

FINAL

Meeting Minutes

Meeting Subject: Norwalk Tank Farm Restoration Advisory Board (RAB) Quarterly Meeting	Meeting Date: <u>29 July 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) J. Holdren (City of Cerritos) N. Matsumoto (WRD) A. Townsend (RWQCB) T. Ryland (KMEP) (Co-Chair)
<u>Other Attendees</u> S. Chou (Geomatrix) R. Hassan (Parsons) A. Holbrow M. Jolbert (Shaw E & I) D. Lubbon (DL Services) S. Seipel (Shaw E& I) 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. 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 Terri Ryland, KMEP Co-Chair, Meeting Chair

Terri Ryland called the meeting to order at 6:34 p.m. Visitors Scott Seipel and Michael Jolbert of Shaw Environmental and Dave Lubbon of DL Services introduced themselves. Ms. Ryland asked if there were any comments on the April 22, 2004, meeting minutes. Mary Jane McIntosh made a motion to accept the minutes as written. Wanda Sterner seconded the motion, and the motion passed without opposition.

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

Shioh-Whei Chou said that in a letter dated October 31, 2003, 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." An Off-site Chemicals Cleanup Subcommittee (OCCS) meeting was held in April 2004, where they agreed to look at the HRA that was conducted by the Defense Energy Support Center (DESC) for the California Department of Toxic Substances Control (DTSC) in 1993. The HRA evaluated:

- Potential risk to residents in the southern off-site area assuming exposure via inhalation of indoor air
- Potential risk to on-site workers assuming exposure via inhalation of ambient and indoor air, dermal contact with soil, and soil ingestion.
- Potential risk to off-site residents assuming exposure via ingestion of drinking water from off-site wells.

Ms. Chou said that KMEP reviewed the 1993 HRA and evaluated it based on current site conditions. There were significant differences between the Risk-Based Corrective Action (RBCA) and 1993 HRA methods. Ann Holbrow said this included exposure point concentration, which in 1993 looked at the site as a whole, looked at degradation, and predicted the outcome after 30 years; the RBCA looked at the maximum concentrations detected and if nothing happened over 30 years. Another difference was the model predicting indoor air concentrations; now there are more sophisticated modeling technologies that tend to be more conservative. Significantly higher risk was predicted using the RBCA method, about two orders of magnitude. The risk was near the benchmark for the level of concern.

Ms. Holbrow said that there is 30 feet between the surface and the contamination. The models are conservative, so if they show there is no concern, they can be sure it is safe. Ms. Chou 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 proposes to collect soil gas data in the South-Central Plume area. KMEP will prepare and submit a draft work plan to RWQCB. Gene Garcia said they would probably find nothing. Ms. Holbrow said hopefully that would be the case, due to the depth to groundwater. Ms. McIntosh asked if they planned to do any soil gas testing beneath any homes. Ms. Chou said that would be ideal, but access can be a problem, so they may sample next to homes. Bob Hoskins and Ms. Sterner volunteered their properties for testing.

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 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 4,520 gallons equivalent of fuel were removed from the soil and destroyed by thermal oxidation since the April 2004 RAB meeting. Approximately 407,980 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

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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 April 2004 RAB meeting includes 45,100 gallons from the South-Central Plume area, 282,800 gallons from the Southeastern 24-Inch Valve area, and 1,383,300 gallons from the West Side Barrier area. No free product was recovered. Total groundwater extracted since September 1995 includes 22.1 million gallons from the South-Central Plume area, 4.7 million gallons from the Southeastern 24-Inch Block Valve area, and 13.6 million gallons from the West Side Barrier area, for a total of 40.4 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. No free product has been extracted since about February 2001.

Phytoremediation Update. Ms. Chou showed a map of the phytoremediation trees layout. Stressed and/or stunted trees were indicated on the map. KMEP replaced nine over-stressed trees with new trees in July 2004. They performed groundwater monitoring activities in April and July 2004. In July 2004, they also installed transducers in wells to gauge diurnal effects of poplars, which extract groundwater during the day. They will evaluate data collected to date and present summary of results during next RAB meeting. Ms. Sterner said she was on site recently and was astonished on how well the trees are doing. She asked if the contamination might have contributed to the problem of the stressed trees. Ms Chou said it was possible, and that is why they are sampling in the area. They took samples in and around the area in April 2004; they will compare those results to the July 2004 sampling to see if there are any seasonal differences. They will look at data from the transducers. They are also looking at organics, inorganics, pH, temperature, conductivity, hardness, and iron. Mr. Hoskins recommended comparing the data to DESC's site in San Pedro. Ms. Chou showed some photographs of the trees and noted that they are 40 to 50 feet tall.

