

Publication of the Installation Restoration Program

Travis Air Force Base, California

October 2002

INSIDE

Viewpoint:

The Senior Executive Committee resolved the WABOU Soil ROD dispute on August 8, 2002...... 2

Contracting Strategies:

Travis and the Air Force are evaluating different ways to award cleanup contracts for effectiveness and cost reduc*tion*.....**3**

Clean-up Program Plays Key Role in Travis Development:

As the base grows and changes, the restoration program continues to provide environmental support......3

Completion of First Phase at LF007:

Phase 1 of the landfill cap project will be completed in *October*.....**4**

Offbase Plume Capture:

The installation of an extraction and monitoring system will help to contain the offbase groundwa*ter plume*.....**5**

New Co-chair Joins RAB:

Col. Michael Sevier joins the Restoration Advisory Board as the Air Force co-chair......6

New Flight Chief Named:

Troy Martinson becomes chief of the environmental flight for the 60th Civil Engineering Squadron......6

Next RAB Meeting:

The agenda and location are set for the next Restoration Advisory Board meeting, scheduled for October 24, 2002......7

Outlook for Travis in Fiscal Year 2003

What's Ahead Next Year?

By Bruce Oshita Air Mobility Command Action Officer

Wow! Another fiscal year is winding down and, unbelievably, another fiscal year (FY03) will be upon us. Since 14 August 2002, Travis engineers have been busy working on their program budgets and projects for FY03 funds. So what's ahead for Travis AFB next year?

The Record of Decision (ROD) for the West Annex Basewide Operable Unit is scheduled to be completed no later than March 2003. Ongoing discussions between the EPA, State of CA, and DOD, have ironed out the ROD dispute. Language is being revised in the ROD concerning land use controls and once all parties agree to the final version, the ROD will be signed and immediately proceed to final remedial design and site construction. All that said, the team's goal will be to remove contaminated soil from four sites on base and implement institutional controls at three other sites. Once construction starts, all nine sites should be finished within 9 months.

Construction at landfill site LF007 will continue next summer and will involve installing additional extraction wells to capture the off-base plume. In order for this work to be completed, an easement will have to be negotiated with a private landowner. In order to minimize any impacts on the scheduled construction, negotiations will start early in FY03.

The four Groundwater Treatment plants at Travis will continue to operate on the TCE groundwater plumes. This also includes



FY03 Future — With budgets finalized, remedial activities have been planned for the coming year. For example, at LF007, installation of new extraction wells will occur next summer.

sampling/testing in order to confirm that the plants are running properly and cleaning up the contamination. Two of these four operations are especially critical since these plants address plumes which have migrated off-base.

The base has also budgeted for community inputs with future newsletters and the continuance of Travis' Restoration Advisory Boards (RABs).

Travis' bottom line for FY03 is currently projected to be \$2.7 million dollars to execute clean-ups at 10 sites, operate ongoing pump/ treats at 4 plants, and conduct your RABs! Air Mobility Command, Travis staff, and the Air Force Center for Environmental Excellence have already started and will be ready once the funds come down. FY03 funds may become available as early as 14 October, 2002. Lead the Charge!

CELLATE Base, California Staff

Chief, Environmental Flight Troy Martinson, P.E. Chief, Environmental Restoration Allen Brickeen, P.E. 60th AMW Public Affairs Linda Weese

RAB Members

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The Guardian is a publication of the 60th Civil Engineer Squadron's Installation Restoration Program (IRP). The newsletter is designed to inform and educate the public about the base's ongoing environmental cleanup program. Contents expressed herein are not necessarily the official views of, or endorsed by, the U.S. Government, the Department of Defense, or the Department of the Air Force.

