

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

**9 October 2002, 0930 Hours**

Mr. Allen Brickeen, Travis Air Force Base (AFB), conducted the Remedial Program Managers (RPM) meeting held on 9 October 2002 at 0930 in Building 246, Upstairs Conference Room, Travis AFB, California. Attendees included:

- Allen Brickeen Travis AFB
- Glenn Anderson Travis AFB
- Dale Malsberger Travis AFB
- Wilford Day Travis AFB
- Tom Sreenivasan Travis AFB
- DeAnn Lehigh Travis AFB
- Roger Johnson Air Force Center for Environmental Excellence (AFCEE)
- John Lucey U.S. Environment Protection Agency (U.S. EPA)
- Elizabeth Allen TechLaw
- Jose Salcedo Department of Toxic Substances Control (DTSC)
- Sarah Raker Regional Water Quality Control Board (RWQCB)
- Wayne Williams CH2M Hill
- Ross Overby URS
- Elise Willmeth URS
- Brian Garber Shaw Engineering and Infrastructure (SE&I)

Handouts distributed throughout the meeting included:

- Attachment 1 Meeting Agenda
- Attachment 2 Master Meeting, Teleconference, and Document Schedules
- Attachment 3 Site Summary Sheets for Sets 1 through 3
- Attachment 4 NEWIOU ROD – Presentation of Set 4 Sites
- Attachment 5 U.S. EPA’s Memorandum – Region 9 PRGs Table 2002 Update
- Attachment 6 SBBGWTP Monthly Data Sheet
- Attachment 7 CGWTP Monthly Data Sheet
- Attachment 8 NGWTP Monthly Data Sheet
- Attachment 9 Travis AFB – CH2M Hill Field Activities (October – November 2002)
- Attachment 10 Shaw Field Activities, Travis AFB (October – November 2002)
- Attachment 11 URS Field Activities, Travis AFB (September 2002)

## **1. ADMINISTRATIVE**

### **A. Previous Meeting Minutes**

The 11 September 2002 meeting minutes were corrected, approved, and finalized.

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

The revised Travis AFB Master Meeting, Teleconference, and Document Schedules were distributed (see Attachment 2). This attachment supercedes the calendar that was distributed during the meeting.

#### **Master Meeting and Document Schedule**

- Page 1, North/East/West Industrial Operable Unit (NEWIOU) Soil/Sediment/Surface Water Record of Decision (ROD), URS point of contact was changed to Ross Overby.
- Page 3, LF007 Area C Remedial Design, LF007 C Groundwater, final due date was corrected to 1 October 2002.
- Page 3, LF007 Area C Off-Base Removal Action Work Plan, schedule was established.
- Page 4, RW013/LF044 Site Specific Removal Action Work Plan, response to comments meeting was changed to not applicable (NA); response to comments, draft final, and final due dates were changed to TBD (to be determined). ECC point of contact was changed to Christian Canon.
- Page 4, SD045 Site-Specific Removal Action Work Plan, ECC point of contact was changed to Christian Canon.
- Page 5, DP039 Treatability Study Report, response to comments meeting was changed to NA; response to comments and final due dates were changed to 4 October 2002.
- Page 5, Groundwater Sampling Analysis Plan, agency comments due date was changed to 11 December 2002. The response to comments and final due dates were changed to 13 January 2003.
- Page 6, LF008 Construction Quality Control Plan (CQCP) predraft to Air Force/Service Center, due date was changed to 15 November 2002 and comments are due 3 December 2002.
- The North Groundwater Treatment Plant Rev. 1 Operations and Maintenance (O&M) Manual, LF007 Corrective Action Management Unit (CAMU), and LF007 Work Plan were moved to the historical section.

## **2. OPERABLE UNIT UPDATE**

### **A. North/East/West/ Industrial Operable Unit**

#### **1. NEWIOU ROD Plan of Action and Milestone**

##### **ARAR Review**

Mr. Malsberger stated that Mr. Salcedo did not have comments and the Air Force is in the process of responding to U.S. EPA's comment.

Ms. Raker stated that Title 27, 20310 does not need to be included in the ROD.

##### **Sections 1 – 4 Review of the Draft ROD**

Mr. Malsberger asked for an update from U.S. EPA and DTSC.

Mr. Lucey stated that he should be able to provide the comments by the next RPM meeting (11 December 2002).

Mr. Salcedo stated that he received comments from Mr. Mike Anderson and will forward the comments to the Air Force by 11 October 2002.

