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Meeting Minutes

Meeting Subject: Norwalk Tank Farm Restoration Advisory Board (RAB) Semiannual Meeting	Meeting Date: <u>23 January 2003</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 J. Rifilato W. Sterner	<u>Other Members</u> T. Devoy (City of Norwalk) J. Holdren (City of Cerritos) J. Hu (RWQCB) (attending for A. Townsend) H. Ng (WRD) R. Tweidt (KMED) (Co-Chair) Lt Col Wilson (DESC-AMW) (Co-Chair)
<u>Other Attendees</u> D. Alsawaf (Shaw E & I Group) S. Chou (Geomatrix) G. Coppola (Geomatrix) P. Hernandez (US Rep. Napolitano) K. Olowu (DESC) S. Seipel (Shaw E & I Group) J. Trani (DESC-AMW) T. Whyte (URS) T. Winkler (Citizen)	DESC-AMW .. Defense Energy Support Center Americas West GSA..... General Services Administration KMED 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> None	
<u>Not Attending</u> Dr. Duran (OCCS) Dr. Landolph (OCCS)	
<u>BACKGROUND</u> DESC-LA and KMED 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 semiannually on the last Thursday of the month at 6:30 p.m. in January and July, unless otherwise voted on by the RAB community membership.	

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1. Introduction Lt Col Edward Wilson, DESC Co-Chair, Meeting Chair

Lt Col Edward Wilson called the meeting to order at 6:40 p.m. Mary Jane McIntosh introduced some of the meeting attendees. Joe Holdren from the City of Cerritos is replacing Ron Babel, who has retired. Hoover Ng of the Water Replenishment District (WRD) is replacing Jim Leserman. Jeffery Hu of the Regional Water Quality Control Board (RWQCB) is temporarily replacing Ana Townsend while she is on maternity leave. Perla Hernandez from the Office of Representative Grace Napolitano was in attendance. Rob Tweidt is the new KMEP Co-Chair, replacing Catherine Quinn. Lt Col Wilson also mentioned that the Defense Energy Support Center Los Angeles (DESC-LA) is now known as the Defense Energy Support Center Americas West (DESC-AMW).

Review of Minutes. Lt Col Wilson asked for comments on the minutes of the July 25, 2002 meeting. Seeing none, he asked for a motion to approve the minutes. A motion was made, seconded, and passed without opposition.

2. RBCA Update Gregory Coppola, Geomatrix Consultants, Inc.

Mr. Coppola discussed the Risk-Based Corrective Action (RBCA) report. He said they are still waiting for RWQCB comments, so they are at the same point as the update at the last RAB meeting. Ms. Townsend may have some comments when she returns. There have been several meetings, comments, and revisions to the report over the past few years.

3. KMEP Update Gregory Coppola, Geomatrix Consultants, Inc.

Remediation Operations Update. Mr. Coppola showed a map of the current remediation systems. He discussed the soil vapor extraction system, which has 16 onsite and 7 offsite wells in the South-Central Plume area and 2 wells in the 24-Inch Valve area. The system removed and destroyed 4,270 gallons equivalent of fuel since the July 2002 RAB meeting and 388,450 gallons equivalent of fuel since September 1995. The system has been shut down since December 2002 for system repairs. It was back up and running, but then it was shut down again for the pipeline testing. This is the same system that was down last year. It will be back online next week. Mr. Coppola showed a graph of cumulative fuel removed by vapor extraction. He said that there has been a plateauing effect, so they are looking for ways to improve system efficiency.

Mr. Coppola described the groundwater/product extraction system. There are eight groundwater wells in the West-Side Barrier area, six groundwater/product wells in the South-Central Plume area and two groundwater/product wells in the 24-Inch Valve area. They plan to install additional extraction wells in the 24-Inch Valve area. Since the July 2002 RAB meeting, a total of 333,020 gallons of groundwater have been extracted from the South-Central Plume area, 258,430 gallons from the 24-Inch Valve area, and approximately 1.2 million gallons from the West-Side Barrier area. Total groundwater removed since September 1995 includes 24.1 million gallons from the South-Central and the 24-Inch Valve areas and 8.9 million gallons from the West-Side Barrier area, for a total of 32.9 million gallons. In addition, 8,735 gallons of free product have been removed since September 1995. The South-Central/24-Inch Valve area groundwater/product extraction system was shut down for repairs in December 2002. The West-Side Barrier groundwater extraction system continued to operate independently during the shut down. Mr. Coppola showed a graph of the operations summary statistics. The plateau of the cumulative product removed is a function of the reduction in mass of free product.