Additional information about the program can be obtained from the public website at http://www.travis.af.mil/pages/enviro. Questions and comments about the environmental cleanup program should be addressed to:

> Linda Weese 60th AMW Public Affairs 580 Hickam Ave., Bldg 246 Travis AFB, CA 94535-2176

WABOU Soil ROD Dispute Resolved



VIEWPOINT

COMMENTARY

The WABOU Soil ROD (ROD) dispute was resolved by the Senior Executive Committee (SEC) on August 8, 2002 and the parties are working out the details to implement the resolution. The SEC consists of one representative each from the Environmental Protection Agency (EPA), the California Department of Toxic Substance Control (DTSC) and the Air Force. The Regional Water Quality Control Board (RWQCB) was represented by DTSC in the dispute. The dispute resolution process is described in the Travis Air Force Base Federal Facilities Agreement (FFA), a legally binding agreement between the Air Force, EPA, DTSC and the RWQCB.

The FFA dispute resolution process designates decision making authority and has a strict schedule to resolve disputes quickly. The first step in the dispute process is an informal dispute at the staff level. If there is no resolution in the informal dispute it is elevated to a formal dispute at the Dispute Resolution Committee (DRC) level. If the DRC does not resolve the dispute within the specified time limit it is elevated to the SEC level. Now since the SEC has resolved the dispute, the ROD will be finalized after all three parties agree to new language concerning implementation of Land Use Controls (LUCs).

The ROD explains that Travis AFB decided to use industrial clean-up levels because it was the most cost effective alternative. Industrial clean-up levels allow higher levels of soil contamination to remain in the soil but LUCs are needed to restrict inappropriate land uses such as housing, day care centers and play areas for children. Alternatively, Travis AFB could use lower residential clean-up levels allowing unrestricted use and no LUCs. The ROD explains that after field work has started, Travis AFB will determine the additional cost to reach lower residential levels. Travis AFB may decide it is more cost effective to clean up to residential levels with no LUCs than to use industrial levels with LUCs.

There are ten sites addressed in the ROD. The Cypress Lakes Golf Course site (SS041) was previously cleaned up to residential levels and no LUCs are required. Five sites in the WABOU Soils ROD will require excavation of contaminated soil. Four sites are contaminated at levels between residential and industrial cleanup levels, therefore, soil excavation is not required but LUCs are needed because the levels are above the residential clean-up levels.

The ROD dispute was partially related to national issues regarding the implementation of LUCs at military facilities across the nation. Department of Defense (DOD) is working with EPA and State regulators to have consistent implementation of all remedies, including LUCs. LUCs can be complicated at closing military bases because properties will eventually be transferred to public or private entities. At open bases, such as Travis AFB, LUCs are simplified because the military has control over land use and development of sites on the base.

Industrial clean-up levels and LUCs were selected in the ROD because implementation is simple and cost effective,



(Photo by Al Brickeen)

Land Use Controls — A LUC at Landfill LF044 will limit access and protect the wetlands area.

Restoration Program Key to Travis Development

By Allen Brickeen Travis AFB Restoration Program Manager

Just as the Air Force is changing to adapt to its role in the defense of the nation, Travis is continually adapting to meet its changing role in providing air mobility for the Air Force. This generally involves demolishing, adding, changing or upgrading buildings and infrastructure to support the base needs. Contaminated restoration sites cover a large percentage of the base, especially in the industrial area. Inevitably that means that the base work interferes with the cleanup effort. Our goal is to clean-up the base contamination with minimal impact to the base mission. Many times that requires some innovative thinking by everyone involved.

In many cases, needed work can be done

with little impact to site clean-up. For instance, in cases where roads or parking lots are being repaired or replaced, the contamination has little impact on the road work. Usually the worst case in this situation would be if there were surface soil contamination in the area of the work and the workers would have to take precautions to protect themselves from the contamination and any excavated contaminated soil would have to be properly disposed of. In most cases, even this is not necessary. Work can generally be accomplished without affecting the contamination or planned clean-up.

In some extreme cases when new buildings are to be constructed on contaminated sites, special efforts must be taken. Buildings generally cannot be placed over contaminated soil because it would be impossible to later clean-up the soil without damaging the new building. In these cases the building may be relocated or the site cleaned up before the building is installed. If the site is to be cleaned up earlier than planned, the decision documents or funds are generally not available to support the work. Emergency documentation under the Removal Action Program can be prepared to expedite clean-up. Funds for the early clean-up are usually provided by the building construction project, but if they are not available there, funds are sought from other sources.

