

Final

**Meeting Minutes
Travis Air Force Base
Installation Restoration Program
Restoration Advisory Board (RAB) Meeting
60th Air Mobility Wing Headquarters
400 Brennan Circle, Building 51
Travis AFB, California
12 April 2001**

RAB members present:

NAME	AFFILIATION	PRESENT
Swickard, Col. Jan M.	Travis Air Force Base/RAB co-chair	√
Whalen, Jim N.	City of Vacaville Representative/RAB Community co-chair	√
Child, David	Fairfield Resident	√
D'Lima, Anne	Travis AFB Resident	√
Flores, Lalo	BDC Marine	
Foster, John	City of Fairfield Representative	√
Guido, Timothy	David Grant Medical Center	
Kanouff, David F.	National Association of Retired Federal Employees	√
Lucey, John	U.S. Environmental Protection Agency	√
Marianno, David	Suisun City Resident	
Morad, Cyrus	Fairfield Resident	√
Moseley, Michael	Daily Republic	
Negron, Daniel	Vacaville Resident	√
Raker, Sarah	SF Bay Regional Water Quality Control Board	√
Root, Pastor David	Crosswinds Church, Suisun City	
Rued, Emily	Vacaville Unified School District	√
Rundlett, John	Suisun City Resident	√
Salcedo, Jose	Department of Toxic Substances Control	√
Taylor, William W.	Travis Unified School District	√
Tolentino, Ron	Solano Garbage Company	√
Urquhart, Kurt	Goodrich Corporation	√

Agencies and Contractors present:

- Allen Brickeen Travis AFB
- Glenn Anderson Travis AFB
- Mark Sandy Travis AFB
- Dale Malsberger Travis AFB
- Wilford Day Travis AFB
- Kevin Jackson Travis AFB
- Roger Johnson Air Force Center for Environmental Excellence
- Doris Anders AFCEE
- Sarah Byrum AFCEE
- Parker Atkins Informatics
- Daryl Greenway CH2M HILL
- Wayne Williams CH2M HILL
- Loren Krook CH2M HILL
- Traci Bjers URS
- Mike Wray GTI
- Patricia Ryan DTSC
- Michael Anderson DTSC
- David Cooper U.S. EPA
- Viola Cooper U.S. EPA
- Sonce deVries U.S. EPA
- Elizabeth Allen TechLaw

WELCOME, INTRODUCTIONS, AND ANNOUNCEMENTS

Colonel Jan Swickard called the meeting to order and welcomed all that were present. Colonel Swickard introduced Mr. Michael Anderson, DTSC; Dr. Sonce deVries, U.S. EPA; Dr. Doris “Andy” Anders, AFCEE; Ms. Sarah Byrum, AFCEE; and Vacaville Mayor David A. Fleming.

Mayor Fleming welcomed everyone to McBride Senior Center. He stated that he has been the Mayor since 1990, has been on the City Council, and is retired from the Air Force. The Mayor said that he can relate to Travis AFB’s environmental issues because the City of Vacaville is currently experiencing a problem with the Regional Water Quality Control

APPROVAL OF MINUTES

The January 2001 RAB minutes were approved and finalized.

ADDITIONAL AGENDA ITEMS AND QUESTIONS

There were no other additional agenda items or questions.

DISCUSSION TOPICS

Ecological Risk Assessment and Risk Management Decisions

Mr. Glenn Anderson formally introduced Dr. Anders, who works for the Air Force Center for Environmental Excellence (AFCEE). She previously worked for the Department of Energy, and has co-authored a number of technical documents, papers, and books. She even lived at Travis AFB with her late husband in the late 1960s.

Dr. Anders gave a presentation on ecological risk assessment.

Risk assessment is the characterization of the types of health effects expected from exposure to a toxicant, estimation of the probability (risk) of occurrence of adverse health effects, and recommendation of an acceptable concentration of a toxicant in all media.

A human health risk assessment (HHRA) estimates the probability of occurrence of an undesirable event and the magnitude of its consequences over a specified period. For humans, two endpoints are considered; cancer and non-cancer. The U.S. EPA has established guidance how to conduct HHRA.

