#### **Meeting Minutes**

Meeting Subject: Norwalk Tank Farm Restoration Advisory Board (RAB) Semiannual Meeting	Meeting Date: <u>31 January 2002</u> Meeting Time:6:30 p.m.Meeting Place:Norwalk Arts & Sports Complex
RAB, PROJECT TEAM, AND OTHER	
<b>RAB Community Members</b>	Other Members
D. Caughey	J. Anderson (City of Norwalk)
E. Garcia	R. Babel (City of Cerritos)
B. Hoskins	C. Quinn (KMEP) (Co-Chair)
M. McIntosh (Co-Chair)	A. Townsend (RWQCB)
W. Miller	
J. Rifilato	
W. Sterner	
<u>Other Attendees</u> D. Alsawaf (IT Corp.)	DESC-LADefense Energy Support Center- Los Angeles
G. Coppola (Geomatrix)	GSAGeneral Services Administration
T. Devoy (City of Norwalk)	GTIGroundwater Technology, Inc.; a wholly-
J. Jefferson (KMEP)	owned subsidiary of IT Corporation
K. Hekimian (HVN Environmental)	KMEPKinder Morgan Energy Partners
K. Olowu (DESC)	OCCSOffsite Chemicals Cleanup
J. O'Neill (March ARB)	Subcommittee
T. Whyte (URS)	RABRestoration Advisory Board
T. Winkler (Citizen)	RBCARisk-Based Corrective Action
	RWQCBRegional Water Quality Control Board
	URSURS Corporation
Absentees	WRDWater Replenishment District of
J. Leserman (WRD)	Southern California
Lt Col Wilson (DESC-LA) (Co-Chair)	

#### Not Attending

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

#### BACKGROUND

DESC-LA and KMEP are conducting environmental cleanup activities at the area in and around the 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 Catherine Quinn, KMEP Co-Chair, Meeting Chair	N/A	
	Catherine Quinn called the meeting to order at 6:40 p.m.		
	<b>Review of Minutes.</b> Ms. Quinn asked for comments on the minutes of the October 18, 2001 meeting. Seeing none, Ms. Quinn asked for a motion to approve the minutes. The motion was made by Mary Jane McIntosh and seconded by Bob Hoskins. The motion passed without opposition.		
	<b>Meeting Schedule Proposal.</b> Ms. McIntosh discussed the proposal introduced at the last meeting to change the RAB meeting schedule to semiannually. Wanda Sterner made a motion to hold the RAB meetings in January and July, with additional meetings to be scheduled as needed. Mr. Hoskins seconded the motion. The motion passed without opposition.		
2.	RBCA Update Catherine Quinn, KMEP		
	Ms. Quinn said they received comments from the Office of Health Hazard Assessment (OEHHA) yesterday on the Risk- Based Corrective Action (RBCA) report. KMEP is drafting responses to the comments. She said she would like to convene a meeting of the Offsite Chemicals Cleanup Subcommittee (OCCS) to review and receive concurrence on the draft responses. Jill Jefferson suggested sending the	КМЕР	Driverto
	draft comments to Dr. Duran and Dr. Landolph prior to the meeting. Eugene Garcia requested the draft be sent to all RAB members. The OCCS meeting will be held on	KMEP	Prior to meeting
	Thursday, March 7 <sup>th</sup> at 4:30 p.m. at City Hall.	OCCS	03/07/02
3.	KMEP Update Catherine Quinn, KMEP		
	<b>Remediation Update.</b> Ms. Quinn showed a map of the current remediation systems and discussed the soil vapor extraction. She said that in the past quarter, 5,030 gallons equivalent of fuel have been removed from the soil and destroyed through thermal oxidation, and 376,421 gallons equivalent of fuel have been removed since September 1995. The system has been down for one month for repair of the thermal oxidizer. It is scheduled to come back online in another month. KMEP is taking this opportunity to conduct system enhancements. Ms. Sterner asked if the groundwater		

