Final

Meeting Minutes
Travis Air Force Base
Environmental Management
Building 246, Downstairs Conference Room
Installation Restoration Program
Remedial Program Managers Meeting

10 October 2001, 0930 hours

Mr. Allen Brickeen, Travis Air Force Base (AFB), conducted the Remedial Program Managers (RPM) meeting held on 10 October 2001 at 0930 in Building 246, Downstairs Conference Room, Travis AFB, California. Attendees included:

• Allen Brickeen	Travis AFB
• Glenn Anderson	Travis AFB
• Dale Malsberger	Travis AFB
• DeAnn Lehigh	Travis AFB
• Tom Sreenivasan	Travis AFB
• Wilford Day	Travis AFB
• Roger Johnson	Air Force Center for Environmental Excellence (AFCEE)
• Roby Gregg	AFCEE/ERD
• Ann D'Lima	Restoration Advisory Board (RAB) member
• John Lucey	U.S. Environmental Protection Agency (U.S. EPA)
• Elizabeth Allen	TechLaw
• Sarah Raker	California Regional Water Quality Control Board (RWQCB)
• Wayne Williams	CH2M HILL
• Scott Eckman	CH2M HILL
• Loren Krook	CH2M HILL
• Rebecca Maco	CH2M HILL
• Deena Stanley	URS
• George Joyce	URS
• Mike Wray	GTI/IT

Handouts distributed throughout the meeting included:

• Attachment 1	Meeting Agenda
• Attachment 2	Master Meeting, Teleconference, and Document Schedule
• Attachment 3	SBBGWTP Monthly Data Sheet, September 2001
• Attachment 4	FT005 Extraction System
• Attachment 5	CGWTP Monthly Data Sheet, September 2001
• Attachment 6	NGWTP Monthly Data Sheet, September 2001

- Attachment 7 Travis AFB FY02 Project List
- Attachment 8 CH2M HILL Field Activities, September 2001 – October 2001
- Attachment 9 GTI Field Activities (September/October 2001)
- Attachment 10 URS Field Activities (September 2001)
- Attachment 11 2002 – Travis AFB Annual Meeting and Teleconference Schedule

1. ADMINISTRATIVE

A. Previous Meeting Minutes

The 8 August 2001 meeting minutes were accepted as final.

B. Four-Month Calendar of Upcoming Milestones and Meeting Dates

The revised Travis AFB Master Meeting, Teleconference, and Document Schedule were distributed (see Attachment 2).

Master Meeting and Document Schedule

— Page 3, DP039 Natural Attenuation Workplan (NAAW) schedule was revised.

— Page 5, Groundwater Sampling Analysis Program (GSAP) Annual Report schedule was established.

2. OPERABLE UNIT UPDATE

A. North/East/West/ Industrial Operable Unit

1. Landfill Cap Design

Mr. Malsberger stated that the U.S. EPA and RWQCB are in the process of reviewing the revised drawings that show the interceptor trench, the text on the trench's effect on the groundwater levels, and a document comparing the CAMU evapotranspiration (ET) cap to Potrero Hills and Kiefer ET caps.

Mr. Lucey stated that he spoke with Ms. Cynthia Whitmore of U.S. EPA, who indicated that she is not comfortable with the Air Force's confidence that the cap will perform as described.

Mr. Lucey stated that he reviewed the cost estimate of the design and it appears there is not a significant difference in cost between a geosynthetic cap and monolithic cap; therefore, he recommends the Air Force chose the geosynthetic cap.

Mr. Malsberger explained that it is not just the construction cost that drives Travis AFB to choose the ET cap. Other factors are ease of construction, maintenance costs, and resistance to shifting and earthquakes. Mr. Malsberger asked that the U.S. EPA give specific reasons why an ET cap would not work, and Travis AFB will address the opposition. The Air Force's position is that the ET cap is the best option.

Mr. Lucey stated that another concern is the possible shortage of soil to build an ET cap. The geosynthetic cap would use less soil than an ET cap. Mr. Malsberger stated that Travis AFB is confident that a sufficient volume of soil will be available due to the ongoing construction projects on base.