4. Semi-Annual Monitoring Event Terri Ryland, KMEP Co-Chair, and Shioh-Whei Chou, Geomatrix Consultants, Inc.

Ms. Chou said that the first semi-annual 2004 groundwater monitoring event was conducted in April and May by Parsons for DESC and Secor for KMEP. Eighty-five wells were sampled, including 4 Exposition wells. No volatile organic compounds (VOCs) were detected in Exposition wells. Total petroleum hydrocarbons as free product (TPHfp) were detected in well EXP-5 (located southeast of the site). This well was re-sampled during the July 2004 Sentry event. Free product was observed in 16 of 163 wells gauged. The North-Central free product plume remains as smaller separated plumes in same general areas as noted during previous monitoring events. The South-Central free product plume remains in the same general areas as noted during previous monitoring events but appears as two smaller separated plumes. Free product was also observed in Truck Fill Stand area, Intermediate Block Valve area, well PZ-2 (north of the South-Central plume area), and may be present in Southeastern 24-Inch Block Valve area. Ana Townsend asked if it was the first time TPHfp was detected in EXP-5. Ms. McIntosh asked if they knew why it was found in this well. She said she is very concerned about the Exposition wells. Ms. Chou said she would check into these questions and report back at the next meeting. Ms. McIntosh also asked for a report at the next meeting on historical free product levels in the Southeastern and Intermediate Block Valve areas. Ms. Chou next showed a groundwater elevation map and pointed out the north-northeast area, where the elevation was higher due to air sparging, and the west area, which has a depression due to groundwater extraction from the West Side Barrier System. Groundwater generally flows to the northwest. She also showed a map of the 2003 groundwater elevations.

M. Chou said that the lateral extent and concentrations of TPHfp decreased in the northern area and in the area between the North-Central and South-Central free product plumes since October 2003. Lateral extent of TPH resembles that of April 2003. TPH concentrations increased in wells located near the South-Central free

product plume but decreased near the southern extent of the TPH plume and remained non-detect in several southern off-site wells. Ms. McIntosh asked if there was a reason for the increase. Ms. Chou said that it was due to the system shutdown in March 2004. She said TPHfp was detected in wells GWM-O-16 and GMW-O-19 near the Southeastern 24-Inch Block Valve and in EXP-5. These wells were re-sampled during the July 2004 Sentry event. They expect the results soon. Ms. McIntosh asked if the plume was getting bigger because of wells GWM-O-16 and GMW-O-19. Ms. Chou said no, because they did not see a corresponding increase in the other types of TPH. Ms. Chou showed a map of the TPH concentrations in April/May 2004. Theresa Devoy asked why there was an increase in the offsite area to the northwest. Ms. Chou said she was not sure, but they would look into it and report back at the next meeting. It probably had low concentrations, near the detection limit. They have had detections there in the past. They will resample wells in the area in October.

Ms. Chou said benzene concentrations decreased in wells GMW-45, GMW-57, and GMW-59 in the northeast field area. Benzene concentrations increased in four wells surrounding the South-Central free product plume, which may be due to the system shutdown. Benzene concentrations decreased in southern off-site well GMW-O-3 and remained non-detect in several southern off-site wells. Benzene was not detected in the Southeastern 24-Inch Block Valve area. Ms. Chou showed a benzene map and said that the limits are mainly the same as previous, except for the increase in the South-Central area. It should go back down after the next monitoring event. She said that concentrations of 1,2-dichloroethane (1,2-DCA) in off-site wells west of the site remained non-detect or similar to those detected during previous monitoring events. 1,2-DCA decreased in wells WCW-3, WCW-6, and WCW-7 west of the site and in wells GWM-O-9 and GMW-O-14 south of the site. The 1,2-DCA map lines up similarly to last year's 1,2-DCA map. Ms. Sterner said that wells GMW-4 and MW-9 have not been tested because they have shown a sheen for many years. She asked when will that area be tested. Ms. McIntosh asked for more information on the area at the next meeting.

