Guardian

America's First Choice for Environmental Restoration

A Publication of the Environmental Restoration Program | Travis Air Force Base, California | April 2011

Inside

NOTICE

Remedy selection is a long and detailed process, but one of the most important tasks in this process is the solicitation of public comments on the proposed remedies. In other words, we want to know what you think about them. To ensure that you can learn about and comment on these potential actions, Travis AFB will publish a ***Proposed Plan*** *in October 2011. The Plan will describe each proposed remedy and offer several ways to get your comments to the base. Your participation will help Travis AFB to pick the best solutions to its environmental challenges.*

(Photo by Glenn Anderson)

Site Inspection: Travis AFB and the U.S. Environmental Protection Agency representatives inspect one of 18 groundwater sites where interim cleanup is taking place. Along with two California environmental departments, they are working to select final cleanup remedies that will lead to site closure.

Road to the Final ROD

The Selection of Groundwater Cleanup Remedies has Begun

By Glenn Anderson
Travis Environmental Project Manager

For some, March Madness is the absolute highlight of the year in sports. If you are not a sports enthusiast, March Madness is the nickname for the last basketball tournament that is sponsored by the National Collegiate Athletic Association (NCAA). It is a single elimination tournament that attracts the best men's and women's team across the country.

Conceptually, this tournament is simple. If a team wins its game, it gets to play in the next game; if it loses, their season is over and the team goes home. Eventually, the last two teams standing play for the title of National Champion. The tournament offers a simple process of eliminating the weaker teams and pitting the best teams against each other to find out which team is the best. This process of elimination is filled with drama and excitement, which explains its popularity.

The process to select the best technologies to clean up contaminated groundwater is not dramatic or exciting, but it is very effective. It was developed by the U.S. Environmental Protection Agency and considers technical merits, costs, and community/state interests. At the end of this process, the best technology is selected as the best cleanup remedy, and it is described in detail in a legally-binding document known as a **Record of Decision** (ROD). Currently, the remedy selection process is expected to be complete by June 2012.

The first step in this process evaluates the technical merits and costs of each potential remedy in a **Feasibility Study**. The result of

See **ROAD** page 3

Guardian
Travis Air Force Base, California

The *Guardian* is published by the 60th Civil Engineer Squadron's Environmental Restoration Program. 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 web site at *http://www.travis.af.mil/enviro*. Questions and comments about the program may be sent to this address:

Merrie Schilter-Lowe
60th AMW Public Affairs
400 Brennan Circle
Travis AFB, CA 94535
(707) 424-2011
merrie.schilterlowe@us.af.mil

Questions and comments about the environmental web site may be sent to:

enviropa@travis.af.mil

Collaboration for Closure

VIEWPOINT

Mark H. Smith
Travis AFB Remedial Program Manager

We've been asked to refocus our cleanup effort…let me explain: Last month, the Travis Environmental Restoration Staff attended the 2011 Air Force "Restoration and Technology Transfer Workshop" in San Antonio, TX. This workshop presented the latest technical and scientific information for effective site cleanups and closures as well as the most recent government policies and guidelines. It was a gathering of the leading cleanup experts and professionals from the military, private industry, academia, and state and federal regulatory agencies.

The theme of the workshop was "Collaboration for Closure," which reflects a new Air Force cleanup policy. Previously, the focus was on working with our regulatory agencies and other interested parties to select appropriate cleanup remedies for our restoration sites and get these remedies in place and working by the end of next year. Our mantra was "Remedy in Place by 2012," or "RIP by Twenty Twelve!"

At the workshop, we learned that the new focus is even more aggressive. It came from the office of the Assistant Secretary of the Air Force for Installations, Environment and Logistics in Washington, D.C. It tasks all Restoration Program Managers to look beyond the remedies and to plan for the closure of these sites. Seems like common sense and you might ask me why we weren't thinking site closure in our current strategies. Well, we are. We've just been focused on green sustainable remediation (GSR) in an effort to keep energy costs and consumption low while still heading towards site closure.

Why the change? There are several reasons for this, but the projected cost of the Air Force Restoration Program is the most important. Since time is money, we are now to compare GSR to more aggressive cleanup methods and determine which has the lowest cost to reach site closure. It is no secret that the federal government needs to do everything that it can to get its work done while reining in costs. When Air Force leaders looked at the future budgeting requirements associated with the operation and maintenance of treatment systems at its installations, they decided to make a policy change now to avoid escalating costs in the future. Since the future cost of a closed site is $0, it makes sense to try to close as many sites as possible.

To effectively close sites and meet the objectives of this new policy, the workshop emphasized the use of Performance-based Contracts (PBC). Unlike most contracts that describe the actions that the contractor must complete, the PBC describes the end result, and the contractors use their best technical and cost management approach to achieve that end result.