Mr. Lucey stated that the modeling indicated the ET cap will not work without the 6-inch low-permeability layer because of the high potential for infiltration. (The permeability would be compromised by adding clay along with the roots of the vegetation going through the cap.) Mr. Eckman stated that the model shows zero percolation. Travis AFB will modify the cross-section, eliminate the 6-inch low-permeability layer, and allow 1 inch maximum percolation.

Ms. Raker asked when the Air Force will provide an updated design. Mr. Eckman stated that once the Air Force has concurrence that the cover is an acceptable solution, the design will be finalized, and a draft final report will be submitted.

Mr. Eckman asked how much interaction takes place within U.S. EPA's staff in developing test cells across the country. Mr. Lucey stated that the U.S. EPA has different research facilities. Based on the data, Potrero Hills and Kiefer Landfills are not ET caps; they have 4 feet of 10^{-6} permeability cap. There is a vegetation cover; but neither cap relies on ET to get rid of the moisture. The U.S. EPA wants confidence that the ET cap will work. Mr. Lucey stated that he will finalize his comments as soon as possible.

Mr. Malsberger will ensure that Mr. Lucey gets the latest design modifications (a modified cross-section).

Ms. Raker stated that the document that compares the different monitoring systems for Kiefer and Potrero Hills is a good start. However, additional data are needed, such as rooting depth for Potrero Hills.

Ms. Raker stated that the hydrology information for the trench was very good. Outstanding questions are where the water will go, what will be the impact downstream, and how sustainable is the 5 gallons

per minute (gpm) maximum trench flow. Mr. Malsberger and Ms. Raker will discuss these issues after today's meeting.

Ms. Raker asked what is the funding for the design. Mr. Malsberger stated that Travis AFB did not want to repeatedly redesign the cap and redo the design report. Travis AFB wants to get agreement on all issues before the draft final because there is only enough money for one design revision for the draft final and final.

Mr. Lucey stated that U.S. EPA's issues should be resolved if Travis AFB reruns the model to show the effects of the new cap configuration and if the cross-section is updated. Mr. Malsberger stated that the model will be rerun.

2. LF007 C Groundwater Remedial Design

Ms. Raker stated that she has reviewed the design but does not have any formal comments yet. She will review the conceptual model of the surface/groundwater interaction, steps to be taken so no drilling occurs during wet times when the vernal pools are full, and how the capture zone was determined. RWQCB is concerned with placing wells in the middle of a very wet area.

Ms. Raker stated that putting a well in the middle of an extremely wet area limits the amount of solvents that are going off base. Ms. Raker requested a conceptual cross-section with the vernal pools and extraction wells. Ms. Raker also questioned the capture zone and the assumptions used. Ms. Stanley stated that, because of the relatively flat gradient, there is a circular capture area. That is why the capture area should be adequate.

Ms. Raker asked if the first phase consists of installing monitoring wells. Mr. Malsberger stated that the two on-base extraction and the on-base monitoring wells will be installed first. The final phase will be to install two monitoring wells off base once access is obtained. (The off-base monitoring wells are part of the design for completeness.)

Ms. Raker stated that another assumption is that this is limited to an area where the cone penetrometer test (CPT) investigation was conducted during the remedial investigation (RI) but no source areas for these volatile organic compounds (VOCs) was identified. Mr. Malsberger stated that the assumed source area is disposal to the landfill or a small amount of surface dumping.

Ms. Raker asked what is the vertical gradient component at monitoring well (MW-) 125. Ms. Stanley stated that MW-125 is not part of a well pair that can used to estimate vertical gradients.

Ms. Raker requested more information on the estimated influent concentration to the North Groundwater Treatment Plant.

Ms. Raker asked for an update on the LF007 easement agreement. Mr. Brickeen stated that there is money in this fiscal year program to pursue the agreement.

Ms. Raker asked what will be the schedule that will allow the vernal pools to dry before the start of next year's construction. Mr. Brickeen stated that construction will occur in early summer, after the pools have dried.

Ms. Raker and Mr. Lucey stated that they will submit comments shortly.

B. West/Annexes/Basewide Operable Unit

1. Ecological Protection Technical Memorandum

Mr. Anderson stated that Travis AFB is scheduled to deliver the draft final to the agencies on 11 October 2001.

2. Language for Institutional Control and Skeet Range

Mr. Anderson stated the language for the institutional control and Skeet Range are outstanding issues for the West/Annexes/Basewide Operable Unit (WABOU) soil record of decision (ROD). Mr. Lucey will submit the language to the Air Force by next week.