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	system goes to the thermal oxidizer. Greg Coppola said groundwater from the West Side Barrier System goes to carbon, not to the thermal oxidizer.		
	Ms. Quinn next showed a graph of the cumulative fuel removed by vapor extraction to date. Ana Townsend then asked about the system enhancements. Mr. Coppola said they are moving pumps in the South-Central area and cleaning some pumps. They will measure for free product; if any is found, they will use a vacuum truck to remove it. They also plan to clean the air stripper and will change the thermal oxidizer to catalytic operation.		
	Ms. Quinn described the groundwater/product extraction system. From the South-Central Plume area, more than 798,003 gallons of groundwater have been extracted since the October 2001 RAB meeting. From the 24-inch Valve area, 557,788 gallons were extracted. Approximately 311,349 gallons were extracted from the West-Side Barrier area. No free product was removed in this period. Total groundwater removed since September 1995 includes 22.7 million gallons from the South-Central/24-inch Valve areas and 5.9 million gallons from the West-Side Barrier area, for a total of 28.6 million gallons. Ms. McIntosh noted that these figures are much higher than the figures at the previous meeting. Mr. Coppola said that was because the flow meters were not operating properly in the previous quarter, and recent enhancements helped increase the recovery rates. Ken Hekimian asked if water levels have dropped since 1995. Mr. Coppola said that water levels regionally in the tank farm area have risen. Localized areas have depressed due to the effects of the remediation system pumping. Ms. Quinn next showed a graph of product extracted and water treated. She noted that there is not much product left to extract.		
	<b>Remediation System Enhancements.</b> Ms. Quinn said that the West Side Barrier wells BW-5 through BW-8 were redeveloped in October 2001 to enhance system operations. Flow meters were installed in two West Side Barrier wells and more flow meters will be installed in additional wells. KMEP reconfigured the West Side Barrier System to allow it to operate independently from the South-Central remediation system. In addition, KMEP optimized placement of extraction pumps in the South-Central Plume area to improve plume containment. Mr. Garcia if there were any new wells by the Chang property. Mr. Coppola said there		

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	are no new wells, but there are two existing wells in the area. They are working on gaining access to the wells. The wells were shut down during construction in the area and put back online after construction ended. They have not had access to the wells in four to six months, so they are not sure how well they are operating.		
	<b>Semiannual Monitoring Event.</b> Ms. Quinn said that the second 2001 semiannual monitoring event took place in November. Ninety-seven wells were sampled, including the five Exposition wells. No chemicals were detected in the Exposition wells, except low concentrations of benzene and toluene in one sample from EXP-3. No chemicals were detected in a duplicate sample from EXP-3. Free product was detected in 17 wells. The South-Central free product plume decreased in lateral extent along the southern and eastern boundaries. No free product was found in the 24-inch Valve area. Two wells northwest of the 24-inch Valve area had detectable concentrations of MTBE (methyl tertiary butyl ether). KMEP will resample wells MW-16 and MW-29 and selected wells in the vicinity. There had been only one MTBE detection in 1996 in the area. TPH (total petroleum hydrocarbon) concentrations decreased to nondetect levels near the West Side Barrier area. Non-detect TPH concentrations in wells GMW-26 and HL-3 indicate improved containment of the South-Central Plume. The 1,2-DCA (1,2-dichloroethane) plume west of the site decreased since May 2001. Well WCW-13 was non-detect for 1,2-DCA. 1,2-DCA concentrations in WCW-3 have been decreasing since the startup of the West Side Barrier wells and continue to decrease.		
	Mr. Garcia asked about the sampling under the former truck fill stand. Kola Olowu said the sampling has taken place. Scott Seipel said the report was submitted to the Regional Water Quality Control Board (RWQCB) in December. Ms. Townsend said she received that report as well as the report on the tar pit. She expects to provide comments by early March. Ms. McIntosh requested the comments and reports be sent to each RAB member.	DESC	Mar. 2002

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4.	DESC-LA Update Dr. Daoud Alsawaf, IT Corp. Mr. Olowu introduced Dr. Daoud Alsawaf of IT Corporation, who was in attendance for Neil Irish, who could not make the meeting. Dr. Alsawaf said he has been working on the Norwalk project for nine years and has conducted modeling and remediation system design for the site.	N/A	
	<b>Central Plume Remediation System Update.</b> Dr. Alsawaf said that since 1996, the Central Plume remediation system has recycled and destroyed approximately 136,379 gallons of fuel. This includes 55,534 gallons of free product recovered. Approximately 79,506 gallons have been destroyed in the thermal oxidizer. They have treated approximately 35.6 million gallons of water. In addition, 1,339 gallons of dissolved phase hydrocarbons have been recovered.		
	<b>Sentry Well Monitoring Event.</b> Dr. Alsawaf said that during the July/September 2001 Sentry well monitoring event, 30 wells were gauged and 27 wells were sampled. Free product was detected in three wells. Five wells showed concentrations for TPH. Wells GMW-O-3 and WCW-8 showed decreasing concentrations to non-detect. Wells MW-14, MW-19(MID), and MW-22(MID) showed decreasing trends since a high in August 2000. The five Exposition Aquifer wells were non-detect for TPH, BTEX, 1,2-DCA, and MTBE, with the exception of well EXP-3, which had trace concentrations of benzene and toluene (0.8 and 0.6 ug/L, respectively). This well will be resampled and checked.		
5.	Semiannual Monitoring Event Dr. Daoud Alsawaf, IT Corp. Dr. Alsawaf said that 155 wells were gauged and 97 wells were sampled during the semiannual monitoring event. Free product was found in 17 wells ranging from 0.01 to 5.10 feet in thickness. The highest concentration was found in well GMW-22 in the South-Central area. Three free product plumes remain. In the north-central area, only one well had product. In the southern plume area, product measurements decreased by an average of 0.36 feet. The overall southern and northern boundaries have decreased, which is a big improvement. In the South-Central area, free product was detected around well GMW-4. In the		