Ms. Chou said two smaller methyl tertiary butyl-ether (MTBE) plumes were detected in the north-central and northeastern area. The MTBE concentration in well MW-19 (MID) has consistently decreased and was not detected in April 2004. MTBE remained non-detect in off-site monitoring wells west of the site, except at WCW-7 where the concentration remained low. The lateral extent of MTBE in the southeastern portion of the site has decreased since one year ago. Groundwater extraction in that area is effective in stabilizing the plume. Mr. Garcia asked what were they doing to decrease concentrations in the plume, not just stabilize it. Ms. Chou showed an MTBE map and said that they installed two new groundwater extraction wells that decreased the lateral extent of the plume over the past year. The two new plumes have been detected intermittently, so they are probably near the detection limit. Mr. Garcia asked why the plumes would be bouncing back and forth. Ms. Ryland said it is possibly due to natural water table fluctuations or the system shutdown. Redwan Hassan said that the pumping creates a depression. When sampling, they need to turn off the pumping so it will not affect the samples. When the pumping is turned off, the groundwater recharges, or goes back up in the depression area. When this happens, the groundwater could come in contact with the dirty soil again and cause the intermittent detections. Ms. Chou said that the next sampling in the northeast area would be in October 2004.

5. Land Use Update Theresa Devoy, City of Norwalk

Ms. Devoy said that nothing is concrete yet for future land use of the Tank Farm. One thing the City Council wants to do is expand Holifield Park by 15 acres. For the remaining land, they are considering light industrial and also commercial near the corner of Norwalk Boulevard and Excelsior Drive. Whatever happens, the City Council plans to involve the community and hold public hearings. The City has been talking to the General Services Administration (GSA) and KMEP about the land transfer process. Mr. Hoskins suggested that once the RAB has completed its duties, the City should convert it to a land use advisory board. Mr. Hoskins asked if the area was designated a redevelopment zone. Ms. Devoy said yes. Mr. Garcia asked if anyone remembers a citywide vote on reuse of the property. Ms. Devoy said she would check into it. *[note: at the following RAB*

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meeting, Mr. Garcia clarified that there was a citywide advisory vote in 1992 on the Tank Farm cleanup, and in 1994 there was a public meeting held by the City to discuss what to do with the Tank Farm after closure.] Mr. Garcia said he was concerned that the City Council may not know that for industrial use, the land does not have to be cleaned up completely. Ms. Townsend said the land would need to be cleaned to industrial standards for soil and to drinking water standards for groundwater. Ms. Devoy said the City Council was aware of it. Ms. McIntosh said they discussed cleanup levels in a recent City Council meeting with the GSA.

6. DESC-AMW Update Redwan Hassan, Parsons

Central Plume Remediation System Update. Mr. Hassan said that during the second quarter of 2004, the Central Plume remediation system removed a total of approximately 3,961 gallons of hydrocarbon mass. Approximately 922 gallons of fuel were recycled and destroyed through soil vapor extraction. No free product was recovered during the quarter, and virtually no dissolved phase hydrocarbons were recovered. An estimated 3,039 gallons were removed through bioremediation. Approximately 13,212 gallons of water were treated and discharged offsite. Mr. Hassan said that the system was shut down for most of the second quarter for upgrading and tie-in to the new Truck Fill Stand area remediation equipment.

The system performance since April 1996 includes 265,328 gallons of hydrocarbon mass removed. Approximately 143,397 gallons of fuel have been recycled and destroyed, including 55,536 gallons through free product recovery, 87,464 gallons through soil vapor extraction, and 1,397.1 gallons of dissolved phase hydrocarbons. In addition, an estimated 120,931 gallons have been removed through bioremediation. Approximately 42.2 million gallons of water have been treated and discharged offsite. Mr. Hassan showed a graph of the free product and soil vapor extraction recovery. No free product has been recovered since Parsons came aboard the project. Free product thicknesses are very low, not more than one foot.

Aboveground Storage Tank Activities. Mr. Hassan said that three Aboveground Storage Tanks were cut open for access. He said 22 soil borings and 17 soil vapor monitoring points were drilled and installed in and around the tank area. They plan to install 12 soil vapor extraction wells the week of August 2, 2004. They also plan to install 10 sparge points the week of August 2, 2004, to enhance the groundwater remediation effort in the Tank Farm area. Biosparging is working very well, so they are expanding it. Ms. McIntosh asked if they plan to perform similar activities with the other tanks. Mr. Hassan said that they are waiting on sampling results, and then they may address the other tanks. Mr. Hassan showed a map of the tanks; tank number 1 in the northwest, number 9 on the southwest, and number 8 in the east were cut. He next showed some photographs. He said tank number 8 needed heavy coring; the other tanks had thin layers.