For example, suppose you are building a new warehouse, but a boulder lies in the middle of the construction site, and you want it removed. Using a traditional approach and contract, you hire a firm to break it up into little pieces and truck them off the base. The bids you receive to do the job range from $500,000 to $700,000, and you would pick the lowest bidder.

However, with a PBC, prospective contractors are told that the boulder has to be cleared from the construction site, and they present their best approach to make it happen. One contractor proposes to freeze the boulder and break it up with one blow from a big hammer ($440,000). Another one states that acid can be used to melt the boulder away in a month ($380,000). A third contractor offers to dig a huge hole next to the boulder, roll it into the hole, and cover it up with soil ($290,000).

In this hypothetical scenario, regardless of who wins the contract, the government ends up paying less money to accomplish the task. At this point, subject matter experts are brought in to evaluate the technical merits of all three proposals, and the contractor is selected, based on both technical and cost considerations.

How will this policy change affect the Travis AFB Environmental Restoration Program? Over the next few years, it will not change much. We have been operating under two PBCs since 2008 and have made significant progress in cleaning up our soil, sediment and groundwater sites. Our sediment work is finished, we have one more large soil cleanup scheduled for this summer, and the Travis Team of regulators, contractors and support staff is

See **VIEWPOINT** page 3

Road

■ From page 1

this study is a list of preferred remedies that have a high potential for getting the job done. The second step presents these preferred remedies as proposed actions to interested community members in a **Proposed Plan**, and the public has the opportunity to ask questions and provide feedback on these proposals. The last step selects these remedies in a ROD. The ROD is approved and signed by upper level managers within the Air Force and federal and State of California environmental regulatory agencies.

It is a stretch to compare remedy selection to a high-energy sports tournament, but there are similarities. At the start, all potential cleanup technologies are considered, but only the ones with a chance of being successful are invited to a more detailed technology and cost evaluation. Some technologies are tested under actual field conditions to demonstrate their abilities and to collect cost information. This information is then used to either support the use of a technology or eliminate it from consideration. The ones that make the cut are compared to each other, using nine standards to select the best available technologies. Both competitions take place in full view of the public, and the selected cleanup strategies are considered the "best in the field."

As Travis AFB proceeds along the road to the final ROD, progress reports will be published in this newsletter and will be uploaded to the Travis AFB environmental website. If you have any questions concerning remedy selection (or want to put in a plug for your favorite cleanup technology), please click the feedback link on the right side of the website, shown at the bottom of page 1 of this newsletter.

Viewpoint

■ From page 2

well on its way to select the best cleanup solutions for 18 groundwater sites.

In the future, this policy may present some opportunities to speed up the completion of a remedy or close a challenging site. But for now, I intend to continue business as usual and clean up in an environmentally friendly manner.

So, which contractor would you have chosen? Hint: the cheapest is not always the best. Visit the Travis environmental public website and click on the feedback link to let us know what you think.

Damp Days of Summer 2011

By Lonnie Duke
Travis Environmental Project Manager

Most people will remember the winter of 2010-2011 as being one of the wettest winters on record. Wave after wave of storm clouds traveled across Solano County, bringing with them high winds and sheets of rain. If you are a farmer or a water purveyor in northern California, this has been a great year.

For the rest of us, blue skies and warm temperatures cannot come fast enough. Gardens need planting, and spring cleaning will be a welcome chore. And for the Travis AFB Environmental Restoration Branch, there is a summer construction season to plan and carry out.

Fortunately, this year's field activities will not be as extensive as those from last year. Even after the rains started in 2010, field crews were still able to complete their tasks at sites that are covered with asphalt and concrete. The October 2010 edition of the Guardian described in detail several biology-based treatment strategies for the cleanup of solvent contamination, such as the bioreactor and the injection of emulsified vegetable oil, that were put into place last year and are being tested at a number of groundwater sites. The analytical data from these field activities will be used to support the selection of final groundwater cleanup actions, as described in page 1 of this newsletter.

However, the 2011 summer construction season may prove to be more difficult to coordinate, thanks to the amount of rain that we have received. The clay-rich soil underneath Travis AFB is completely soaked, and it will be a while before the soil is dry enough to support a drill rig, or even a utility truck. Even if the summer sun is shining and the first foot of top soil is dry, a heavy vehicle can still end up sunk down to its axles in mud if it breaks through the dry soil crust and the deeper wet soil squeezes around the tires.

Here is a summary of the field work that will take place this summer once the rains stop and the dry delta breezes get the fields ready for action:

Soil Cleanup: Travis AFB has completed soil cleanup actions at all but one site. The last soil site is a former fire training area on the southern side of the base. Last year, a data gap investigation identified the presence of buried construction debris and the distribution of contaminants at the site. The investigation also discovered the presence of fuel constituents in the deeper soil layers. The soil cleanup action will consist of soil excavation and off-base disposal in an appropriate landfill. Every attempt will be made to segregate the construction debris (asphalt and concrete) and send it to a recycler for reuse. This will reduce the amount of contaminated soil that has to be transported to a landfill. Once complete, the Travis AFB soil cleanup program will be finished.

