and MTBE concentrations that have remained consistently below the risk-based cleanup goals in the western area and in off-site wells west of the site, the West Side Barrier pumping system will remain shut down.

Ms. Chou next discussed the results of sampling in the Uppermost Groundwater Zone performed in April 2009 in comparison to results of groundwater sampling performed in April 2008. The results are as follows:

- Total Petroleum Hydrocarbons (TPH) – a reduction in the Northwest area is noted as compared to last year
- Benzene – reductions in the Eastern Area and the South Central area are noted as compared to last year
- 1,2-DCA – very similar to last year
- MTBE – very similar to last year

Additional Assessment Update

Ms. Chou stated that in a letter dated November 26, 2008, the Regional Water Quality Control Board (RWQCB) commented on the report titled “Additional Off-Site Assessment Report, Off-Site 24-Inch Block Valve Area,” dated August 28, 2008. RWQCB questioned the presence or continuity of an aquitard in the vicinity of the block valve and requested a work plan for further vertical delineation of contaminants in that area. She said the work plan was submitted to the RWQCB on January 26, 2009. The workplan will be implemented after receiving written approval from the RWQCB.

Ms. Winkler asked the question regarding the reporting of the TPH as one source, when it is really two identifiable carbon ranges. She furthered asked whether the chemicals are coming from Kinder Morgan facilities or the tanks. Mr. Osborn stated a Workplan was submitted that included analyzing samples for all the chemicals of concern, and they are awaiting approval to implement the Workplan. This should happen at the end of September, and an update will be provided at the next RAB meeting. Ms. McIntosh inquired about wells GWM-59 & GMW-60 on page 11 of the Additional Off-Site Assessment Report and stated it did not indicate an increase or decrease. She wanted to know if the next report could give more data. She requested these changes be addressed and asked for a better explanation or at least address in the next presentation. Parsons indicated that a new extraction well was installed and should provide better data.

3. DESC-AMW Update Redwan Hassan, Parsons

Remediation System Update

Redwan Hassan said that DESC has been conducting routine maintenance and operations including:

- Weekly system inspections that took place from April 1 through June 30.
- System performance and compliance sampling was conducted on April 14, 30; May 6, 13, 28; and June 4, 30.
- The Groundwater Treatment System (GWTS) Granular Activated Carbon (GAC) change out for both vessels was completed on July 15.
- The National Pollutant Discharge Elimination System (NPDES) Discharge Monitoring Report (DMR) for the first quarter of 2009 was submitted on May 11th.
- The First Semiannual 2009 Sentry Groundwater Monitoring was conducted the third week of April.

Mr. Hassan discussed the remediation system update and stated that 955,020 gallons of groundwater were extracted and treated in the second quarter of 2009, and 45.9 million gallons were extracted and treated since the system startup in April 1996. DESC’s SVE system remained out of operation due to redesign of the system and the preparation of a permit modification package for the Air Quality Management District

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(AQMD). This was done because the system is switching from thermal oxidation to carbon treatment system. Mr. Hassan then gave a breakdown of the system's performance. The system has been operating since April 1996 through June 2009. During this time, approximately 428,722 gallons of total hydrocarbon mass were removed, including approximately 215,870 gallons recycled and destroyed through groundwater extraction and vapor extraction, and an estimated 212,851 gallons of hydrocarbons destroyed due to enhanced biodegradation.

Mr. Hassan said that elevated TBA has been detected at some monitoring wells, and a concentration of 14 µg/L was detected in a discharge sample collected on June 30th (the limit is 12 µg/L) resulting in system shut down and GAC change out. As per the permit requirements, the RWQCB general permitting department was notified and an accelerated sampling schedule will be followed in order to be in compliance.

The Groundwater Extraction System was on from March 31 through June 30 except for the following periods:

- April 14 – April 29: Quarterly Groundwater Monitoring
- May 15 – May 26: System off pending confirmation of lab results, TBA concentrations
- June 4 – June 8: Following filter replacement and routine maintenance
- June 16 – June 23: System off awaiting filter replacement.