Ecological risk assessment (ERA) is the process that evaluates the likelihood that ecological effect(s) may occur or are occurring because of exposure to chemical, physical, or biological stressor(s).

The baseline ecological risk assessment (BERA) represents the current conditions at a site. It also looks at what might take place in the future and what may have taken place in the past.

The endpoints for an ecological risk assessment represent key objectives for ecological protection. An assessment endpoint is an expression of important ecological values that need protection (e.g., species abundance). A measurement endpoint is a measurable quality that

- Superfund Amendments and Reauthorization Act (SARA);
- Resource Conservation and Recovery Act (RCRA);
- Applicable or relevant and appropriate requirements (ARARs); and
- DOD, which is a natural resource trustee.

The Risk Assessment Guidance for Superfund (RAGS) is for human health risk assessment. RAGS, Part D which came out in 1998 is a very standardize package that instructs how to put data into the report.

Ecological Risk Assessment Guidance for Superfund (ERAGS) was published in 1998 and provides the procedures for conducting an ecological risk assessment. ERAGS gives more latitude than RAGS.

The ecological risk assessment is a potential basis for natural resource damages (NRD) and natural resource injury (NRI). The term damages means monetary fines assessed against a potentially responsible party. As a natural resource trustee, the Air Force and all of DOD takes that very seriously.

Dr. Anders reviewed the following:

- Components of a Baseline Risk Assessment (BRA);
- Conceptual Site Model Diagram, which looks at the sources, contaminants, potential pathways, and the receptors; and
- Risk Characterization Steps.

Some of the key risk issues are human health (cancer, non-cancer), current human health chemicals of concern in water, ecological (habitats; species of special concern), and NRI/NRD assessment.

A question was asked what is meant by species of special concern. Dr. Anders stated that species of special concern are plants, animals or birds in which there is particular interest; i.e., their habitat is threatened or the population may be limited.

Vernal Pools

Role of Human Health Risk Assessment and Ecological Risk Assessment in Superfund Remedial Process

Human Health Risk Assessment (HHRA) is in the first part of the remedial investigation and feasibility study (RI/FS), along with the Ecological Risk Assessment (ERA). After the risk has been assessed, the remedy or remedies are selected and documented in the record of decision (ROD). Once the ROD is in place, then remedial actions begin.

Dr. Anders explained that Travis AFB makes sure that the intent of the law is met by knowing the rules, regulations, and what guidance is available; meeting with the regulators and the RAB regularly; and attending regulatory workshops and training events.

Ecological Protection Technical Memorandum

Dr. Anders clarified that risk assessment tells how much is at risk, whereas risk management tells what will done with the risk. Risk management is the decision-making tool.

Risk management begins with an extremely conservative risk assessment. It applies all regulatory, scientific, and economic considerations. The end result is input to soil, surface water, or groundwater cleanup levels.

Travis AFB is working on an ecological assessment technical memorandum. Considerations for the technical memorandum include the following:

- Current and future land use;
- Soil cleanup levels using inputs from several sources
- Protection of sensitive habitats and special status species;
- Protection of population of other species; and
- Home range and foraging strategies of species.

Risk management considers the output from the HHRA, ERA, the protection of the groundwater, and site background levels. The feasibility of the selected remedies and cost are also considered.

Mr. Kurt Urquhart asked how preliminary remedial goals (PRGs) fall into the ecological risk and health risk aspect, how does that play into Travis AFB where there are many risk screening levels from the various agencies for different species. Dr. Anders stated that EPA

so many people with so many degrees just to wade through the paperwork that nothing ever really happens. Dr. Anders stated that people do become frustrated; however, eventually progress is made.

Mr. Child commented that there should be some sort of mechanism to stop the endless paperwork and result in a cleanup decision.

Mr. Whalen asked where shrimps lie in the food chain. Dr. Anders stated that the fairy shrimp is a calcopod and is not at the extreme bottom. Fairy shrimp eat bacteria and fungi.

Mr. Atkins asked if ecological risk information is being entered into a database. Dr. Anders answered yes.