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	northern plume, free product was found to the east around wells GMW-50, GMW-58, and GMW-59.		
	The uppermost aquifer groundwater gradient was 0.001 feet per foot (ft/ft) in the northwest direction in the eastern portion of the site and 0.002 ft/ft in the northeast direction west of the site. Groundwater is converging toward the pumping wells. Groundwater elevation increased by 0.66 feet since May 2001, which is due to the annual recharge. Compared to 1996, groundwater levels have risen by four feet. This makes it more difficult to remove product.		
	TPH was detected in 32 wells, which is a decrease since May 2001. Several wells were non-detect in the western area. Benzene was detected in 25 wells. The northern plume decreased significantly since May 2001. The South- Central benzene plume extended slightly to the west and east compared to May 2001. The southeastern benzene plume decreased in size compared to May 2001. When remediation started, benzene was detected in the western wells; now it is only detected in the east, showing a dramatic improvement. It is due to pumping and biodegradation. Dr. Alsawaf said that benzene has a half-life of one to two years.		
	1,2-DCA was detected in 21 wells. The plume has decreased in size and average concentration. In May 2001, the average was 130 ug/L. In November 2001, the average was 21 ug/L. MTBE was detected in 35 wells. The western plume is similar to May 2001. The southeast plume has extended further to the northwest. MTBE has also been detected in three areas in the north.		
	<b>Expanded Air Sparging.</b> Dr. Alsawaf said that air sparging was found to be very effective in the first year of its use, so they doubled the number of wells. There are 33 sparge wells currently active. The sparging system alternates with one-third of the wells on for one hour; each hour 11 wells are working, then the next hour another 11, and so on. A map of the sparging system showed wells in the area of the free product discovered in the northeast area two to three years ago. Bill Miller asked how the product ended up to the east of the original plume. Dr. Alsawaf said that investigation of the bottom of the uppermost aquifer indicated that it slopes towards the east and west of the free product plume forming a depression. This depression might have trapped some product in the past. Air-sparging through the aquifer could		

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	mobilize product in this area and in monitoring wells. Ms. Sterner asked about the proposed donation of 15 acres of land, which would include the northeastern area, to Holifield Park. Jill Anderson said that any land transfer would include some type of indemnification so the City would not be liable for any possible future cleanup needed. Jim O'Neill said that the property would continue to be considered one parcel		
	until the General Services Administration (GSA) receives it. GSA can then break it up if it chooses to do so. Dr. Alsawaf said he and Mr. Olowu observed the oil/water separator inflow (total fluid wells manifold) earlier in the day and did not see any evidence of free product. Furthermore, the free product totalizer meter has not recorded additional product for the past six months in the northern area. IT will monitor oxygen levels in groundwater to see if any adjustments are needed for the air-sparging system.		
	Ms. McIntosh asked about plan for testing under the tanks. Mr. Olowu said the plan has been approved. Ms. McIntosh and Ms. Sterner asked about the sheen observed in two wells by the truck fill stand. Dr. Alsawaf said due to the presence of hydrocarbon vapors in soil, it is possible that the sheen was caused by condensation in the well. Ms. Jefferson said free product has been found in that area in the past.		
	Mr. Garcia asked about the half-life of benzene. Dr. Alsawaf said it depends on the amount of oxygen and the flow of water, so it ranges from one to two years. John Rifilato added that they were talking about benzene in the dissolved phase. Dr. Alsawaf said that in 1993, after five years of drought, the groundwater elevation was seven feet lower than average. Then after the two wet years of 1993-94 and 1998-99, groundwater levels returned to normal. The additional recharge water helped the biodegradation process but submerged part of the free product in the upper parts of the saturated zone. After air sparging, they observed the pumps turning from a black to an orange color, which shows that groundwater is becoming rich in oxygen due to sparging.		
	Ms. McIntosh asked about the new monitoring plan. Mr. Seipel said he currently has it, and the changes are not significant. Ms. Quinn said KMEP and DESC worked together to finalize it. Mr. Olowu said they would send	DESC	Mar 2002