3. Skeet Range

Mr. Anderson has given a copy of the revised Part I Declaration of the Soil ROD to the Air Force attorney, Ms. Lehigh, to review.

Mr. Lucey stated that he is concerned that the water board issued an order associated with the Skeet Range. Ms. Raker explained that it is not an order, but a requirement.

Ms. Raker asked whether or not U.S. EPA considers the Skeet Range a CERCLA site. Mr. Lucey stated that it is U.S. EPA's position that it is a CERCLA site.

Mr. Anderson stated that the Skeet Range is not an Installation Restoration Program (IRP) site because it is an active recreational facility. Any environmental work would be addressed by the compliance branch of the base environmental office. Discussion is taking place to remove the Skeet Range from the WABOU Soil ROD.

Ms. Raker stated that she received the analytical results from the first round of sampling conducted in June, and the concentrations of lead in all the samples were high. The RWQCB recommends that the vernal pools be rehabilitated by remediating quadrants of the pools in a phased approach to keep the vernal pools viable. The RWQCB is in the process of working out the procedure, and a formal request will be issued at a later date. The RWQCB will continue to request the use of steel shot, not lead shot.

Ms. Raker stated that once she receives the report from Mr. Holmes, who has the old evaluation of the vernal pools from Dr. Northern, she will write a report to be submitted to Mr. Bruce James.

Mr. Brickeen asked why no lead shot can be used at the Skeet Range if the base complies with the proposed changes. Ms. Raker stated that it is a continued source of lead in the vernal pool and there is a zero tolerance of lead. The barrier, which is viewed as an institutional control, does not ensure that the lead will not get into the vernal pools and the proposed angle of shot does not provide adequate control.

4. Soil ROD Schedule

Mr. Anderson stated that the third revision to the draft WABOU Soil ROD will be submitted to the regulatory agencies by 31 October 2001. An additional issue has arisen having to do with the soil cleanup level for RW013. During the internal review of the pre-draft RW013 Soil Design Package, the base learned that the previous residential and industrial soil cleanup values for uranium-235 were lower than its practical quantitation limit (PQL). In other words, there was a high probability that the base would not be able to verify that the cleanup levels were achieved during the remedial action. To select cleanup values that were higher than the PQL and were still protective of human health and the environment, the base used the RESRAD 6.0 computer model. This model is described in the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) and has been accepted by DOD, DOE, U.S. EPA and a number of other organizations. The remedial design for RW013 will include the results of the computer modeling that supports the revised cleanup levels.

3. CURRENT PROJECTS

A. South Base Boundary Groundwater Treatment Plant

1. Operational Status

Mr. Tom Sreenivasan reported that the South Base Boundary Groundwater Treatment Plant (SBBGWTP) performed at 100% uptime with approximately 3.4 million gallons of groundwater

extracted and treated during the month of September 2001. The average flow was 79.2 gpm. Approximately 3.1 pounds of VOCs were removed during September 2001. The total mass of VOCs removed since startup of the system is 154.1 pounds (see Attachment 3.)

2. SS029 Communication Problem

Starting the week of 17 September 2001, Travis AFB began implementing a well-by-well diagnosis strategy to identify the source of the telemetry system failures at SS029. The entire system was removed from the wellfield and reassembled in a remote location for testing. All system components operated without failure at this remote location, indicating that the problems lie somewhere in the SS029 wellfield. The next step will be to reinstall the control equipment well by well to determine which lengths of cable and wiring might be causing the problem.

Mr. Sreenivasan also stated that communication failures at SS029 are intermittent and typically result in individual well shutdown requiring manual restart.

3. Easement Agreement

Mr. Sreenivasan stated that there was a language issue on the easement agreement between the property owner and U.S. Army Corps of Engineers, regarding insurance deductibles. This issue has been resolved; however, it has resulted in a postponement of work until late spring or early summer of 2002.

4. FT005 Off-Base Construction

Mr. Sreenivasan distributed a handout illustrating the FT005 extraction system (see Attachment 4). Mr. Sreenivasan explained that the groundwater velocity is approximately 50 feet per year. Travis AFB projects 150 feet movement (southwest) by the time the work is started next year.