If the conflict is identified far enough in advance, steps can be taken to minimize the impact on the construction project. In a future edition of *The Guardian*, we will describe the process to ensure that we identify these conflict areas well in advance.

Cost-Saving Contracting Strategy to be Evaluated

By Allen Brickeen Travis AFB Restoration Program Manager

The Department of Defense (DoD) spends hundreds of million dollars each year on environmental clean-up. Because of limited Air Force manpower most of the money is awarded to environmental contractors who perform the work with DoD oversight. It will take several decades to complete the clean-up of all defense installation sites. The government continually looks for ways to reduce the multi-billion dollar price for complete and effective clean-up.

There are several ways to award cleanup contracts. One is through a "cost-plus" contract. Under this type of contract a contractor performs the work specified in a statement of work and is reimbursed for his expenses plus a reasonable profit.

Another mechanism is the firm-fixedprice contract. This type of contract provides a fixed fee to the contractor for work specified in a statement of work. It is used when the scope of work is very clear and there are few unknowns that can increase the cost unexpectedly.

Travis has used both types of contracts

in the past to successfully implement the clean-up program. Another type of contracting method that has been used successfully outside the Air Force is termed a performance-based contract. Under this type of contract the detailed scope of work that identifies exactly what and how the work is to be done is replaced with clearly defined objectives.

For instance, instead of saying "dig two holes in the ground two feet deep and four feet apart, place a 4-foot long pressure treated 4-by-4 in each hole, fill the hole with concrete and allow it to cure for two days, nail four 2-by-12 pressure treated boards to the posts using six 16-penny galvanized nails for each board", one would say under a performance-based contract to "prevent the soil from this hill from falling onto the sidewalk". The contractor could choose to build a wood retaining wall as described, he could build a concrete retaining wall, he could remove the hill or he could choose any other method of achieving the objective.

In most cases the contractor is able to draw on significantly more resources than are available to the Base and perform the work that meets the objectives at a lower cost.

Most performance-based contracts span several years. Under this longer time frame, a contractor can implement ideas in the first year that might cost more than would normally be available. By doing so he can realize significant cost savings in future years that offset the added initial cost.

Performance-based contracts that have been executed in the past have successfully reduced the cost to the government, increased the profit for the contractor, met all legal and regulatory requirements and resulted in effective environmental cleanup.

In 2003 Travis intends to use its first performance-based contract for environmental clean-up. "We anticipate that this contract will result in a significant savings to the tax-payer and faster clean-up of the sites involved." says Roger Johnson of the Air Force Center for Environmental Excellence.

Travis and the Air Force will evaluate the effectiveness of performance-based contracting at Travis and other bases and anticipate the expanded use of these types of contracts in the future.

SITES

Travis Completes First Phase of Landfill Project

By Dale Malsberger Travis AFB Restoration Staff

This October, Travis will complete Phase 1 of the landfill cap project at former base landfill #2 (LF007). This is a major step in cleaning up soil contamination. Although this project primarily

"Fortunately, Travis has been stockpiling excess clean soil from various projects at the base for the last seven years." Dale Malsberger

addresses the maintenance of the existing landfill cap, it also constructs the pad for the Corrective Action Management Unit, or CAMU. Starting next year, this CAMU will be used to safely consolidate and cap contaminated soil excavated from many sites throughout the base.

Why was maintenance necessary?

The former landfill #2 was active in the 1950s through the 1970s and covered approximately 73 acres. The landfill was a trench and cover type of operation and was used for disposal of municipal garbage, industrial wastes such as wood, glass, and construction debris, and small amounts of fuel sludges. In 1974, the landfill was closed and capped with native soil. Since 1974, the waste in the trenches has decomposed, resulting in subsidence trenches that collect and hold rainwater during the rainy season. Maintenance of the existing cap required filling and regrading these trenches to achieve good drainage. This work began last summer with a 3 acre area and will be completed this summer with the remaining 23 acres. In addition, there was some miscellaneous debris on the landfill which has been removed and properly disposed of.

