

II. Approval of minutes from last meeting

The previous meeting minutes were approved as written. Mr. Dunbar asked if the base tour had happened. Mr. Smith replied that it had and he anticipates another tour to occur in the summer of 2009. Mr. Foster added that the tour is well worth the time to take.

III. Additional Agenda Items and Questions

Mr. Smith asked if there were 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.

IV. Discussion Topics

a) Sustainable Remediation

Mr. Duke presented information on green sustainable remediation, also referred to as GSR. The term was defined as the practice of considering ALL environmental effects of implementing a remedy. It is considered an evolving process.

The growth and evolution of waste treatment was shown in a chart. Sustainable remediation principles are an attempt to look at the whole picture, keeping these goals in mind: minimize or eliminate energy consumption, reduce or eliminate environmental releases (especially air), mimic a natural process and reuse or recycle land and materials.

GSR projects at Travis include the use of solar powered pumps at LF007 (north end of base) and phytostabilization at DP039. The trees at the DP039 were planted ten years ago. Transpiration sampling will occur this summer (2009) to see how much groundwater is being used by the trees and how much TCE is transpiring through them. This is a demonstration project. The newest GSR project is the solar powered bioreactor. Installation will occur in the next six weeks. It works like a percolator, below the ground, treating waste (chlorinated solvents) in the groundwater in place. No transportation needed. This is an AFCEE funded demonstration project.

Upcoming GSR initiatives include optimization at the groundwater treatment plants. The incoming levels of chemicals of concern at the Central Plant have dropped. The energy intensive UV-Ox is not needed anymore to treat groundwater; replacing it with Granular Activated Carbon (GAC) would reduce power usage and cost of maintenance. Along the same idea is the Therm-Ox vapor treatment, which currently uses 278,825 cu ft of natural gas per month. Replacing it with Vapor Granular Activated Carbon (VGAC) would reduce annual CO₂ emissions by 400,000 lbs!

The Remedial Process Optimization team from AFCEE visited Travis AFB in August and had excellent suggestions for optimizing groundwater treatment. The team

commented that Travis is one of the most advanced bases they had seen. Discontinuing the UV- and Therm-Ox systems was one of their recommendations, which validates what the ERP team was considering. There is an article on the AFCEE website that includes information on the solar-powered wells at Travis.

Comparison of statistics for the three treatment plants was shown. The Central Plant uses more electricity due to the UV-Ox and Therm-Ox treatments. The Dept of Energy conversion for CO₂ emissions is 1.37 lbs CO₂ per kWh used. Also, the cost per pound of volatile organic compounds (VOCs) removed were shown for each plant, with Central at \$938, South at \$3,174 and North at \$24,221. The vast difference in costs is based on the concentrations of VOCs being removed; concentrations at the North plant have been greatly reduced which drives up the cost to treat the groundwater. Mr. Wray pointed out that converting the UV- and Therm-Ox to granulated carbon will not be costly. The equipment is already on site; only changing out the carbon is needed.

Mr. Velez asked when the trees were planted at DP039. They were planted in 1998, and at that time bore holes were drilled from the tree root zones to the water table prior to planting to encourage root growth. The second planting was a year or two later. The trees are red-iron bark eucalyptus.

b) Second Five Year Review

Mr. Anderson presented the overview of the second five year review. There is an article in the July Guardian on this document. It is basically a program check up required every five years. The definition from the EPA fact sheet states a five year review is a review of the remedies at Superfund sites where hazardous substances remain at levels that potentially pose an unacceptable risk, and applies to all soil, sediment and groundwater cleanup actions and environmental controls on Travis AFB. As a maximum, these reviews are conducted every five years or when necessary to ensure protectiveness of the cleanup remedy. The next schedule Five Year Review will be in 2012, and will include all soil actions, all groundwater actions, and remedies in place (RIP). The lead agency (in this case, Travis) conducts it and the regulatory agencies (EPA, DTSC, and RWQCB) review it.

The components of the five year review process were presented on a slide. The process includes interviews of former and current base employees and contractors, site inspection, data review and analysis (possible resampling may be required), document review, community involvement and notification, and assessment of protectiveness. The bottom line is to assess protectiveness. The three questions to answer are 1) was it done and done right; 2) is the information still valid; and 3) is there any other information that would question protectiveness of a remedy.

How did Travis do? The completed soil remedies are protective. One soil and two sediment cleanup actions are pending, due to time and financial constraints. The

vapor intrusion (VI) assessment on Travis is ongoing; an article about the VI is in the July Guardian. The assessment started this year and will be completed in 2009. A passive vent system to control vapors is now included in all newer building designs. The interim groundwater remedies are protective; however, the final remedies are needed. Cleanup levels have not been established yet for the groundwater.

Mr. Reagan asked about the upstream groundwater contamination. Mr. Anderson replied that the source and problem areas have been identified. Travis recognizes that contamination ignores fences.

V. Cleanup Program Status

Mr. Smith presented information on the performance-based contractor (PBC) selection. The challenge the ERP is facing at Travis is the need for a signed Basewide Groundwater Record of Decision (ROD), and an Air Force deadline of 2012. The plan to meeting this challenge is to implement performance based management to the program. Awarding a PBC provides the experts the ability to have more of a say in how to accomplish the objectives and milestones for the project. As stated before, a PBC provides the objectives to be met rather than providing direction on how to achieve those objectives.