Truck Fill Stand VES Startup and Operation. Mr. Hassan said that startup testing for the Truck Fill Stand area vapor extraction system (VES) was conducted from April 19 to April 29, 2004. The baseline vadose zone results showed the vapor wells (VWs) had 1.4 percent to 15.6 percent oxygen and a total volatile hydrocarbons (TVH) maximum of 11,000 parts per million (ppm). The vapor monitoring points (VMPs) had 0 to 16.4 percent oxygen and a TVH maximum of 12,000 ppm. After two hours of operation, oxygen was greater than 19.3 percent at the VMPs, indicating a positive influence. Oxygen was lower than the baseline in the VWs, indicating that the surrounding soil area is contaminated and depleted of oxygen. After four hours of operations, oxygen was 20.9 percent at the VMPs and 5.5 to 16.4 percent in the VWs. This indicates that the system is oxygenating the vadose zone. After two months of continuous operation, oxygen was 20.9 percent at the VMPs and greater than 11.6 percent in the VWs. TVH in the VWs was from 560 to 9,500 ppm. Extraction flow from the individual VWs equaled 300 to 1,000 feet per minute. Mr. Hassan said that based on the results, they concluded that continued high contamination in the vadose zone is being extracted. Oxygen is still being pulled and utilized through the vadose zone and enhancing biodegradation.

500-gallon UST Excavation and Removal. Mr. Hassan said a 500-gallon underground storage tank (UST) was excavated and removed on June 2, 2004. It was found near the Truck Fill Stand area during installation

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of the vapor extraction wells. It was backfilled on June 3. Per permit requirements, one soil sample was collected below the tank. Soil results for TPH, BTEX (benzene, toluene, ethylbenzene, and total xylenes), and MTBE were non-detect. A closure report was submitted to Los Angeles County on June 28. They are awaiting final approval from the County. Mr. Hassan next showed some photographs of the tank removal.

Thermal Oxidizer Demolition. Demolition of the old thermal oxidizer was conducted on May 13, 2004. The resulting scrap metal was hauled to a recycling facility on May 14. Mr. Hassan showed some photographs of the demolition activities.

Soil Investigation Near GMW-60. Mr. Hassan said that RWQCB requested two new monitoring wells in the eastern area. An additional soil investigation was carried out near well GMW-60 to identify the source of TPH detected in soil and groundwater. The areas between wells GMW-57, GMW-58, GMW-60 and GMW-61 were investigated. Shallow and deep soil samples were collected. Analytical results are still pending, but field photo ionization detectors (PID) indicated no hydrocarbon detection. Mr. Hassan showed a map of the area of the two new wells and an additional soil boring.

Tracy Winkler asked if the tanks that were cut into had dirt floors. Mr. Hassan said two were nearly dirt, and the third needed to be drilled through for sampling. He said they also sampled around the tanks and did some angle sampling. They may put wells inside the tanks if the results call for it. Ms. Winkler asked if the UST that was removed was empty. Mr. Hassan said yes, it was empty. DESC records indicate that it had not been used in a long time.

7. Set Date and Agenda for Next Meeting

Ms. McIntosh suggested Ms. Winkler be brought on as a RAB member. Ms. Winkler will complete a membership application, which will be voted on at the next meeting. The next RAB meeting will be held **Thursday, October 28, 2004, at 6:30 p.m.** in the Norwalk Arts & Sports Complex. The agenda is to include:

- Health Risk Assessment – soil gas sampling locations
- Phytoremediation – report on groundwater testing, which trees were replaced, and update map
- Report on the historical values of free product in the 24-Inch and Intermediate Block Valve areas
- Resampling of wells GMW-O-16 and GMW-O-19 for THPfp
- TPH increase – Sentry event data and historical ranges in the northwest area
- Update plume maps – darken lines of previous years' plumes
- MTBE detections – data on wells sampled in the northeast area
- Update on wells in area of GMW-4 and MW-9
- Consideration of Ms. Winkler as a new member.

8. Public Comment Period

There were no other comments. Mr. Miller moved to adjourn the meeting. Ms. McIntosh seconded the motion. The motion was passed, and Ms. Ryland adjourned the meeting at 8:27 p.m.

ACTION ITEMS

Item	Responsible Party	Due Date
Next RAB meeting/see Section 7 above	All	10/28/04

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