24-Inch Block Valve Area. Mr. Coppola said they have had concerns about this area for the past 1-1.5 years. They conducted an investigation and prepared and submitted a report to RWQCB. RWQCB provided

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comments in November 2002 requesting a work plan for expanding the groundwater extraction system and for additional site assessment. They plan to install new extraction wells and piezometer wells to measure the effectiveness of the extraction wells. The new wells will help to extract the MTBE in the southeast portion of the Tank Farm. Mr. Coppola submitted a Work Plan to expand the groundwater extraction system to Mr. Hu of RWQCB tonight. They expect the review to take couple of weeks. The new wells should be online within 2-3 months. Most of the new piping attaching the wells to the South-Central remediation system will be aboveground. Ms. McIntosh requested the RAB members be provided copies of the work plan that was submitted to Mr. Hu.

Pipeline Testing Update. Ms. McIntosh said that at the last meeting some RAB members had raised concerns about increasing concentrations found in some wells. Therefore, Ms. McIntosh requested KMEP to conduct pipeline testing to determine if there are any leaks in the system. Mr. Tweidt gave an overview of the pipelines. KMEP has three pipelines that enter from Watson Station; two are 16-inch and one is 24-inch. These pipelines transport gas, diesel, and jet fuels. They enter the Tank Farm from the southwest area and follow along their easement. One of the lines continues to Mission Valley in San Diego. The other two continue to Colton. KMEP used to have a pump station at Norwalk, but it has been removed. A tracer test was conducted by Tracer Research Company, which uses a proprietary gas called Tracer A. In December 2002, preparatory activities included exposure of three block valves on the southwest corner of the facility; utility clearance and geophysical surveying; and the installation of sample probes. In January 2003, the three mainline pipelines were inoculated and the Tracer A was injected. Two lines of probes were installed parallel to the pipelines to test for potential leaks. From January 22 through January 24, 256 samples were collected and sent to a laboratory in Arizona for analysis. The analysis report should arrive the week of February 17, 2003. The pipelines have about 40 feet of easement on the Tank Farm property. The pipelines are approximately 4 to 4.5 feet deep, except in the old pump station area, which has some aboveground piping. Probes were installed 2 to 3 feet from the center of the pipeline and to depths of 1.5 to 2 feet below ground surface. The tracer is very volatile and under a lot of pressure, so it will migrate upwards from the pipe to the probe if a leak is present. This is also why the remediation system was down during testing, so as not to skew the results. The testing was conducted while taking the pipelines offline for only a few hours. If any leaks are found, KMEP will treat it like an emergency response and act as quickly as possible. Ms. McIntosh said she expects KMEP's response would be similar to DESC's response to a release found from some abandoned pipelines about four years ago. That response was done quickly, everyone was notified, and a report was given at the following RAB meeting. Ms. McIntosh requested that a RAB meeting to be held 2 to 3 weeks after the results come in and that the RAB be provided a copy of the report one week prior to the meeting.

Decommissioning Activities. Mr. Tweidt said that in the year 2001, KMEP began decommissioning of equipment no longer needed, which included the removal of 3 mainline pumps, 2 provers, and some ancillary pipes and valves. The scheduling of the remainder to decommissioning activities is being reevaluated due to KMEP budget constraints. Further activities may be phased. KMEP's final intent is to remove the equipment in the old pump station area, and then just have their easements.

