



Guardian

America's ~~First~~ Choice for Environmental Restoration

A Publication of the Environmental Restoration Program

Travis Air Force Base, California

July 2017

Award-Winning

INSIDE

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The Travis AFB Restoration Program Manager has been on the job for over a year, a period that has been filled with a lot of field work and professional recognition. He reflects on recent accomplishments in the field and a significant write-up in a prestigious environmental journal..... **2**

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Editor's Corner

It has been over six months since we learned that Travis AFB won the General Thomas D. White Award for Environmental Restoration, the highest honor that the Air Force can bestow on a restoration program (the General's photo is shown above). We are slowly getting back to typical cleanup topics that may interest long-time Guardian readers, but we are keeping a few of the balloons around as a reminder of the significance of this achievement.

Are we giving you enough information about the cleanup of past contamination on Travis AFB? Please send your thoughts on this matter in a message via the environmental public affairs e-mail account:

EnviroPA@us.af.mil.



(Photo by Angel Santiago)

Getting the Lead Out: Heavy equipment operators excavate soil at a former skeet range that is contaminated with lead and polycyclic aromatic hydrocarbons. Once laboratory analyses of soil samples show that cleanup levels were achieved, the excavations will be backfilled with clean soil.

Deplete the Skeet

Cleanup of Skeet Range Tops
2017 Summer Field Schedule

By Glenn Anderson

Travis Environmental Project Manager

One of the highlights of the 2017 construction season at Travis AFB is the cleanup of contaminated soil at an old skeet range. A skeet range on the western side of the base provided recreation for military members in the past, but it resulted in the deposition of lead (from lead shot) and polycyclic aromatic hydrocarbons (PAHs) (from clay pigeons) into surface soil. The selected remedy for this contamination is excavation and off-base placement in

an approved landfill.

The basic approach for this type of cleanup strategy is fairly simple. The field team establishes a work zone around the site to limit site access to qualified personnel. Access points are established to allow workers and vehicles to enter and exit the work zone. Contaminated areas within the work zone are marked to show the excavator operator where to dig. The excavator scrapes up the contaminated soil and places it in temporary soil piles that are later transferred by truck to an off-base landfill. Confirmation soil samples are collected from the excavation void

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Visit our Environmental Program web site at <http://www.travis.af.mil/About-Us/Environment>



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The *Guardian* is published by the Air Force Civil Engineer Center's Western Region Restoration Support Team, located at Travis Air Force Base. The newsletter is designed to inform and educate the public about the ongoing environmental cleanup program at Travis Air Force Base. 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:

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My First Year in Perspective

Well, it's official. Time does fly when you are having fun. It has been almost a year since I took over the role of Travis AFB Environmental Restoration Program Manager, and it has been enjoyable to watch the progress that we are making in reaching cleanup standards and closing sites.

I admit that I am still feeling the afterglow of winning the General Thomas D. White Award for Environmental Restoration for having the best restoration program in the Air Force. I am sure the balloons throughout our last newsletter gave that away! It was a team effort and represents years of planning and field work by some of the top environmental scientists and engineers in the country. It also represents the commitment by Air Force leadership to use limited resources to promote a safe working environment for its employees and contractors. This commitment comes to mind every time that I see the General White trophy, which is prominently displayed in our conference room.

A key aspect of the Travis restoration program is the use of biology-based technologies to speed up groundwater cleanups. The microbes beneath the base do an amazing job of breaking down contaminants when they are given the proper living conditions! Over the last year, we have been testing several methods of improving the efficiency of these technologies and increasing the size of treatment areas. If successful, the results of these tests could be used to expand the underground areas where contaminant breakdown takes place, reduce overall costs by minimizing the amount of infrastructure needed to carry out groundwater cleanup, and complete cleanup actions sooner. It is still too early to evaluate the success of these tests, but I hope to report on them over the next couple of years.

Of course, these successes have



VIEWPOINT

Lonnie A. Duke
 Travis AFB Restoration
 Program Manager

not gone unnoticed. A research article on the Travis AFB cleanup approach was recently published in *Remediation: The Journal of Environmental Cleanup Costs, Technologies, & Techniques*. It is rare for an entire cleanup program at an active military installation to be showcased in a professional journal in this manner, even though it is a natural outcome of an award-winning team effort. Would you like to read what the scientific community is saying about America's Award-Winning Choice for Environmental Restoration? You can find an electronic copy of the Remediation Journal article in the Wiley Online Library, using the following link: <http://onlinelibrary.wiley.com/doi/10.1002/rem.21514/full>.

Finally, we would not have received these awards and accolades without the hard work and dedication of our field engineers who turn our plans into successful actions. The 2017 summer construction season is ramping up to take advantage of the longer days and dry weather, and I look forward to showing our accomplishments to our Restoration Advisory Board members during our autumn base tour on October 19th.

Even though this will be a busy summer, I am not sure that it will match what we accomplished last year. The 2016 field team drilled 138 soil borings, of which 9 were converted to monitoring or injection wells. If you place those 138 borings end upon end, the total drilling footage is 1,659.5 feet. That is more than the total height of the Empire State Building (1,454 feet) but not enough to reach the top of the One World Trade Center Building (1,792

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Skeet

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and sent to a laboratory for analysis, and the results are used to verify that the field work met the approved cleanup standards. The filling of the excavation pits with clean soil and reseeded usually marks the end of the project.