1,2-DCA is not effectively treated with carbon; therefore, while approval of the sequestering agent is pending, extraction well flow rates in FT005 must be decreased to ensure that the total concentration of 1,2-DCA in the plant influent does not exceed plant effluent limits. As a result, extraction wells 1 and 2 have been temporarily turned off. Once SS029 wells are back online Travis AFB will be able to restart treatment. A discussion of this will be included in the GSAP report.

Ms. Raker asked if a CPT investigation would be warranted since one has not been conducted since 1999. The Air Force responded that the

sequencing of the field work (sampling of boreholes) will be used to guide placement of extraction wells.

5. TPH-diesel Discharge

Mr. Sreenivasan reported that the total petroleum hydrocarbon as diesel (TPH-D) concentration in the effluent was 150 micrograms per liter (µg/L), which is in exceedance of the plant discharge limit of 50 µg/L. It is believe that this exceedance was the result of a broken seal on the sump pump. Approximately 1.5 quarts of oil may have been lost as a result of the broken seal. Upon discovery of the broken seal, the pump was immediately removed from the sump, all visible oil was absorbed, and a replacement sump pump was installed. The effluent and the midpoint between the two carbon vessels were resampled and TPH-D was not detected at either location. A report was sent to Ms. Raker via email.

Ms. Maco stated that a temporary lower capacity sump pump is being used and Travis AFB is investigating several different options for a long-term solution that would involve not placing a submersible pump with oil within the system. Mr. Brickeen commented that there are submersible pumps in all other plants and there has never been a problem.

Ms. Raker requested a technical memorandum stating Travis AFB's intentions of what will be done to resolve the problem. A letter from Ms. Raker will be submitted to the Travis AFB attorney.

6. Other

Ms. Raker stated that after reviewing the Air Force's analysis of substantive and procedural requirements within the operations and maintenance (O&M) manual, the RWQCB's management does not agree that the O&M manual is an enforceable document. The RWQCB's position is that they still hold to the letter written in May 2001, recommending that the Air Force apply for a permit or modify the interim records of decision (IRODs) to include/attach the entire requirements of Board Order 99-051.

Ms. Raker stated that RWQCB is pursuing permits at all bases that are performing groundwater treatment. Ms. Raker stated that Mr. Curtis Scott will be the point of contact on this issue.

Mr. Brickeen asked if the RWQCB will provide a response to the Air Force letter. Ms. Raker stated that this is her response and the Board will not provide a written reply.

Mr. Brickeen asked if the RWQCB will provide an interim approval of using a sequestering agent while this issue is being resolved. Ms. Raker stated that the RWQCB will not.

It was agreed that this issue should be turned over to the appropriate attorneys.

B. Central Groundwater Treatment Plant

Mr. Sreenivasan reported that the Central Groundwater Treatment Plant (CGWTP) performed at 98.1% uptime with approximately 3.8 million gallons of water extracted and treated in September 2001. The average flow for the CGWTP was 89.6 gpm for the month. Approximately 65 pounds of VOCs were treated during September 2001. The total mass of VOCs removed since startup of the system is 1,449 pounds (see Attachment 5).

Due to the low demand for irrigation water this month, only 38% of the treated water was used for irrigation. The remainder was diverted to the storm sewer. As of October 1, Travis AFB has reduced the length of time for irrigation.

Thermal Oxidizer Sampling Plan Review

Mr. Sreenivasan stated that Travis AFB is in the process of reviewing Mr. Lucey's response to comments on the thermal oxidizer sampling plan. (Ms. Raker has deferred her comments to California Department of Toxic Substances Control [DTSC].)

C. North Groundwater Treatment Plant

Mr. Sreenivasan reported that the North Groundwater Treatment Plant (NGWTP) performed at 92.7% uptime. From 1 September to 30 September 2001, approximately 24.7 pounds of VOCs were removed. Approximately 14.3 million gallons of water were extracted and treated. The average flow for the NGWTP was 32.5 gpm for the month of September. The total mass of VOCs removed since startup of the system is 134.4 pounds (see Attachment 6).

Mr. Sreenivasan reported that the project to transport and use treated water at the duck pond is proceeding. According to Mr. Al Elbeck of CES/CEO, a dig permit has been obtained by CES/CEO to lay pipe for the treated water from NGWTP to the duck pond and construction materials have been procured. The work has been projected to start during the last week in October. Contacts have been established between the CES/CEO project manager and the GTI project manager to work out the engineering details pertaining to the hook-up to the NGWTP. Ms. Raker stated that she does not need any additional information for the piping installation to the duck pond.