Ms. McIntosh stated that this TBA could be coming from the Eastern Boundary well that was just installed. Mr. Hassan said that TBA has been detected sporadically in the past, and now there are three 6 inch wells which results in higher pumping rates and extraction; which in turn, may be pulling in TBA from other sources into the GWTS.

Mr. Hassan provided a map of the SVE treatment system layout and the various tank locations. He stated that all the extraction wells are operational and that GW-16 was added in the last few weeks, inside the site boundaries adjacent to Holifield Park. Groundwater from GW-16 will be sampled within the week for baseline data.

Holifield Park Investigation

Mr. Hassan said that Parsons submitted the Holifield Park Groundwater Remedial System Design Supplemental Work Plan on May 26, 2009 and RWQCB provided approval on June 11, 2009. Field work was conducted from June 15 to July 10 at the park and included well installation for the expanded groundwater extraction system. A system expansion layout was provided for the placement of the new groundwater monitoring well (GMW-65) and extraction well (GW-16). The supplemental investigation included the following:

- June 15th – geophysical survey conducted
- July 6 & 7 – wells GMW-65 (4-inch diameter monitoring well), GW-16 (6-inch diameter groundwater extraction well), and GW-16p (1-inch diameter piezometer) were drilled, sampled, and installed. (Photos of the GW-16, surface completion and well development were provided).
- Soil was analyzed by a lab for TPH as gasoline, TPH as JP-5, and VOCs from GW-16 at 30, 35, 40, 45, and 55 feet. All results were non-detect.
- July 10 – GMW-65 and GW-16 were developed. (Photos of the GMW-65, drilling set up and GW-16, auger were provided).

The third quarter activity updates for the park indicate groundwater from GMW-65 was sampled during the 3Q July monitoring event. Results will be reported in the third quarter sentry event letter report. Groundwater extraction from GW-16 began on July 22nd following the third quarter monitoring event. In summary, the well installation and system expansion report for eastern area will be submitted to RWQCB.

Planned Activities

Mr. Hassan said that Parsons will continue the weekly system inspections, required sampling, evaluation, and optimization. They will conduct weekly sampling of GWTS effluent for TBA and conduct the third quarter

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groundwater monitoring event. Other planned activities include:

- Weed abatement started on July 22nd and ended last week.
- Prepare and submit NPDES DMR for the second quarter (Q2) of 2009
- Startup of expanded groundwater extraction system at the eastern area – July 22nd, this already happened as it is now operational
- Prepare and submit the well installation report for the Eastern area
- Installation of new equipment for the upgraded groundwater extraction and soil vapor extraction systems
- Submit Supplemental Investigation Work Plan for the Truck Fill Station, Water Tank, and Northeast Settling Pond Areas (submitted July 16) and begin procurement and mobilization for field effort
- Submit to AQMD permit modification package for upgraded GWTS and SVES (submitted July 24)
 - Begin procurement of all upgraded system equipment and installation.

4. Set Date and Agenda for Next Meeting

The next quarterly RAB meeting will be held on **Thursday, October 29, 2009 at 6:30 p.m.** in the Norwalk Arts & Sports Complex.

5. Public Comment Period

Lt Col Ramer provided a site disposition update. He said the Norwalk property card belongs to March Air Reserve Base. March ARB did not want to accept the single unsolicited bid for demolition of the tanks. Instead, they want to put the project out for bid to see if they can get a better deal through competitive bidding. Under any circumstance, the contracting personnel at March are too busy through the end of the fiscal year and will not be able to work on the proposal until after 1 Oct. Hopefully, the project proposal will be completed by 1 Nov. With a 30-day window for bids followed by another 30-day window for evaluation and acceptance, then 90 days to implement the work, the tanks could be gone by March 1, 2010.

Mr. Hoskins made a motion to adjourn the meeting. Ms. McIntosh seconded the motion. A vote was taken, and all were in favor. Lt. Col. Ramer adjourned the meeting at 7:30 p.m.

ACTION ITEMS

Item	Responsible Party	Due Date
Update on implementing the Additional Off-Site Assessment work plan	Kinder Morgan	10/29/09
Update on the new extraction well in the eastern area to include the groundwater results and update on the status of the truck fill stand investigations.	Parsons	10/29/09
Next Quarterly RAB meeting	All	10/29/09