Mr. Atkins asked why are we reinventing the wheel at each one of the sites. Why can't we just draw on the empirical information that has already been decided upon and move forward with site-specific information. Dr. Anders stated that the Air Force has an environmental data management system called environmental restoration program information management system (ERPIMS), which includes data from various installations.

Mr. Atkins asked if there was any cross sharing of information with the U.S. EPA and AFCEE. Dr. Anders stated not generally. However, the regulators and environmental industry leaders are coming together and realize that there must be more cooperation.

Mr. Dan Negron commented that the key people who are in key position are sitting in this room, so it starts right here. There is a concern specifically about how Travis AFB cleanup efforts are being done. This is the place to bring it up and hold these people accountable.

Col Swickward commented that he is proud of the environmental management program at Travis AFB. Six months ago, part of the funding was at risk; however, it is now fully funded.

U.S. EPA View of the Ecological Protection Technical Memorandum

Mr. Lucey gave a presentation on the U.S. EPA's view of the Ecological Protection Technical Memorandum.

Mr. Lucey stated that the remedies in the ROD are designed to be protective of human health and ecological receptors. Mr. Lucey explained that the cancer risk range is not a hard and fast rule. The cancer risk must be in range in order to make acceptable decisions. This is where the bartering and negotiations between U.S. EPA and the Air Force comes into play.

Mr. Lucey stated that for the soil sites, there are 2 items to make a decision on: is there an ecological risk or is there a human health risk.

The agencies are addressing the hazard quotient (HQ) and the lowest observable adverse effect level (LOAEL). The agencies have agreed that LOAELs are protective of the populations. The agencies are willing to accept the less stringent level that is protective of the population; however, the agencies need data to support that premise.

The U.S. EPA is requesting that the Air Force bring loose ends together in a coherent place and explain what was done. The solution was to come up with Ecological Protection Technical Memorandum.

Mr. Lucey stated that the agencies and the Air Force are working together to get the data to support the premise that the levels are protective.

Mr. Lucey reviewed the items that should be in the technical memorandum.

Mr. Glenn Anderson asked Mr. Lucey if the U.S. EPA can provide the Air Force with examples of other technical memorandums or guidance documents showing what the requirements are. Ms. deVries stated that she would see if she could find documentation.

Mr. Whalen asked if Mr. Lucey's presentation represented the U.S. EPA's viewpoint or if it was a collective effort of all the agencies. Mr. Lucey stated that this presentation is his opinion; however, the process is the same for the agencies.

Mr. Parker Atkins commented that actions could be taken quicker to mitigate the risk to other creatures by the natural migration of these contaminants. If the negotiating process was not as laborious, perhaps the cleanup efforts would move along quicker and there would be less risk to additional creatures through the migration of contaminants.

Mr. Lucey stated is true to some extent; the sooner contaminants are cleaned up, the better for the environment. *Mr. Atkins asked when this would not be beneficial.* Mr. David Cooper stated that it would not be beneficial if the wrong cleanup levels were chosen. Mr. Atkins stated that if you removed 99% of the contaminant, would you not be 99% better off and address the 1% later. Dr. Michael Anderson stated that we have to careful not to destroy the habitat of the burrowing owl.

Mr. Negron asked where does the cost to mitigate or come up with the solution; where is the purse cut off. Mr. Negron asked Mr. Lucey what is his role in the cleanup of Travis AFB. Mr.

CLEANUP PROGRAM STATUS REPORT

West/Annexes/Basewide Operable Unit Soil Record of Decision

Mr. Glenn Anderson gave an update on the WABOU Soil ROD:

- **Ecological Issues** — Delay in the start of the technical memorandum due to contractual and funding issues. The base ran out of money and had to seek additional funds to complete the ROD. The internal draft review will take place on 13 April. Once reviewed, the technical memorandum will be reviewed by the agencies and RAB.
- **Cleanup Levels** — The Groundwater Protection Technical Memorandum was finalized. Once the ecological protection is resolved, the cleanup level determination will be finished.
- **Acceptance Levels** — The Air Force is working with the agencies to finalize the corrective action management unit (CAMU) soil acceptance criteria technical memorandum.
- The submission goal for the third revision of the WABOU Soil ROD is October 2001.