D. LF008 O&M Manual Review

Mr. Anderson stated that the Air Force has provided responses to the U.S. EPA comments on the draft LF008 Groundwater O&M manual.

E. DP039 Treatability Study Report

Mr. Anderson stated that U.S. EPA has concerns on the language used in the draft DP039 Treatability Study Report. Mr. Lucey will be submitting a response to the Air Force response.

F. DP039 Draft NAAW Review

Mr. Anderson stated that the draft final submittal will consist of changeout pages to update the document from draft to draft final.

G. GSAP

Mr. Brickeen stated that the sampling has been completed and the schedule for the GSAP report has been included in the document schedule.

Mr. Malsberger commented that the 5-year review is coming up and that the annual GSAP report is a feeder document. Mr. Malsberger asked that, if the agencies have examples of 5-year review documents, to please submit them to Air Force.

H. SS014

Mr. Wilford Day stated that because of the removal of groundwater in SD037, groundwater in Area G (Part of SS014) of the site has experienced the lowest water levels recorded in the last 2 years. Apparently this is allowing pockets of fuel to flow into monitoring wells in this location and especially to monitoring well MW02x14. The flow of fuel is up and is expected to continue. Currently, over 0.5 gallons a day of fuel are being recovered from MW02x14. This is expected to decrease once the rain returns.

4. PROGRAM ISSUES UPDATE

A. LTO and RD/RA Strategic Plans Review

Mr. Lucey stated that he will have comments on the Long-Term Operations (LTO) and Remedial Design/Remedial Action (RD/RA) Strategic Plans by the next RPM meeting.

B. FY02 Program

Mr. Brickeen distributed a handout titled “Travis AFB FY02 Project List” (see Attachment 7) which identifies the projects that are in the program for next

year. The budget totals approximately $3.2 million (GSAP requires 20% of budget).

Mr. Brickeen stated that headquarters mentioned concerns that there may be too much money in FY03 and not enough in FY04 and FY05. Also the shortage in FY05 may impact Travis AFB's NEWIOU high relative risk soil projects.

Other

- Ms. Raker asked if the water reuse plan will be updated and if it has been programmed. Mr. Brickeen stated that it has not been programmed and will have to be done internally.

- Mr. Brickeen announced the Restoration Advisory Board (RAB) dry run meeting will take place on 16 October 2001 at 0930.

- Ms. D'Lima asked if the security has increased around groundwater treatment plants. Mr. Brickeen stated that the Air Force is not particularly concerned. Processing plants do not supply drinking water and the placement of wells is close to restricted areas. The Air Force has increased security on access to the base and near the base boundaries.

- Mr. Brickeen stated that the Air Force will mitigate the wetlands at LF007 at the Burke property by creating new vernal pools.

C. Field Activity Reports

Mr. Brickeen distributed the field activity reports from CH2M HILL, URS, and GTI (see Attachments 8, 9, and 10).

D. 2002 Travis AFB Annual Meeting and Teleconference Schedule

The 2002 Travis AFB Annual Meeting and Teleconference Schedule has been included in these minutes for review (see Attachment 11)

ACTION ITEM LIST
(Action Item Closed)

AGENDA	RESPONSIBLE	ACTION ITEM	DUE DATE	STATUS
1.	Air Force	Check with Bob Holmes concerning the duration of the ecological survey.	Teleconference	Completed. **Item Closed.**

ACTION ITEM LIST
(Action Item Opened)

as of 10 October 2001

AGENDA	RESPONSIBLE	ACTION ITEM	DUE DATE	STATUS
1.	RWQCB	Follow up on the letter from the Air Force in response to the notice of violation.	Open	Pending
2.	DTSC	Submit "no comment" letters on the Treatment Plant Performance Monitoring Recommendations, WIOU NAAW, CAMU soil acceptance level technical memorandum, groundwater protection technical memorandum, and ST032 technical memorandum.	1/11/01	Pending
3.	All	Review DP039 data after the GSAP Annual Report is submitted	12/05/01	Pending. (Due date was changed from 24 October 2001 to 5 December 2001.)