##### **Table of PRGs**

Mr. Malsberger stated that the Air Force is in the process of reviewing the latest information on the preliminary remediation goal (PRG) table and will determine the impact of the changes. It appears that the industrial levels for lead and chromium have remained the same.

##### **SS015 Construction Interface**

Mr. Malsberger stated that the Air Force has a project being funded through Compliance to accomplish a removal action on the northern portion of SS015 as specified in the remedial design. The work effort is scheduled to be completed by early summer of 2003 to support the construction of a maintenance facility.

Ms. Raker asked if the project will impact areas that have tetrachloroethene (PCE) in the soil gas. According to the 1999 GSAP, there are elevated concentrations in the soil gas. Ms. Raker requested that the Air Force give a presentation on potential impacts to ensure that all aspects of groundwater and soil are being considered and not just lead/chromium. (Ms. Raker had previously submitted an email to Mr. Malsberger concerning this issue.)

Mr. Malsberger stated that he would review and address Ms. Raker's email.

## **Other – Vegetable Oil Study**

Ms. Raker also requested an update on the vegetable oil study results at SS015. Mr. Sreenivasan stated that additional testing will be conducted during the week of 7 October 2002. The study is showing promising results.

Mr. Sreenivasan stated that this is a five-year project and the project is now entering year two. Mr. Sreenivasan also stated that there are no quantitative results because of limited data.

Mr. Brickeen stated that new wells will be installed where appropriate to replace wells removed for the maintenance facility project and to provide data needed.

Mr. Lucey requested that the existing data be provided for the agencies to review. Mr. Sreenivasan stated that he would provide that information to the agencies.

## **Set 1 through 3 Sites Review**

Mr. Malsberger distributed site summary sheets for Sets 1 through 3 (see Attachment 3).

Mr. Malsberger asked the agencies for an update on their review of the Set 1 through 3 site summaries. Ms. Raker submitted additional comments on Sets 1 and 2 and does not have comments on Set 3.

Ms. Raker commented that the soil aspects of SD037 could be closed with land use controls, which will control exposure to soil, if groundwater is being actively captured and treated. The CERCLA process will continue to look at total petroleum hydrocarbon (TPH) that has not been adequately characterized.

Mr. Malsberger requested clarification about closing a site with land use controls.

Ms. Raker stated that no future soil remedial actions will be needed for TPH if land use controls are implemented. This concept could be expanded to other sites such as SD034 where there is product but groundwater extraction is being conducted.

Mr. Brickeen stated that the Air Force wants to avoid land use controls as much as possible. Ms. Raker stated that in order to close a site without land use controls, more sampling may be required.

Mr. Brickeen stated that increased construction is planned for the west side of the ramp area. The construction may take care of sites where additional sampling would be needed before the soil sites could be closed without land use controls.

Ms. Allen stated that the cleanup should be done as specified by the ROD; and site closure would be based on meeting the ROD requirements.

Mr. Brickeen stated that the land use controls would address both TPH that is managed outside the CERCLA process and solvents that are managed through the ROD. The Air Force will need a separate agreement for TPH site closures.

Mr. Salcedo asked how a site will be managed if contamination is excavated during construction, before the ROD is signed

Ms. Raker stated that the Soil Management Plan addresses the management of contaminated soil discovered during construction.

## **Set 2**

Mr. Malsberger asked if Mr. Salcedo had comments on the second set.

Mr. Salcedo agreed with the issues presented in the second set, and asked for confirmation of the absence of habitat. Mr. Salcedo requested a final eco-habitat finding for the sites.

## **Set 3**

Mr. Malsberger stated that there has been no feedback on Set 3.

Ms. Raker stated that she does not have comments; she agrees with the issues presented by the Air Force.

DTSC and U.S. EPA are still reviewing the set. Mr. Salcedo stated that he will need another two weeks. Mr. Lucey stated that he is still working on the review but will have the review completed by the next RPM meeting.

Ms. Lehigh reported that there is a proposal by U.S. Fish and Wildlife Service to designate all or a substantial portion of Travis AFB as critical habitat for vernal pools, crustaceans, and some plant life.

There is a possibility that Travis AFB could be designated a critical habitat by the U.S. Fish and Wildlife Service which is reviewing the base and its surroundings. The habitat designation would be based on the macro setting of the base and does not consider the industrial nature of many areas of the base.

Closing SS016 for soil may be difficult. TPH is not a driver; metals may complicate site closure.

SD034 may also be a candidate for land use controls on the soil.

Mr. Brickeen stated that the Air Force would like to complete actions to the extent land use controls are not required. The Air Force will look at the sites and assess trade-offs between actions needed to bring unconditional closure and closure with land use controls.

