

**Travis Air Force Base  
Environmental Restoration Program  
Restoration Advisory Board (RAB) Meeting**

***Meeting Minutes***

19 April 2018

**I. Welcome and Introduction**

**Mr. Duke**, the Travis Restoration Program Manager, called to order the regular meeting of the **Travis AFB RAB** at **7 pm** on **19 April 2018** in the classroom at the **Northern Solano County Association of Realtors office**. General introductions were made. Mr. Duke thanked the USACE Omaha District, the regulatory agency representatives, RAB members, and everyone else for attending. Mr. Duke announced that the Travis Installation Support Section has a new Section Chief, Mr. Greg Capra, who was unfortunately unable to attend. Mr. Duke introduced a new RAB member, Pat Shamansky. Ms. Shamansky has served as an Honorary Commander at Travis AFB since 2017. She has also served as a Fairfield-Suisun Unified School District (USD) Governing Board Trustee and Parent/Community Volunteer, and has a background in engineering with Chevron Richmond Refinery.

**Roll Call**

The following RAB members were present:

<b>Name</b>	<b>Affiliation</b>	<b>Present</b>
Col Lance D. Clark	USAF, Travis AFB (Air Force Co-Chair)	
Lt Col Robert C. Baird	USAF, Travis AFB (Air Force Co-Chair)	✓
John ‘Tom’ Dunn	Suisun City Resident (Air Force Representative)	
David Marianno	Suisun City Resident (Community Co-Chair)	
Nadia Hollan Burke	U.S. Environmental Protection Agency (EPA)	✓
Adriana Constantinescu	SF Bay Regional Water Quality Control Board	✓
John Foster	National Association of Uniformed Services	
Mike Reagan	Travis Regional Armed Forces Committee	✓
Ben Fries	Dept. of Toxic Substances Control (DTSC)	✓
Dominique Forrester	Dept. of Toxic Substances Control (DTSC)	
Jim Dunbar	City of Fairfield Representative	
David M. Feinstein	Principal Planner, City of Fairfield	✓
Gale Spears	Communications Director, City of Fairfield	✓
Thomas Randall	Air Mobility Command Civic Leader	✓
Mark Pennington	Principal, Scandia Elementary School	✓
Pat Shamansky	Travis AFB Honorary Commander	✓

George Hicks	Dept. of Public Works City Hall	
W.T. Jeanpierre	American Legion	✓
Mayrene Bates	Solano County School Board Trustee, Dist. 4	✓
Debi Tavey	President, FF-SS Chamber of Commerce	
Amit Pal	PG&E Representative	

Public Members present:

- Bill Cumberland                      Citizen
- Rosemary Caraway                 Citizen

Agencies and Contractors present:

- Glenn Anderson                      Travis AFB AFCEC/CZOW
- Lonnie Duke                            Travis AFB AFCEC/CZOW
- Milton 'Gene' Clare                  Travis AFB AFCEC/CZOW
- Monika O'Sullivan                    Travis AFB AFCEC/CZOW
- Angel Santiago                        Travis AFB AFCEC/CZOW
- Haekyung Kim                         AFCEC/CZRW
- Merrie Schilter-Lowe                 Travis AFB 60 AMW/PA
- Dezso Linbrunner                    USACE, Omaha District
- Sarah Miller                            USACE, Omaha District
- Mike Wray                              CH2M
- Jill Dunphy                             CH2M
- Jeannette Cumberland                CH2M

**II. Approval of minutes from last meeting**

The previous meeting minutes were approved as written.

**III. Additional Agenda Items and Questions**

Mr. Duke asked if there are any questions about the agenda or if anyone had any additional items not already on the agenda. He stated that there will also be an opportunity at the end of the meeting to add agenda items or ask questions.

Mr. Duke told the audience that Mr. Anderson would be presenting the formal public meeting for Site TS060, the Old Skeet Range, as the first discussion topic, and Ms. O'Sullivan will discuss Perfluorinated Compounds.

**IV. Discussion Topics**

- a) **Public Meeting for No Further Action Record of Decision for Site TS060.** Mr. Duke began the formal public meeting by stating that the Air Force has prepared a No Further Action (NFA) Proposed Plan and will prepare a NFA Record of Decision (ROD) for Site TS060 (Old Skeet Range). The reason for proposing NFA is that previous

activities at the site met residential cleanup goals. He then introduced Mr. Anderson, who facilitated the public meeting for this site.

Mr. Anderson noted the following:

This is our sixth public meeting; it's a little bit different than the others, because additional actions were necessary and proposed in the other five proposed plans. For this one, we are explaining the actions we have already taken, that those actions resulted in the site meeting residential use standards, and that no additional cleanup activities are needed.