The project required the hauling and placing approximately 120,000 cubic yards of soil. Fortunately, Travis has been stockpiling excess clean soil from various projects at the base for the last seven years. As a result, we did not have to purchase or import any soil to complete the project. In fact, we have soil remaining in our clean soil stockpile to use for the CAMU cap.

The elimination of subsidence trenches resulted in a loss of 2.1 acres of wetlands. Travis has already accomplished a project which constructed 2.2 acres of wetlands at another area on the base. This mitigation project complies with an executive order to achieve "no net loss" of wetlands at federal facilities.

Planning for the CAMU

The largest area where this maintenance occurred is in the middle of the landfill and covers approximately 20 acres. This regraded area will also serve as the pad for construction of the CAMU. A CAMU is a designated area that is designed to carry out a corrective action, such as the management of contaminated soil. Use of a CAMU will mean a large quantity of soil will not have to leave Travis, avoiding the transport of this soil by truck on major roads and highways, and extending the functional useful life of the off-base commercial landfill. The CAMU will result in significant cost-savings, which will allow Travis to complete our clean-up actions sooner. Travis has worked with the regulatory agencies to develop the CAMU concept at Travis and the details of the CAMU design.

One of the requirements of the CAMU is that the contaminated soil in the CAMU be a minimum of 5 feet above the underlying groundwater. The design for the CAMU incorporated an interceptor trench along the east side of the CAMU. The trench is buried 6 feet below the surface of the CAMU pad to intercept the natural flow of groundwater from the east and divert the groundwater to a low area to the south of the CAMU. The trench is made of gravel with a 6 inch diameter slotted pipe and is approximately 1000 feet long. The trench was installed as part of phase 1. Also included in phase 1 are two additional groundwater wells to monitor the quality of groundwater below the future CAMU and a perimeter of six gas monitoring probes to ensure methane gas will not migrate from below the future CAMU.

What Next?

Next summer, soil excavated from four sites in the West/Annexes/Basewide Operable Unitwill be consolidated into the CAMU and capped with an evapotranspiration cap. In 2005 and 2008, soils excavated from up to 18 sites in the North, East, and West Industrial Operable Unit will be added to the CAMU.



Slotted Pipe in Interceptor Trench — The pipe will be covered with gravel and wrapped with the black filter fabric. The filter fabric will screen the dirt out of incoming groundwater.

Offbase Plume Capture

Extraction and monitoring system contain contaminants migrating beyond easement

By Tom Sreenivasan Travis AFB Restoration Staff

Installing an extraction and monitoring system at the offbase portion of the South Base Boundary Groundwater Treatment Plant (SBBGWTP) will enable the Air Force to contain a contaminated groundwater plume and halt its migration, according to Tom Sreenivasan, remedial project manager for the site.

Groundwater contamination in the offbase portion of FT005 consists of relatively low concentrations of 1,2-dichloroethane. The contamination was first detected during the remedial investigation in 1995. Since the remedial investigation, three additional sampling efforts, conducted in Fall 1997, Fall 1998, and Spring 2002, have been undertaken to better define the extent of contamination in the area. With each additional investigation, and the passage of time and natural migration of groundwater, the size and shape of the contaminated groundwater plume has evolved. In 1995, the remedial investigation identified the contamination as extending perhaps 580 feet south of the base boundary. Recent sampling results indicate that the contamination now extends to Creed Road to the south, a distance of approximately half a mile, Sreenivasan said

Construction of the offbase interim remedial action at Site FT005 is now underway after years of investigation, planning, and negotiation. The IRA comprises a network of extraction and monitoring wells and conveyance of extracted groundwater to the existing SBBGWTP on Base for treatment. When in place, the system will serve to remediate the contaminated groundwater and prevent further migration of contaminants offbase.