4. DESC-LA Update Dr. Daoud Alsawaf, Shaw E & I Group

Central Plume Remediation System Update. Dr. Daoud Alsawaf said that since 1996, the Central Plume remediation system has recycled and destroyed approximately 139,160 gallons of fuel. This includes 55,534 gallons of free product recovered. Approximately 83,626 gallons of hydrocarbons recovered through vapor extraction, through the horizontal wells. Approximately 39.6 million gallons of water have been treated and discharged offsite. In addition, 1,367 gallons of dissolved phase hydrocarbons have been removed. An estimated 110,858 gallons have been removed through bioremediation (approximately double the amount of free product removed). Dr. Alsawaf showed a graph of hydrocarbons and free product recovered. He said

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the free product line has remained unchanged for about 1.5 years. They have recovered some free product in the oil/water separator, but it was just sheen and not enough to report. The remaining free product is mainly near wells not connected to the remediation system. They propose to develop these wells to remove the rest of the product. These wells may be biofouled. Dr. Alsawaf discussed two poster boards showing the history of free product removal. There has been great success, especially in the last two years, when they introduced air sparging. Ms. McIntosh requested copies of the plume maps be sent to the RAB members.

5. Semiannual Monitoring Event Dr. Daoud Alsawaf, Shaw E & I Group

Dr. Alsawaf discussed the latest semiannual monitoring event. In October 2002, 78 wells were sampled, including 5 Exposition Aquifer wells. No chemicals were detected in the Exposition wells. The Exposition is a separate, deeper aquifer. The results show no chemicals are migrating down to it. The North-Central free product plume decreased in lateral extent and separated into smaller plumes. The South-Central free product plume decreased in lateral extent and separated into two smaller plumes. Free product was observed in the 24-Inch Valve area. Concentrations of Total Petroleum Hydrocarbons (TPH) increased in the area between the North-Central and South-Central plumes and in the area south of the South-Central free product plume. Benzene concentrations decreased in the North-Central and South-Central areas, except in well GMW-O-10 (located offsite, just southwest of the South-Central plume). Benzene increased in two wells near the 24-Inch Valve area. The increases are believed to be due to seasonal changes, such as the decrease in water levels from the lack of rainfall. The 1,2-Dichloroethane (1,2-DCA) plume west of the site decreased since April 2002 and has separated into two plumes. 1,2-DCA concentrations continue to decrease in well WCW-7 (located offsite to the west). Methyl tertiary butyl ether (MTBE) was detected for the first time in well GMW-O-8 (located southwest of the South-Central free product plume). It was a very small detection, at 2.4 parts per billion (ppb). It is possible the detection was caused by a private citizen spilling gas or from a vehicle running during the sampling. The well will be resampled during the next Sentry Event, which will begin in one week.

Dr. Alsawaf next showed a free product and groundwater map. There has been a good change in direction of groundwater flow. Previously, flow was from the southeast to the northwest. Since pumping of the Westside Barrier wells for containment, the gradient has been reversed and is now towards the northeast. He next showed a TPH map. He said hopefully soon all the TPH will be on-site. He next discussed the benzene map, which shows a few detections in the north, due to trapped product being released when the air sparging started. The concentrations of benzene are very low. Benzene is very biodegradable. In the South-Central area, concentrations were 217 and 1,300 ppb in two wells. In the northwest area, one well had a concentration of 917 ppb. In a center well, the concentration was 0.58 ppb. In the northeast plume, concentrations were 430 and 770 ppb in two wells.

There has been a great reduction in 1,2-DCA. The highest concentration is on-site and is shrinking with time. Wanda Sterner asked how do you know the free product found in the Truck Stand area is old fuel, since it has never been tested. Scott Seipel of Shaw E&I Group said they tested the soil, and DESC plans to sample the wells and determine the constituents. Two years ago they found no concentrations in this area, but there was free product found there six years ago. Since free product was found in this area again, they are working on how to address it. Dr. Alsawaf said that when the groundwater levels go down (such as during periods of drought), the product can show up again in the wells. Ms. McIntosh asked if that could account for the increase in TPH. Dr. Alsawaf said many wells increased with the starting of the air sparging. The injection of water or air could cause trapped free product to move, causing an increase in concentration. However, there is usually a drop in concentrations the next year. Residual free product is like soap in a sponge; it will stay there unless it is rinsed or washed. Free product is not only on the surface of groundwater, but also in the saturated zone. The type of soil in which the free product is located can also affect how long it is trapped.