Mr. Glenn Anderson commented that the new Ecological Protection Technical Memorandum will add a significant delay to the ROD schedule.

Real Estate Agreements (Easements)

Mr. Mark Sandy reported that the final details are being negotiated by the attorneys for the FT005 off-base easement.

Summer Construction

Mr. Sandy reported the following FY2001 construction activities will take place:

- SS016 Groundwater Extraction System Expansion - 2 new extraction wells within the 1,000 ppb portion of the plume under the aircraft parking ramp. Will also install 6 monitoring wells at the ramp.
- FT005 Off-Base Groundwater Extraction - 4 additional wells and 7 monitoring wells will be installed once the easement agreement is completed.

process has been resumed. The FT005 plume consists primarily of 1,2-DCA at 20 ppb. It is not amenable to treatment by carbon. (The discharge standard/drinking water standard is 0.5 ppb.) The requirements could be met if the carbon is frequently changed, which is very costly and there is a high risk that the contaminant could pass through the carbon and be discharged into Union Creek. The Air Force attempted to reduce the flow of 1,2-DCA coming into the treatment plant to preclude discharging unacceptable concentrations of 1,2-DCA into the creek. This will allow some additional contaminant to cross the base boundary onto private property. The base will continue working with RWQCB to get the sequestering agent approved.

Mr. Urquhart asked what is the process of getting the sequestering agent into the water stream. Mr. Sandy stated that the Air Force and RWQCB are negotiating this issue. Ms. Raker stated that the sequestering agent is not so much the question, it is just deciding on the approval process.

Mr. Sandy announced that this was his last RB meeting and that has taken another job in Southern California.

Regulatory Agency Reports

The regulatory agencies had no reports.

Focus Group Reports

Community Relations Group

Mr. Jackson stated that the communications squadron shut down all of the base's public web sites sometime back and it affected the environmental cleanup program web site. Mr. Jackson has since received permission to put the public web site back on line.

Mr. Jackson stated that Travis AFB restoration project managers will again take the IRP display to Earth Day activities on Travis AFB. Earth Day will be celebrated on 26 April 2001 at the Base Exchange parking lot from 9 a.m. to 2:30 p.m.

Technical Review Focus Group

Mr. Glenn Anderson stated that Mr. John Foster reviewed a restoration document and submitted comments. It was very well received and it was the kind of review that the Air Force is looking for.

Budget/Scheduling

Other

- Mr. Brickeen announced that the IRP sites tour has been scheduled to take place on 4 and 5 May 2001. Letters will be sent to RAB members and that an advertisement will be placed in local newspapers. The meeting place for the tour will be at the Environmental Flight office.
- Mr. Brickeen stated that Travis AFB is revising the Remedial Action (RA) Strategic Plan to identify the best method to approach remedial action at soil sites. A copy of the RA Strategic Plan will be provided to each RAB member to review and make comments.
- Mr. Brickeen stated that the Long-Term Operation Strategic Plan is being developed. A copy was provided to each RAB member to review and submit comments. Mr. Brickeen commented that Section 8 gives an excellent summary of the document.
- Mr. Brickeen announced that there will be a Strategic Planning Meeting on 2 May 2001 at 9:30 a.m. to review the RA and LTO Strategic Plan to get agreement. Mr. Brickeen encouraged the RAB members to attend. This meeting will tentatively take place at the Environmental Management Office.

Set Time and Place for next RAB meeting

The next RAB meeting will be on 26 July 2001 at a location that is yet to be determined.

Next meeting topics/suggestion

Interest was shown for a presentation on the B-29 crash scenario. Mr. Glenn Anderson stated that this topic has not been forgotten and will be addressed at the next RAB meeting.

- Mr. Whelan stated that there are various vacancies in the focus groups. Mr. Whelan asked for volunteers to fill the following positions: alternates for the co-chair in community, budget and technical document review focus groups.

Mr. John Foster volunteered for community relations focus group.

Mr. Dan Negron volunteered for the technical document review focus group.

- Ms. Ryan made available the Fort Ord newsletter.