The Air Force cannot close sites until TPH and solvent contaminants are addressed.

Mr. Malsberger stated that Set 5 will be presented at the December RPM meeting.

#### **Set 4 Site Reviews**

Mr. Malsberger and Ms. Elise Willmeth presented the Set 4 Sites (see Attachment 4).

##### **FT002 (Fire Training Area 1)**

FT002 was used for fire training exercises from 1943 to 1950. Most contamination was attributed to runoff from the parking lots. Dormitories and parking lots present at the time of the remedial investigation have been removed. A grass area now occupies the site. No groundwater contaminants of concern (COCs) and media interactions are associated with FT002. The remedial investigation concluded that FT002 was not a groundwater site.

##### Selected Alternative and Rationale

No further action (NFA) for TPH (human health risk) because the area of contamination is small, less than 10% of the samples are above screening levels, and TPH will naturally attenuate.

NFA for metals that pose a risk to ecological receptors because the available habitat is low quality and in an active portion of the Base. The grounds are regularly mowed and maintained.

##### **FT003 (Fire Training Area 2)**

This site is an open field, part of which is covered by a concrete helicopter pad. It is regularly mowed. The site was used for fire training exercises from 1950 to 1952. Many metals were detected in groundwater at levels exceeding maximum contaminant levels (MCLs); however, because of the infrequency of detection, soil from FT003 was not considered a source of metals groundwater contamination. The remedial investigation concluded that FT003 was not a groundwater site.

##### Selected Alternative and Rationale

Excavation of PAHs and PCBs that pose a human health risk. Land use controls will be implemented if remaining PAHs, PCBs, or dioxins in soil are greater than residential PRGs.

NFA for arsenic because the maximum concentrations could be natural variations of background.

NFA for metals that pose a risk to ecological receptors because all reported concentrations could be natural variations of background.

NFA for TPH (human health risk) because the area of contamination is small, less than 20% of the samples are above screening levels, and TPH will naturally attenuate.

**FT004 (Fire Training Area 3)**

This site is an unused open field with less than 10% paved area. Fire training exercises were performed at this site from 1953 to 1962. VOC-contaminated groundwater is being addressed by five extraction wells that began operating in 2000. Numerous wetlands are located on this site.

Selected Alternative and Rationale

Excavation of dioxins that pose a risk to human health and ecological receptors. Land use controls will be implemented if remaining dioxins in soil are greater than residential PRGs.

NFA for metals that pose a risk to ecological receptors.

NFA for TPH (human health risk) because the area of contamination is small, less than 20% of the samples are above screening levels, and TPH will naturally attenuate.

**FT005 (Fire Training Area 4)**

This site is located in an area of Travis AFB that is inactive except for explosives detonations nearby. Historically, this site was used for fire training exercises from 1962 to 1987; possibly used for munitions storage prior to 1958. A 25,000-gallon aboveground storage tank was installed in 1976 to hold waste fuels. From 1990 to 1994, the northern portion of the area was used as a dump site for miscellaneous waste such as concrete, fencing, and street sweepings.

Selected Alternatives and Rationale

Excavation for PAHs that pose a risk to human health. Land use controls will be implemented if remaining PAHs, PCBs, and dioxins in soil are greater than residential PRGs.

NFA for metals because all concentrations reported (except for selenium) could be natural variations of background.

NFA for VOCs because exposure is unlikely.

NFA for TPH (human health risk) because it will naturally attenuate if it has not already. Additionally, some remaining TPH will be removed as a result of the proposed excavation of PAH-contaminated soil.

## **B. West/Annexes/Basewide Operable Unit**

### **1. ROD Dispute Status**

Mr. Anderson reported that the ROD dispute is officially over. The Air Force is in the process of updating the ROD to reflect the current status of supporting documents; no significant changes will be made. Mr. Anderson would like to meet with Ms. Lehigh and the regulatory agencies to discuss and update the ROD, incorporating changes that were made during the dispute period. In the process of incorporating resolutions into the ROD, other text has to be revised to reflect the current status of proposed actions that are now complete.

Mr. Anderson stated that Travis AFB will no longer have a land use control plan and there will be more details concerning land use controls in the ROD and the General Plan.

Mr. Lucey distributed a memorandum, which announced the update to the Region 9 PRGs table for 2002 (see Attachment 5). Mr. Lucey stated that the new PRGs have impacted the cleanup levels within the ROD. Since the ROD is not signed, the new cleanup levels should be incorporated into the ROD. Mr. Lucey stated that the Air Force should review the changes and determine if the changes impact the cost. If the impact is not significant, then change the numbers in the table in the ROD, otherwise state that the old numbers are protective.