The Source Selection Evaluation board was convened in Omaha, Nebraska to select the best technical approach for accomplishing the objectives and milestones; it consisted of a contracting officer, legal officer, program manager and technical staff from both US Army Corps of Engineers (USACE) and Travis ERP. The process was handled in accordance with USACE direction. For example, no documents were removed from the room. Technical proposals were reviewed, and cost proposals were considered when determining best value. The result: the PBC has been awarded!

The upcoming work will involve all parties as the pace of document development and field work increases. The remaining soil and sediments sites will be cleaned up. Remedial process optimization will be implemented to reduce energy consumption. New groundwater cleanup methods and technology will be evaluated. Mr. Kaiser commented that with this accelerated schedule the agencies should anticipate more documents to review. Mr. Smith agreed, but added that the documents will not be written all at once and attempts will be made to brief the agencies prior to receipt. Mr. Anderson stated that the Action Plan will feed into the ROD and will be a foundation for the document and field work schedule. Mr. Kaiser said he wanted to be sure to have staffing available. Work plans will be focused on individual sites instead of a large document containing all the sites. Mr. Velez asked about the budget for the PBC. Mr. Smith described the PBC in terms of annual funding. The large PBC for groundwater is about ten million dollars over five years; the small business PBC for the soil and sediment sites is about eight million dollars depending on the extent of contamination. This is not much more than the \$2-3M annual cost that the program had this time last year, but provided more reliability that a ROD will be developed by 2012.

Mr. Reagan asked if all groundwater sites will be rolled into one ROD. Mr. Smith said that Travis desires one Basewide Groundwater ROD, as more RODS create more work for the regulatory agencies. For the PBC, sites were grouped based on similarities and difficulty. Lt Col Lawrence pointed out if Travis doesn't have a ROD in place by 2010, it could be possible to have RIP by 2012. Mr. Smith agreed, stating that although the previous two RODs took four years to get in place, with this PBC in place it could be done. Mr. Dunbar asked if the ROD is delayed would that affect funding. The PBC is for five years, with two option years if needed. Mr. Reagan asked if financial incentives existed for finishing early. Mr. Smith replied that there were incentives, but primarily geared towards efficiency. With this PBC, the contractor absorbs overage and splits any savings with the government if under budget.

VI. Regulatory Agency Reports

DTSC: Not present.

EPA: Working with the ERP team to keep projects moving. EPA is looking forward to the GW ROD in 2010. While there are still areas that need work, an incredible amount of work has been accomplished.

WB: Monthly meetings have been productive and busy with document reviews.

VII. Focus Group Reports

The Technical focus group provided review and comments on three documents: 2006-2007 Annual Groundwater Sampling and Analysis Draft Report, 2008 Second Five Year Review Draft Report, and 2008 Vapor Intrusion Draft Work Plan. Mr. Smith mentioned that Mr. Foster has been busy reviewing documents this year. Mr. Foster added it was interesting to see the connection between meetings and the technical documents. Ms Gavlak expressed interest in joining the Focus Group. Mr. Smith thanked Ms Gavlak for her participation. The work plan for the solar powered bioreactor was sent for review today.

Mr. Smith added that two other focus groups exist for Budget and Community Relations, but we haven't had to use either one lately to help overcome problems. Mr. Anderson is in charge of community relations.

VIII. RAB/Public Questions

Mr. Dunbar asked about the impact of the recent fires on environmental activities. Mr. Smith replied that the military housing fire was a massive fire that drew a lot of the base resources but did not affect ongoing remediation efforts. There is no contamination from past activities in that area as well. Irrigation on base was shut off to divert water resources to that area. Ms. Gavlak added that the school district worked closely with the Air Force to ensure the safety of the public and the opening of school.

Mr. Foster asked the group to commit a date for a tour. Mr. Smith stated that for the excavation work he would need to coordinate with ITSI for a date when the creek is dammed. A better project to observe would be the bioreactor.

Lt Col Lawrence asked if the bioreactor would be installed in the next few weeks. Mr. Smith confirmed this, and added it would be operational by December. It would be good for the RAB members to see the installation in progress, but he did not want to interfere with construction schedule.

Mr. Dunbar asked if other projects on Travis interfere with environmental projects. Mr. Smith said in general no, as the ERP staff work very closely with the base personnel and base operations to avoid conflicts. One of the goals of the ERP is to make land available to support the base mission rather than to get in the way. Mr. Reagan offered some suggestions for clean dirt from the widening of Highway 12, and possibly using the existing rail lines to transport excavated dirt. Mr. Duke stated that the rail lines are in poor condition but would take the suggestion under consideration.

IX. Set Time and Place for Next RAB Meeting

The next RAB meeting is scheduled for **23 April 2009** at the Northern Solano County Association of Realtors in Fairfield.

X. Adjournment

Mr. Smith adjourned the meeting at **8:30 pm**.

Minutes submitted by: Leticia Sangalang, Synectics

Minutes approved by: RAB Members