If a cleanup action achieves residential use standards, NFA is needed at the site to officially close it.

The Superfund Law requires a Proposed Plan and public meeting to tell the public about the work that has been done at a site where there is an environmental issue, to propose additional action if needed, or justify why no additional actions are needed, and to give the public an opportunity to comment on the proposal.

The April 2018 Guardian newsletter serves as the Proposed Plan for this site. This RAB discussion serves as the formal public meeting, and an opportunity for informal and formal comments will be provided at the end of the meeting. Formal comments can also be sent via the provided sheet in the newsletter, phone call, or email. All comments must be postmarked or received by 7 May 2018.

The old skeet range was active during the 1952-1962 timeframe and was shut down after the Fairfield Air Force Station closed. Skeet shooting deposited lead shot and clay pigeon pieces that contain polycyclic aromatic hydrocarbons (PAHs) in surface soil. Lead and PAH contamination was concentrated in one area due to the shooting direction and prevailing wind direction. A portion of this site is still active, so it was not included in the cleanup actions I will discuss. When the active portion of the site is closed, it will be evaluated in the same manner as the rest of the site and cleaned up if necessary.

The Military Munitions Response Program (MMRP) is a sister program to the Environmental Restoration Program, designed to address unexploded ordnance, discarded military munitions, and munitions constituents, as well as small arms firing ranges and skeet ranges. The cleanup steps are very similar.

We conducted a Comprehensive Site Evaluation (CSE) Phase I, which includes a records search, site visit, and interviews, equivalent to a Preliminary Assessment. The CSE Phase II included visual surveys, limited soil sampling, and risk assessments, equivalent to a Site Inspection.

If a site is highly contaminated, you want to clean it up faster. In 2012, we proposed a Non-Time Critical Removal Action in the Engineering Evaluation/ Cost Analysis (EE/CA),

which is similar to a Remedial Investigation/Feasibility Study, and Proposed Plan, to remove the bulk of the contamination here. An Action Memorandum, which summarizes the results of the EE/CA, was submitted in 2016. This document is similar to a Record of Decision. All parties agreed to the proposed actions and cleanup standards documented in this Action Memorandum. Additional remedial actions can take place after the removal action, if needed, to clean the site up to residential standards.

Site characterization sampling was completed in 2009. The contaminated areas were excavated in 2017, and confirmation samples were collected to confirm no additional excavation was needed. The site was hydroseeded and restored in 2018.

This removal action achieved residential lead and PAH cleanup goals. No additional actions or land use controls are needed, because the site can be used for any purpose now.

Because the removal action achieved residential goals, no further action is needed at the site, but a Proposed Plan and public meeting are still necessary so that the public has the chance to review what was done and why no additional action is needed.

Formal comments received from the public are taken into consideration for selecting the remedy, and are documented in the ROD, which is reviewed by attorneys, regulatory agencies, and others. This provides multiple perspectives on the selected remedy.

We now open the floor to informal questions.

Q: When it is decided to close a site, how many levels review this document, is it just Travis AFB?

A: Personnel from Travis AFB, State agencies, Federal agencies, and four levels of the Air Force all review the Proposed Plan and ROD, including Air Force legal review.

Q: Travis AFB is within Solano County jurisdiction. Does this document get reviewed by any local City or County officials?

A: Not formally because Travis AFB is a Federal facility, but anyone is welcome to review and comment as a member of the public.

A representative from the Solano County Environmental Health Department added that his agency reviews them, although not part of the Air Force's formal review process.

Q: When will the ROD be available?

A: No time frame yet, but I'm hoping this summer; Air Force legal must review a version first, then it goes through regulatory review, and then it is available to the public.

Q: You mentioned that significant mixing of the soils occurred at the site. What is that and how does it happen?

A: Livestock walking across it during rain events are some ways that the surface and subsurface soils can get churned up and mixed.

Q: You mentioned that a portion of the site is still active. What will stop the wind from blowing contaminated dust from that area back onto the areas that have been cleaned up?

A: Lead shot is no longer supposed to be used but the shot falls within the active area. Clay pigeons used today are environmentally friendly and don't introduce contaminants to the soil. There is also a new shooting orientation being used. When the active skeet range is closed, it will be evaluated by the MMRP process, and if any lead or PAHs are found, the site will be cleaned up at that time.

Q: Why is there no groundwater contamination related to this site?

A: The contaminants are not mobile and not readily available in water. There is no lead or PAHs in the groundwater beneath or downgradient from this site. PAHs and lead don't dissolve readily in water. The Air Force has looked at other sites contaminated more heavily with metals and PAHs than this one was, and did not see resulting groundwater contamination.

Q: How deep were the confirmation samples?