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Dr. Alsawaf next showed an MTBE map. He said a few years ago they thought that MTBE was not biodegradable. Now they believe it is. The bacteria take the BTEX first before it gets to the MTBE. Mr. Coppola said that due to the MTBE concentrations, they plan on doing some enhancements. Ms. McIntosh asked if they had accessed the Chang property. Mr. Coppola said they did once to check the wells there, but they have not been back. Ms. McIntosh said it was important to test those wells, so she suggested that Mr. Coppola contact Theresa Devoy to ask the City for help accessing the property. Mr. Coppola said they will sample the wells in the Semiannual and Sentry monitoring events. Mr. Coppola also said they will check to determine if it would be appropriate to place wells in the vacant lot near the Chang property. Mr. Ng said the WRD oversees the regional basin, and this is the first time he has seen MTBE in the Central Basin. He said MTBE can move quickly and contaminate other supplies, so they need to be vigilant so the MTBE won't move offsite. Dr. Alsawaf said he knows of some gas station sites in the area that also have MTBE. Mr. Tweidt said they are trying to be expeditious and take the MTBE issue seriously. Mr. Coppola said MTBE used to be offsite to the west, and they have been going after it diligently the last two years. He hopes it will be like 1,2-DCA, which has decreased rapidly.

Ms. McIntosh had some general questions about the monitoring report. Referencing the summary on page 3.3, she asked why haven't they seen decreases in free product in the South-Central area? Mr. Seipel said that the well is not hooked up to the remediation system. He said an increase of 10,000-20,000 was not unusual, and they are watching it. The free product in that area is degraded. The increase may be due to the decrease in groundwater levels.

Ms. McIntosh asked for a better explanation on the increases of TPH in wells GMW-O-2, GMW-O-5, and GMW-O-6 that were determined to be anomalous (as stated on page 4.2 of the report). Mr. Coppola said they had some concerns with the laboratory results, since they had not previously seen TPHfp (the standard of fuel product at the site) in this area. They had the laboratory prepare chromatograms for the samples. The chromatograms showed that the samples were not the same as TPHfp. They collected more samples in the area. There was no increase in TPH found in the new samples. Therefore, they believe the initial detections of increased TPH were due to errors during the sampling process. Gene Garcia asked about the validity of the chromatogram data. Mr. Tweidt suggested inviting a laboratory representative come to the next meeting to further explain the results. Mr. Ng said that this is a common occurrence with samples having low levels of detections. If it looks irregular, it should be resampled to see if there is a trend. If something is there, it will repeat itself in the resampling.

6. Set Date and Agenda for Next Meeting

The next RAB meeting will be held **Thursday, February 27, 2003, at 6:30 p.m.** in the Norwalk Arts & Sports Complex. The agenda is to include: proposal to return to quarterly meetings; KMEP pipeline testing update; chromatogram presentation; and KMEP cleanup enhancements.

7. Public Comment Period

Lt Col Wilson said that he appreciates the members' questions. They help keep DESC and KMEP honest and digging deeper to come up with explanations, so do not stop with the questions. Ms. Hernandez said the questions are good because the community also wants to know the status of the cleanup. Mr. Garcia said they need a scientific basis for valid data for credibility. His duty is to keep it credible. Ms. McIntosh said she got a call from Eric Conard of KMEP to discuss ways to speed the cleanup. She suggested this be added to the next meeting's agenda. She suggested returning to quarterly meetings, which should also be discussed at the next meeting. She announced that Lt Col Wilson will be leaving DESC-AMW in June, so the February meeting will be his last.

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<p>Mr. Hoskins asked about the phytoremediation. Mr. Coppola said they have not done an evaluation in that area yet. He will discuss it with KMED and give an update at the next meeting.</p> <p>Mr. Hoskins moved to adjourn the meeting. Bill Miller seconded the motion. The motion passed without opposition. Lt Col Wilson adjourned the meeting at 8:40 p.m.</p>	

ACTION ITEMS		
Item	Responsible Party	Due Date
Distribute 24-Inch Valve Area work plan to RAB members	KMED	Jan. 2003
Distribute plume maps to RAB members	Shaw E&I Group	Feb. 2003
Distribute pipeline testing results to RAB members	KMED	Feb. 2003
Distribute new RAB rosters	URS	Feb. 2003
Next RAB meeting	All	February 27, 2003