Mr. Anderson stated that the change would impact the final remedial design packages. Mr. Brickeen stated that the Air Force would either change the tables or provide justification for leaving the numbers. Ms. Lehigh stated that the Air Force would need the RPMs to agree that the changes are insignificant if the previous values are used. This would require a risk management discussion in the ROD.

The ROD needs to be signed by the spring of 2003 to support remedial actions next summer.

## **3. CURRENT PROJECTS**

### **A. South Base Boundary Groundwater Treatment Plant**

Mr. Sreenivasan reported that the South Base Boundary Groundwater Treatment Plant (SBBGWTP) performed at 100% uptime with approximately 7.5 million gallons of groundwater extracted and treated during the month of September 2002. The average flow was 172 gallons per minute (gpm). Approximately 3.2 pounds of volatile organic compounds (VOCs) were removed during the month

of September. The total mass of VOCs removed since startup of the system is 185 pounds (see Attachment 6).

Chloromethane was detected at the effluent, although at a concentration an order of magnitude below discharge limits. Historically, chloromethane has not been a chemical of concern at SBBGTWP. The influent and effluent concentration will continue to be closely monitored to confirm that this month's detection was an isolated event.

A replacement sump pump was installed and is now fully operating. The pump is mounted at the surface and is air-cooled; thus eliminating the need for oil cooling as was required for the old submerged pump.

Communications between the SS029 well field and the SBBGTWP control system have continued without any interruptions since the replacement of the telemetry system.

## **B. Central Groundwater Treatment Plant**

Mr. Sreenivasan reported that the Central Groundwater Treatment Plant (CGWTP) performed at 99.1% uptime with approximately 3.5 million gallons of groundwater extracted and treated. The average flow for the CGWTP was 81 gpm during September 2002. Approximately 20 pounds of VOCs were removed during August 2002. The total mass of VOCs removed since startup of the system is 2,195 pounds (see Attachment 7).

Minor downtime occurred at the CGWTP and West Treatment Transfer Plant (WTTP) this month because of basewide power outages.

Approximately 48% or 1.65 million gallons of the 3.46 million gallons of treated water was used for irrigation this month. The remainder was discharged to the storm sewer.

The thermal oxidation (ThOx) system has been offline since 18 June 2002 as part of a rebound study. The ThOx wells were sampled this month for the first time since June 2002. A plan of action based on these results will be provided in the upcoming quarterly report.

Mr. Lucey asked if the SS016 Catox unit was still shut down. Mr. Sreenivasan stated the plant does not have a catalytic oxidation system, but the Air Force is waiting for analytical results to determine if the ThOx system will be turned on.

## **C. North Groundwater Treatment Plant**

Mr. Sreenivasan reported that the North Groundwater Treatment Plant (NGWTP) performed at 98% uptime with approximately 1.0 million gallons of groundwater extracted and treated during the month of September 2002. The average flow for the NGWTP was 24.0 gpm during September 2002. Approximately 474 pounds

of VOCs were removed during September 2002. The total mass of VOCs removed since startup of the system is 680 pounds (see Attachment 8).

The sequestering agent system that was installed at the NGWTP is functioning normally.

EW566x31, one of the wells at the NGWTP plumbed for soil vapor extraction (SVE) as well as groundwater, was brought online for SVE on 6 September 2002. A high water table had previously caused the well to extract too much water for the SVE knockout pot to remove, and thus had been left offline for vapor extraction until the water table lowered. Immediately after SVE began from EW566x31, a PID reading was taken at the influent, midpoint, and effluent of the vapor-phase granular activated carbon (VGAC) treatment system. Trichloroethene (TCE) was detected at 113 parts per million by volume (ppmv) at the influent sample location and non-detect (ND) at the midbed location and the effluent. Due to the fact that no vapor had been extracted from the well since the previous year, a high concentration spike was expected initially, with the concentration decreasing over time as the vapor continued to be extracted. On 9 September 2002, a PID reading was taken; resulting in an influent concentration of 246 ppmv and an effluent concentration of 100 ppmv was detected. The system was immediately shut down. The VGAC was profiled for waste disposal purposes and then replaced on 27 September 2002. The SVE system was restarted with an influent concentration of 342 ppmv. PID readings were taken on 30 September 2002, and the influent concentration was found to be 172 ppmv with the effluent at 3 ppmv. The extraction well EW566x31 was once again taken offline as it appears that the high TCE concentrations in soil vapor are not a temporary spike. The well will require an alternative technology for removal of VOCs because the use of VGAC does not appear to be cost or time effective. After taking EW566x31 offline, PID readings were taken again, and an inlet concentration of 15 ppmv was detected at the influent, with an effluent concentration of 2 ppmv.