As the understanding of the problem at FT005 has evolved, so has the design of



Offbase Plume Capture — Investigations of the FT005 plume have occurred in 1995, 1997, 1998, and 2002. With each additional investigation, the size and shape of the plume has increased. The installation of a new extraction and monitoring system is expected to help contain the plume.

the system to remediate it. The original design for the FT005 offbase extraction system was prepared in the Fall of 2000 and consisted of an onbase extraction system, an offbase extraction system, and improvements to the SBBGWTP. The onbase extraction system and SBBGWTP upgrades were completed in 2000; however, construction of the offbase system was delayed pending finalization of the land access agreement between the Air Force and the offbase landowner.

SITES

By Spring 2002, the access agreement had been finalized and work at the offbase portion of FT005 began. The first task was to perform additional groundwater sampling to assess whether the extent of contamination had changed significantly since the last data were collected in 1999. Groundwater samples collected in May and June of this year confirmed suspicions that the plume had migrated. As a result, the extraction system design was revised to include a total of 8 extraction wells and 15 monitoring wells (compared with 4 extraction wells and 7 monitoring wells in the original design).

Installation of the extraction and monitoring wells is ongoing and expected to be complete in early October. During the rainy season, the wells will be sampled and additional data will be collected. Installation of conveyance, electrical, and controls systems and startup of the offbase system are planned for Spring 2003.

New Co-chair Joins RAB

By Linda Weese 60 AMW Public Affairs

Col. Michael Sevier will join the Restoration Advisory Board as the Air Force co-chair at its Oct. 24 meeting.

Sevier is no stranger to Travis. From 1994 to 1996, he worked for the operations group and also served as the deputy commander for the support group.

Sevier is the vice commander of the 60th Air Mobility Wing at Travis Air Force Base and the chairperson of the base's Environmental Protection Committee.

"I'm glad to be back and looking forward to being more deeply involved in our restoration programs," Sevier said. "Taking care of Travis AFB in a way that minimizes negative impacts on the environment while concurrently accomplishing our mission is the right thing to do.

"During my first few months, I will be reviewing past environmental issues and getting up to speed on current issues and concerns that impact Travis. I will attack the most environmentally threatening issues first and remain aggressive toward the remediation of other sites," he said. "Being good stewards of the environment, Team Travis will continue to be up front about what we find, what clean-up measures we will take, and avoid practices that could lead to sites that will effect future generations. The environment is every ones responsibility. We will continue our aggressive recycling program and encourage every Travis Team member to be active participants," said Sevier.

As vice commander of the 60th AMW, he serves as the assistant to the commander for leadership in Air Mobility Commands largest air mobility wing, supporting 23,763 active duty, Reserve and civilian personnel and their families. He is responsible for leading the wing in the commander's absence.

Before assuming his current position at Travis in August, Sevier was the director for the Programs and Resources Directorate at Headquarters, U.S. Southern Command, Miami, Florida.

The California native graduated from the U.S. Air Force Academy in 1976. He also received a master's degree in administration from Central Michigan University.



New RAB Co-chair — Col. Michael Sevier will join the RAB as the Air Force co-chair.

Sevier completed undergraduate pilot training at the former Williams Air Force Base, Arizona. He is a C-5 command pilot with over 3,700 hours in the C-5, C-130, CT-39, T-37 and T-38 aircraft.

His awards and decorations include the Defense Superior Service Medal, Legion of Merit, Defense Meritorious Service Medal, Meritorious Service Medal with four oak leaf clusters and the Air Force Commendation Medal.

Outgoing Air Force co-chair, Col. Jan Swickard, is now the commander of the Air Force Mobility Operations Control Center in Ramstein, Germany.

Environmental Flight gets New Chief

By Linda Weese 60 AMW Public Affairs



New Flight Chief — In August, Troy Martinson became Chief of Environmental Flight.

There is a new environmental leader at the helm.

In August, Troy Martinson was given the opportunity to be chief of the environmental flight for the 60th Civil Engineering Squadron. As the environmental flight chief, Martinson is responsible for the oversight of Travis compliance, pollution prevention, conservation and restoration programs.