However, most cleanup work is rarely simple in execution. The field in which the skeet shooting took place is filled with vernal pools, which are protected habitats. To avoid damaging the vernal pools, the heavy equipment will access the contaminated soil on routes established around the pools and still within the work zone. Also, a biologist is present to ensure all work is carried out in an environmentally safe manner.

The field where all work will take place is often used by the base equestrian center for horse grazing. Early in the project planning stage, the decision to build a fence across the field was made to allow the horses to run around the part of the field that is not undergoing any soil cleanup. This will prevent any horses from getting hurt by heavy equipment or by falling into one of the excavation pits.

Worker protection is always a big priority for the field manager, and the recent triple-digit temperatures that northern California has experienced bring up concerns with heat stroke and heat exhaustion. The field manager has some flexibility with work hours to avoid the hottest part of the day, and consistent hydration is always emphasized at the start of each work shift.

Overall, this project is expected to take several months to complete. Assuming that all cleanup standards are met, this work will be followed by the administrative tasks needed to close the site.

The site will be lead- and PAH-free and available for unrestricted use.



Hall and Farewell

By Glenn Anderson

Travis Environmental Project Manager

An important trait of a successful program is teamwork, the cooperative effort by all members of a team to achieve a common goal. The Travis Environmental Restoration Program (ERP) has benefited from the contributions of many professionals who used their skills to build a track record of success.

Over time, a team loses top people, usually to retirement or advancement to positions of greater responsibility. Sadly, the Travis ERP team will soon be saying goodbye to one of its more lesser known members.

Mr. William "Bill" Hall is a member of the Restoration Program Management Office, which is under the Environmental Directorate of the Air Force Civil Engineer Center in San Antonio, Texas. As the title of his office implies, Mr. Hall provides restoration program support through contract and funds management for the Travis ERP.

Basically, Mr. Hall advocates for the ERP, working to provide the limited but essential funds needed to continue its soil and groundwater cleanup efforts. This support requires a thorough understanding of the government acquisition process: how funds are transferred to local offices and applied to contracts, how the right contractor is selected to carry out the best work, and how this happens while complying with a large number of federal regulations and legal statutes.

In other words, he pays the bills while keeping the team out of trouble!

Mr. Hall joined the Travis ERP team in 2013 when the base was

selecting a contractor for a multi-year environmental restoration performance-based contract (PBC). A PBC provides services in a technically and cost effective manner; instead of telling a contractor what to do, the PBC states the desired end results, and the contractor uses the best ideas to achieve them. The January 2013 Guardian describes the benefits of the PBC concept.

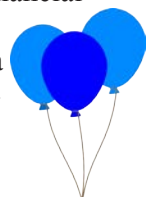
Even though Mr. Hall was not very familiar with the base or the contaminant conditions that had to be resolved initially, he carried out his part of the selection work while

learning along the way. Mr. Hall has worked diligently and enthusiastically over the last 4 years to ensure that each piece of the PBC received the proper amount of funding at the right time.

"Perhaps his work does not get a lot of press, but drillers could not drill and treatment plants

would shut down without him," stated Mr. Lonnie Duke, Travis AFB Restoration Program Manager. "Bill has taken a lot of weight off of my shoulders, and we will miss his leadership and Oklahoma-grown sense of humor."

Mr. Hall will retire from federal service in September 2017, ending a long and distinguished career. A devoted family man, "Mr. Bill" will undoubtedly focus his free time with home projects, the latest and coolest electronic gadgets, and long rides on his motorcycle(s). A replacement for his position will not be selected until this autumn, but the transition will be easy, thanks to the financial coordination that Mr. Hall has already completed. As a valuable member of the Travis team, he will be missed.



Year

■ From page 2

feet). They also decommissioned 32 wells that represent almost 828 feet of combined well piping. That was just short of the distance to reach the top of the Transamerica Pyramid Building (853 feet) in San Francisco.

The team also kept several analytical laboratories busy. They received and analyzed 9 air samples for volatile organic compound analysis, 723 water samples for 24 different laboratory analyses, 283 soil samples for 21 different laboratory analyses, and 38 waste samples for 13 different laboratory analyses. That is a lot of test tubes!

A year from now, I will report on what we achieved in 2017. Judging from the way that time flies around here, the July 2018 Viewpoint will need to be written sooner than later.



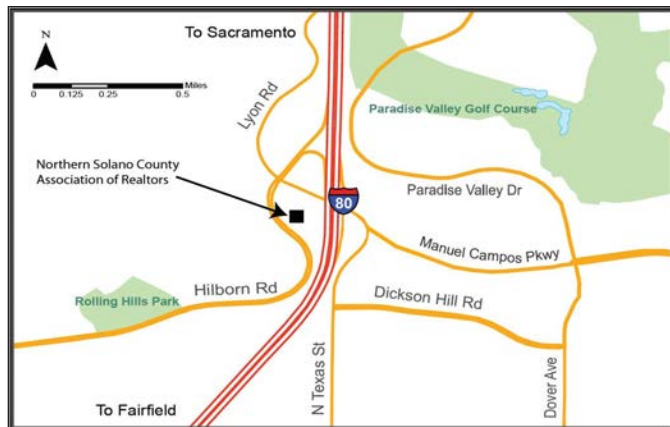
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Travis AFB Restoration Advisory Board Meeting

April 19, 2018
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.



If you have any questions or would like more information about the RAB tour, please contact Lonnie Duke, (707) 424-7520.



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