URS is currently looking at various treatment alternatives to determine the most cost effective and efficient method for treating the high concentrations in soil vapor at EW566x31.

#### **D. FT005 Off-Base Interim Remedial Action**

Mr. Sreenivasan reported that of the 23 wells planned for this project, 21 have been drilled, installed, developed, and are in the process of being tested. The drilling of the last two wells, EW742x05 and EW736x05, began on Tuesday and should be completed by the end of the week. Well development and surface completions may continue into next week.

Mr. Salcedo asked when the pumps will be turned on the new extraction wells. Mr. Brickeen stated that the pumps will be turned on after the pipes have been installed next year.

Mr. Salcedo asked if this will result in the plume migrating further south. Mr. Sreenivasan stated most likely.

**E. LF007 Phase I and Area C Remedial Action**

Mr. Malsberger stated that an email with photographs was sent for review.

Mr. Brian Garber gave an update on the LF007 Phase I and Area C remedial action.

LF007 Soil Phase I

- The Air Force is preparing the site for the final survey.
- The final grade and compaction will be completed in a few days.
- 95% of the debris has been removed so far.
- Groundwater interceptor trench and infiltration system is complete.
- Vapor wells and two monitoring wells are in the process of being installed.
- The final survey will begin next Monday; compacting of the road will also be done Monday.
- LF007 C groundwater extraction/monitoring wells will be completed by the end of the day.
- Debris is being removed from Zone 3B areas. The project will be completed by the end of the month.

Mr. Malsberger stated that approximately 750 tons of concrete have been transported to Concrush and 10,000 pounds of scrap metal have been sent to DRMO for recycling.

**F. Wetlands Mitigation Area Trail Construction**

Mr. Malsberger stated that as part of the wetlands mitigation, Mr. Bob Holmes requested a nature trail around the wetlands. The trail, to be completed by next week, will be approximately 4,300 feet long.

**G. RW013 Remedial Action Work Plan**

Mr. Anderson stated that the draft final response to comments due date is to be determined. The Air Force is focusing on getting out in the field to conduct the remedial action by 21 October 2002. The schedule will be sent to the agencies once it is received from the remedial action contractor.

Mr. Brickeen stated that the bus tour for the performance-based contract contractors' will be on 21 October 2002, followed by a meeting at the Hilton on 22 October 2002 to answer questions. The Air Force requested that the agencies be present at the meeting to hear the types of questions being asked.

Mr. Anderson reported that the DP039 Dual-Phase Treatability Study Report has gone final.

#### **H. Restoration Advisory Board**

Mr. Sreenivasan stated that the Restoration Advisory Board (RAB) meeting will take place on 24 October 2002 at the Northern Solano County Association of Realtors building.

Mr. Salcedo will give a presentation on DTSC to the RAB.

#### **I. Work Plans**

Mr. Brickeen stated that the Air Force has considered the agencies' request to designate work plans as informational documents.

Mr. Lucey stated that according to the FFA, comments are required on primary and secondary documents. The only difference is that primary documents are disputable. The FFA also specifies what documents are considered primary and secondary.

Mr. Lucey suggested that documents be brought to the RPM meeting to have the agencies determine if they want to review the document. The decision can be recorded in the minutes.

Mr. Brickeen stated that waiting for the next RPM meeting could delay the work effort.

Mr. Lucey also stated that the Air Force could notify the agencies of the documents via email or teleconference in order to expedite the process.

### **4. PROGRAM ISSUES UPDATE**

#### **A. Field Activity Reports**

Mr. Brickeen distributed the field activity reports from CH2M Hill, Shaw, and URS (see Attachments 9, 10, and 11).

**ACTION ITEM LIST**  
**(Action Items Closed)**

<b>AGENDA</b>	<b>RESPONSIBLE</b>	<b>ACTION ITEM</b>	<b>DUE DATE</b>	<b>STATUS</b>
1.	Air Force	Check the status of the SWPPP revisions.	9-25-02	Mr. Malsberger stated that the SWPPP would be revised by December 2002. Completed. <b>Item Closed.</b>

**ACTION ITEM LIST**

**(Action Items Open)**

<b>AGENDA</b>	<b>RESPONSIBLE</b>	<b>ACTION ITEM</b>	<b>DUE DATE</b>	<b>STATUS</b>
1.	RWQCB	To provide the recommended changes to the Storm Water Pollution Prevention Plan (SWPPP).	9-25-02	Pending