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copies of the new plan to the RAB members. <b>Environmental Baseline Survey (EBS) Update.</b> Jim O'Neill of March Air Reserve Base (ARB) said that the Environmental Baseline Survey (EBS) was completed in September 2001. He was responsible for the environmental portion and Benedetta Caiazza was responsible for Real Estate section. The Corps of Engineers provided her with many maps, which they had to sift through to get the appropriate ones for the EBS. The EBS was then submitted to the U.S. Air Force Reserve Command (USAFRC) in		
to USAF Air Staff (Department of the Air Force) in January 2002. Then it is sent to a vote in Congress. After that the report goes to GSA. At that point the Air Force is out of the process and it is up to GSA to do what they want with the property.		
Set Date and Agenda for Next Meeting The next RAB meeting will be held <b>Thursday, July 25,</b> <b>2002, at 6:30 p.m.</b> in the Norwalk Arts & Sports Complex. The agenda is to include a review of the RBCA comments and responses; update on the truck rack area; and an update on the sampling under the tanks.	All	7/25/02
<u>Public Comment Period</u> Tracy Winkler asked when the tanks would be coming down. Mr. O'Neill said there are several legal, monetary, and disposal issues regarding tank removal they are considering. Ms. Anderson said it is the City's position that they want the tanks removed to help with the remediation. Mr. Hoskins moved to adjourn the meeting. The motion was seconded by Ms. McIntosh and passed without opposition. Ms. Quinn adjourned the meeting at 8:08 p.m.	N/A	
	copies of the new plan to the RAB members. Environmental Baseline Survey (EBS) Update. Jim O'Neill of March Air Reserve Base (ARB) said that the Environmental Baseline Survey (EBS) was completed in September 2001. He was responsible for the environmental portion and Benedetta Caiazza was responsible for Real Estate section. The Corps of Engineers provided her with many maps, which they had to sift through to get the appropriate ones for the EBS. The EBS was then submitted to the U.S. Air Force Reserve Command (USAFRC) in November 2001. USAFRC reviewed it and then submitted it to USAF Air Staff (Department of the Air Force) in January 2002. Then it is sent to a vote in Congress. After that the report goes to GSA. At that point the Air Force is out of the process and it is up to GSA to do what they want with the property. Set Date and Agenda for Next Meeting The next RAB meeting will be held <b>Thursday, July 25,</b> <b>2002, at 6:30 p.m.</b> in the Norwalk Arts & Sports Complex. The agenda is to include a review of the RBCA comments and responses; update on the truck rack area; and an update on the sampling under the tanks. <u>Public Comment Period</u> Tracy Winkler asked when the tanks would be coming down. Mr. O'Neill said there are several legal, monetary, and disposal issues regarding tank removal they are considering. Ms. Anderson said it is the City's position that they want the tanks removed to help with the remediation. Mr. Hoskins moved to adjourn the meeting. The motion was seconded by Ms. McIntosh and passed without	copies of the new plan to the RAB members.Environmental Baseline Survey (EBS) Update. Jim O'Neill of March Air Reserve Base (ARB) said that the Environmental Baseline Survey (EBS) was completed in September 2001. He was responsible for the environmental portion and Benedetta Caiazza was responsible for Real Estate section. The Corps of Engineers provided her with many maps, which they had to sift through to get the appropriate ones for the EBS. The EBS was then submitted to the U.S. Air Force Reserve Command (USAFRC) in November 2001. USAFRC reviewed it and then submitted it to USAF Air Staff (Department of the Air Force) in January 2002. Then it is sent to a vote in Congress. After that the report goes to GSA. At that point the Air Force is out of the process and it is up to GSA to do what they want with the property.Set Date and Agenda for Next MeetingAllThe next RAB meeting will be held Thursday, July 25, 2002, at 6:30 p.m. in the Norwalk Arts & Sports Complex. The agenda is to include a review of the RBCA comments and responses; update on the truck rack area; and an update on the sampling under the tanks.N/APublic Comment Period Tracy Winkler asked when the tanks would be coming down. Mr. O'Neill said there are several legal, monetary, and disposal issues regarding tank removal they are considering. Ms. Anderson said it is the City's position that they want the tanks removed to help with the remediation.N/A