Before coming to Travis, Martinson was Chief of Engineering at Dobbins Air Reserve Base, GA. Martinson has been a member of the 60th CES since October 2001.

He was a design chief in the Engineering Flight; responsible for one of two cradle-to-grave project management teams.

"Martinson was brought over to the environmental flight because we needed greater emphasis on project management for environmental programs to ensure that Travis is preparing for the future", Lt. Col. Patrick Smith, commander of the civil engineering squadron said. "Martinson will be re-engineering our environmental planning process, so that we can accomplish more of our requirements in-house versus contracting out projects, saving between \$30,000 and \$60,000 a year."

"My immediate goals are to support the Base Civil Engineer, the base and its mission," Martinson said. "I am excited to be given the opportunity to learn the environmental management side of our business. I hope to provide more organization and direction to our environmental programs with emphasis on compliance and pollution prevention."

"The environmental flight has recently created a programming and planning section, which will enable us to get a better handle on planning and budgeting for our years programs. This new section will also keep track of all upcoming construction projects and programs to ensure that the impact analysis process is completed, before base contracts are awarded," said Martinson. **RAB MEETING**



6:30 - 7:00 p.m. Poster Session:

The poster session allows RAB and community members to view posterboards about ongoing Travis AFB restoration program activities. It also allows the public the opportunity to discuss the program with the Travis AFB environmental restoration staff on a one-toone basis.

7:00 - 9:00 p.m. RAB General Meeting

- I. Welcome and Introductions
- II. Approval of Minutes
- III. Additional Agenda Items and Questions

IV. Discussion Topics

- Budget Update
- Future Contracting Strategy

Break

V. Cleanup Program Status

- West/Annexes/Basewide Operable Unit Soil Record Decision
- RWQCB Orientation
- RW013 Remedial Action
- LF044 Remedial Action
- VI. Regulatory Agency Reports
- VII. Focus Group Reports
- **VIII. RAB/Public Questions**
- IX. Set Time and Place for Next RAB Meeting
- X. Set Focus Group Meeting Times

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510 Travis Boulevard

Travis AFB, CA 94535

Monday-Thursday: 10 a.m. -

Friday: 10 a.m. - 6 p.m.

Sunday: 12 p.m. - 6 p.m.

Saturday: Closed

(707) 424-3279

9 p.m.

Printed on vecycled paper

Signs will be posted to warn people of potential hazards. Several sites will have fences to limit access. Landfill X (LF044) will have a soil berm and fence to protect a wetlands portion of the site. Travis AFB will periodically monitor the LUCs to ensure they are operational and brief status reports will be provided to the regulatory agencies and the public. LUCs are an important part of the soil clean up actions in the ROD and they will help ensure that these sites are used safely in the future.

compared with other remedial alternatives. LUCs include changes to the Travis AFB General Plan, used to coordinate activities related to land use and development at Travis AFB. The existing digging permit system will be used to ensure contaminated soil is not removed from the site and used elsewhere on the base. A map will be prepared showing the location of sites and the type of LUCs. Workers will be informed of safety issues.

Travis AFB Restoration Advisory Board Meeting

October 24, 2002 7 p.m.

Northern Solano County Association of Realtors 3690 Hilborn Rd Fairfield, CA

Vacaville Public Library

1020 Ulatis Drive

(707) 449-6290

9 p.m.

5 p.m.

Vacaville, CA 95688

Monday-Thursday: 10 a.m. -

Friday-Saturday: 10 a.m. -

Sunday: 1 p.m. - 5 p.m.



Fairfield-Suisun Com. Library Mitchell Memorial Library



LOCATION OF INFORMATION REPOSITORIES

Monday-Thursday: 10 a.m. -

Friday-Saturday: 10 a.m. -

Sunday: 1 p.m. - 5 p.m.

1150 Kentucky Street

Fairfield, CA 94533

(707) 421-6500

9 p.m.

5 p.m.



From page 2