A: As deep as necessary, up to 48 inches in one location. We also collected confirmation samples from the sidewalls in addition to the flooring to ensure that we met the residential standard.

Q: What is the planned future use of this site?

A: Nothing is planned aside from the current recreational use as a horse pasture, but now that it's met the most stringent standard of residential use, the Air Force can use it for whatever the mission requires. A base community planner coordinates changes to planned future land use, and our cleanup actions provide flexibility when determining appropriate potential uses to support the mission.

Q: Would you conduct additional testing if the planned future use changed?

A: No, technically the site is available for unlimited use and unrestricted exposure. When this standard is met, the land can be used for anything. It's not the actual planned use that is important, but the fact that the land here can be used for any purpose without restrictions.

Q: Was the site used as anything prior to the skeet range that would have contaminated it at deeper depths?

A: No, we looked at past uses, even when the site was associated with the Fairfield Air Force Station and what chemicals were used there at the time. At one point during that time, the site was used to maintain nuclear components. The radiation issue was investigated. There was one area where uranium-235 was detected. This was addressed in 2003. This is why the cleanup process starts with records searches, to ensure we don't miss anything.

Q: Did you do groundwater sampling as part of this assessment?

A: We looked at locations where there was a lot of lead. PAHs and lead don't dissolve readily in water. Groundwater sampled beneath a different, heavily contaminated small arms range was clean.

Mr. Anderson concluded the public meeting by asking for formal comments. None were received. He reminded the audience that formal comments can still be submitted via phone, email, or mail by 7 May 2018.

b) **Perfluorinated Compounds Program.** Ms. O'Sullivan presented information on the Air Force's Perfluorinated Compounds program.

- Perfluorooctane sulfonate and Perfluorooctanoic acid (PFOS/PFOA) are synthetic perfluorinated compounds (PFCs) used in many industrial and consumer products, including non-stick cookware, waterproof fabric, food packaging, and the firefighting agent Aqueous Film Forming Foam (AFFF, or "A-triple-F"). AFFF is very effective at extinguishing petroleum fires resulting from aircraft crashes.
- PFOS/PFOA and other PFCs don't readily break down in the subsurface, and there are many unknowns. They are considered an emerging contaminant of concern because they have reasonable pathways to reach drinking water sources as well as present an unacceptable risk to human health, and the regulatory standards are still evolving. EPA issued provisional health advisories for PFOS/PFOA in 2009, followed by a lifetime health advisory.
- The Air Force will follow the Comprehensive Environmental Response and Liability Act (CERCLA) process, as well as applicable state laws and the EPA's lifetime health advisory, in order to aggressively identify, define, respond to, and mitigate potential contamination, as well as prevent future contamination.
- Air Force guidance on sampling and remediation of PFCs was released in 2012.
- A Preliminary Assessment was conducted at Travis AFB in 2015.
- The Air Force is replacing AFFF with High Expansion Foam (HEF). In 2016, fire trucks on base were retrofitted and began using HEF.
- Groundwater, soil, and sediment sampling for a Site Inspection (SI) took place during summer 2017. Results show that while PFOS and PFOA are present at Travis AFB, drinking water is NOT impacted, and impacted groundwater is not used for irrigation. The Site Inspection Report is expected to be finalized in late 2018.

- Only two hangars at Travis AFB used AFFF; it was stored in tanks and was present in the pumps used to extinguish fires. Those hangars will be retrofitted and will begin using HEF later in 2018.
- There is no regulated standard for PFOS/PFOA cleanup yet. Once a process is defined, the Air Force will follow that process. A site-specific cleanup level can be calculated, but cleanup can't be completed until the extent is defined in a Remedial Investigation. Sites where drinking water has been impacted will be given a higher priority for cleanup funds.
- An entire new branch of AFCEC has been established for concerns related to AFFF and other PFCs.
- More information about PFOS/PFOA is available at the Air Force Civil Engineer Center website ([www.afcec.af.mil/WhatWeDo/Environment/Perfluorinated-Compounds](http://www.afcec.af.mil/WhatWeDo/Environment/Perfluorinated-Compounds)), the EPA website ([www.epa.gov/](http://www.epa.gov/)), and the Agency for Toxic Substances and Disease Registry website ([www.atsdr.cdc.gov/](http://www.atsdr.cdc.gov/))

#### V. Cleanup Program Status

Mr. Duke discussed some of the ongoing progress being made in the cleanup program. This isn't an exhaustive list of documents and field work, but it highlights what we have been busy with lately.