Groundwater Investigation: When contaminated groundwater moves beyond the base boundary, the field work for its investigation and mitigation becomes complicated. Throw in a protected wetland habitat, and the task becomes a significant challenge. That is the background behind a solvent plume that originated from a closed landfill in the northern part of the base. A groundwater extraction and treatment system is cleaning up the portion of the plume that is beneath base property, but field work is needed to identify the off-base extent of groundwater contamination and determine whether an off-base extraction system is needed. Since the groundwater plume is directly below a seasonal wetland, the base is coordinating field activities with the U.S. Fish and Wildlife Service (USF&WS) to ensure that the health of the wetland is protected.

Well Repairs and Removals: One off-base pump needs to be replaced as soon as the soil dries out enough to support heavy equipment. Also, several older monitoring wells near the flight line need to be decommissioned, because they violate federal height restrictions.

Groundwater Sampling: All of the biology-based treatment systems that were installed at a number of sites last year need to be monitored to ensure that they are operating properly and successfully. This effort takes a large field crew and a lot of man-hours.

Compliance Restoration Program: This is a new environmental program that focuses primarily on old Oil/Water Separators to determine if cleanup actions are required. Initial investigative work is scheduled for this year.

Regardless of when the 2011 construction season starts, the long-term forecast calls for lots of work. Again!

Meeting Agenda

6:30 - 7:00 p.m. Open Forum:

The open forum allows RAB and community members to discuss ongoing Travis AFB restoration program activities with the Travis AFB environmental staff on a one-to-one 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**
- The Road To ROD
- MTBE Cleanup

Break

V. **Cleanup Program Status**
- Collaboration for Closure

VI. **Regulatory Agency Reports**

VII. **Focus Group Reports**

VIII. **RAB/Public Questions**

IX. **Set Time and Place for Next RAB Meeting**

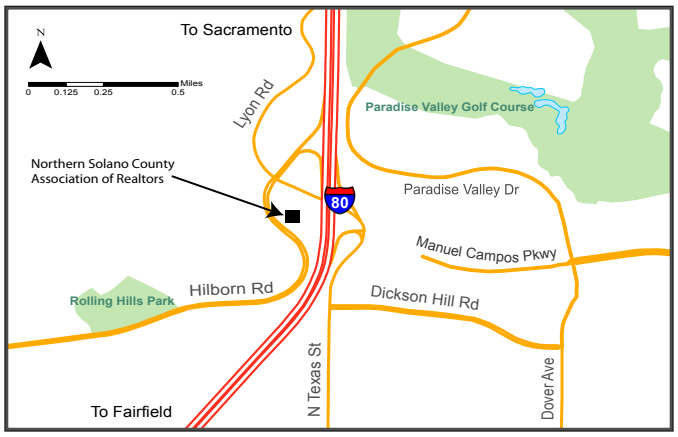
X. **Set Focus Group Meeting Times**

Adjourn

Travis AFB Restoration Advisory Board Meeting

April 21, 2011
7 p.m.

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



Location of Information Repositories

Vacaville Public Library
1020 Ulatis Drive
Vacaville, CA 95688

(707) 449-6290

Monday-Thursday: 10 a.m. - 9 p.m.
Friday-Saturday: 10 a.m. - 5 p.m.
Sunday: 1 p.m. - 5 p.m.

Fairfield-Suisun Com. Library
1150 Kentucky Street
Fairfield, CA 94533

(707) 421-6500

Monday-Thursday: 10 a.m. - 9 p.m.
Friday-Saturday: 10 a.m. - 5 p.m.
Sunday: 1 p.m. - 5 p.m.

Mitchell Memorial Library
510 Travis Boulevard
Travis AFB, CA 94535

(707) 424-3279

Monday-Thursday: 10 a.m. - 9 p.m.
Friday: Closed
Saturday: 12 p.m. - 6 p.m.
Sunday: 12 p.m. - 6 p.m.

Printed on recycled paper

If you would like more information or need special accommodations for the RAB meeting, please contact Mark Smith, (707) 424-3062. You can also view our web site at http://www.travis.af.mil/enviro

For more information about Travis AFB's restoration program, please contact:

Mark Smith
Restoration Program Manager
Travis AFB
(707) 424-3062
mark.smith.6@us.af.mil

Marcus Simpson
Public Participation Specialist
Cal EPA/DTSC
(916) 255-6683
(866) 495-5651
msimpson@dtsc.ca.gov

David Cooper
Community Involvement
Coordinator, U.S. EPA
(415) 972-3245
(800) 231-3075
cooper.david@epa.gov

Community Relations
60 CES/CEANR (Environmental Restoration)
411 Airmen Drive, Building 570
Travis AFB, CA 94535-2001
(707) 424-4359