- The following CERCLA documents are in progress:
  - The Community Relations Plan Update is still in progress, and will be a little different this time. Usually it's a hard copy document that is not utilized as frequently as we would like. The general trend is for people to access the internet with their phones and, as a result, we want to transition more to using the internet. This year the hard copy update will reference the Travis AFB public website for community-focused announcements and material. I will be updating the website. The community can also reach out to us via email at any time of day or night with questions or concerns, rather than only being able to call us during business hours. I check the email account multiple times every day. We hope that this transition will make the community relations update more useful for everyone.
  - Technical memorandum reporting the results of the data gap investigation at Site SS016; this is to clean up soil where a new hangar is proposed.
  - The amendment to the WABOU Soil Record of Decision for sites DP039, SD043, and SS046

- A work plan for remedial design and remedial action at Site SD043. This will remove land use controls from the site so that the land will be available for any type of use the Air Force may have.
- Documents for several petroleum documents are ongoing:
  - Closure reports for oil water separators OW040, OW047, OW048, OW049, OW050, OW052, OW055, OW056, and OW057 are being prepared.
  - A data gap investigation and closure report for Area of Concern TA500 is ongoing. This was never designated as a formal site, and the investigation results indicate that no cleanup is required.
- We will be working on the following documents in the near future:
  - The Site SD031 Soil Remedial Investigation and Feasibility Study; this report covers a remote part of the base where aircraft were parked and cleaned
  - The Amendment to the NEWIOU Soil Record of Decision for Sites SS016 and SD033 is ongoing
  - A Remedial Design and Remedial Action work plan for Site SS046
  - We will prepare an optimization technical memorandum for the Site FT005 extraction system; we would like to speed up the cleanup at this site by circulating more groundwater in the subsurface.
  - SS015 soil sampling plan will propose the collection of additional soil data at locations where initial soil data had been collected prior to building a refueling station, but confirmation soil samples were never collected. The Air Force needs to determine if any further action is needed at that site to make it available for unlimited Air Force utilization.
  - The Corrective Action Management Unit (CAMU) is the big soil repository by the old firing range. We publish a report every year to ensure that the cap is intact and rainwater is not seeping through it.
  - The Groundwater Remediation Implementation Status Report (GRISR) is another annual report that compiles lots of groundwater information into two volumes. It is the ultimate reference for us; when the base does any type of soil work, including digging to repair a buried line, we reference the GRISR. Sampling is starting soon.
  - The field work for many approved documents is in the works now. The field work will be completed by the end of the year, and we will present results at the 2019 RAB meeting.



- RAB tours are usually conducted in October. Last year we had a large bus for everyone. This year, we are conducting the tours a little differently. If you would like a tour of ongoing fieldwork at the base, please contact me, or Glenn Anderson, Gene Clare, or Angel Santiago:
- At last year's RAB meeting, we announced that we had won the Thomas D. White award for Best Environmental Restoration Program in the Air Force, as well as the Secretary of Defense Environmental Award for Best Restoration Program in the Department of Defense. We brought the physical awards with us tonight for everyone to see, as well as a flag we received as part of the award. The Air Force Installation and Mission Support Center commander, General Spacey, stopped by our office to congratulate the team and give us a coin that we also brought for you to see. These are two in a long history of awards at Travis AFB. Beale AFB won the Secretary of Defense award in 2016, and it was announced yesterday that Vandenberg AFB won the Secretary of Defense award for 2018. All are in California, and this is proof of how successful this model for a restoration program has been in California.
- The water quality laws and regulations in California are tougher than most, which likely led to the awards being granted to three California Air Force bases for three years in a row.

**VI. Regulatory Agency Reports**

Ms. Constantinescu introduced herself as an engineering geologist with San Francisco Bay Water Board which oversees cleanup of groundwater plumes.

She indicated that the Water Board's mission is to restore, protect, and enhance water quality of surface water and groundwater. She said she will receive the report about the PFCs at Travis AFB that Ms. O'Sullivan discussed earlier. The report will be reviewed by their experts, and comments will be provided to the Air Force.

**VII. Focus Group Reports**

Mr. Duke thanked John Foster and the technical focus group for their continued support in reviewing documents, noting that Mr. Foster often provides thoughtful comments from the public's perspective.

**VIII. RAB/Public Questions**

Mr. Randell asked if the Association of Defense Communities is looking at what Travis AFB Environmental Restoration Program has succeeded in doing to make the area livable and more family-friendly. He thanked Mr. Duke for the work the program has done.

Mr. Duke noted the partnership and teamwork between the US Army Corps, Travis AFB, the regulatory agencies, AFCEC, and the contractors in working to meet cleanup goals and close sites.

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

The next RAB Meeting is scheduled for **18 April 2019** at the office of the Northern Solano County Association of Realtors in Fairfield.

**X. Adjournment**

**Mr. Duke** adjourned the meeting at **9:03 pm**.

Minutes submitted by: Jill Dunphy, CH2M