



DEPARTMENT OF THE AIR FORCE
AIR FORCE CIVIL ENGINEER CENTER

NOV 20 2013

MEMORANDUM FOR SEE DISTRIBUTION

FROM: AFCEC/CIBW
3411 Olson Street
McClellan CA 95652-1003

SUBJECT: Restoration Advisory Board Meeting Minutes, 18 June 2013

1. Attached please find the final minutes from the 18 June 2013 McClellan Restoration Advisory Board (RAB) meeting held at the North Highlands Recreation Center as approved by the RAB members at the September 2013 meeting.
2. If you have any questions or comments, please contact Ms. Mary Hall, at (916) 643-1250, extension 232.


STEVEN K. MAYER, P.E.
BRAC Environmental Coordinator

Attachments:
Final Meeting Minutes, 18 June 2013

DISTRIBUTION LIST
Final 18 June 2013 McClellan RAB Meeting Minutes

Electronic Copy

Robert Blanchard, RAB
 William Clements, RAB
 Kathy Gallino, RAB
 Paul Green, Jr., RAB
 Alan Hersh, RAB
 Glen Jorgensen, RAB
 Randy Orzalli, RAB
 Paul Plummer, RAB

Nathan Dietrich, Chief of Staff,
 Congresswoman Doris Matsui

Charnjit Bhullar, US EPA
 SJ Chern, US EPA
 Viola Cooper, US EPA
 Bob Fitzgerald, US EPA
 Kim Hoang, US EPA
 Radhika Majhail, DTSC
 Stephen Pay, DTSC
 Mark Clardy, Central Valley RWQCB
 James Taylor, Central Valley RWQCB
 Kent Craney, Sacramento County

Phil Mook, AFCEC/CIBW
 Paul Bernheisel, AFCEC/CIBW
 Joe Ebert, AFCEC/CIBW
 Linda Geissinger, AFCEC/CIBW
 Steve Mayer, AFCEC/CIBW

Mary Hall, Air Force contractor
 Brian Sytsma, Air Force contractor

Electronic Copy

Rich Beyak, URS
 Robert Carter, Tetra Tech
 Andy Cramer, CH2M Hill
 Paul Graff, URS
 Warren Jung, Sacramento Suburban Water
 District
 Tiffany Mendoza, URS
 Deanna Osborn, Tetra Tech

Ottis Berry, community
 Pastor Donnie Bryant, community
 Alan Chickos, community
 Evelyn Frazier, community
 Gary McGlinn, community
 Warren Myhre, community
 Don White, community
 Lee Whitehead, community
 Charles Wilder, community

Hard Copy

Gary Collier, RAB
 Carolyn Gardner, RAB
 Tina Suarez-Murias, RAB
 Frank Miller, community
 McClellan Admin Record

McClellan Air Force Base (AFB)
Restoration Advisory Board (RAB) Meeting Minutes FINAL
June 18, 2013 -- McClellan, California

Time: 6:30 PM

Place: North Highlands Recreation Center
North Highlands, California

RAB Member Attendees

<u>NAME</u>	<u>AFFILIATION</u>
CHARNJIT BHULAR	U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
GARY COLLIER	PARKER HOMES, WEST SIDE OF BASE
KATHY GALLINO	SACRAMENTO COUNTY, LOCAL REUSE AUTHORITY
PAUL GREEN	EDUCATION COMMUNITY
ALAN HERSH	MCCLELLAN BUSINESS PARK
GLENN JORGENSEN	NORTH HIGHLANDS COMMUNITY
STEVE MAYER	AIR FORCE CIVIL ENGINEER CENTER; CO-CHAIR
TINA SUAREZ-MURIAS	ENVIRONMENTAL COMMUNITY
STEPHEN PAY	CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCE CONTROL
JAMES TAYLOR	CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

I. Welcome, Introductions and Agenda

Mr. Bill Davis welcomed everyone to the meeting and introduced himself as the meeting facilitator. Attendees signed the sign-in sheet (Attachment 1), and picked up available handouts. Mr. Davis read a statement of the purpose of the RAB, went over the agenda (Attachment 2), and the general format of the meeting, including how to be recognized as a speaker during the meeting and when to ask questions.

Mr. Davis invited the RAB members to introduce themselves and the stakeholder groups they represent. He invited members of the audience to introduce themselves and state if they had any questions or concerns they would like addressed at the meeting. Members of the audience did not express any specific concerns to be addressed at the meeting.

II. March 2013 Minutes

Mr. Davis asked if there were any comments or changes to the March 2013 meeting minutes. Mr. Jorgensen asked for an update on the goats in the West Nature Area. Mr. Mayer said he would address that in his update.

Mr. Collier noted that he would like to repeat his comments from the March minutes asking that the Air Force further investigate the landfills using emerging ground-scanning radar technology.

Mr. Green noted that Mr. Meyer and Ms. Hall, along with representatives from the Sacramento County Well Program, did give a presentation to the Rio Linda/Elverta Community Water District Board on June 17, as mentioned in the March minutes. He thanked them both for their informative presentation.

There were no comments or changes to the minutes. They are considered approved.

III. Community Co-chair Update

There was no community co-chair update. Ms. Hall reported that Mr. Blanchard was in a motorcycle accident recently and was unable to attend the meeting. He did not have any major injuries, but is feeling sore and stiff.

IV. Air Force Cleanup Update

Mr. Mayer reviewed the *BRAC Cleanup Team and Stakeholder Meeting Field Review* for June (Attachment 3). Only information and comments not presented in the attachment are recorded in these minutes.

Mr. Mayer next went over the *Key Documents* (Attachment 4). Only information and comments not presented in the attachment are recorded in these minutes.

Regarding the Ecological Sites Remedial Action Work Plan, Mr. Mayer said he is hopeful that it will be finalized in time for some of the work to begin this field season.

For the Radiological Non-time-critical Removal Action Final Status Survey Reports (FSSR), Mr. Mayer referred to the handout detailing the sites and their status (Attachment 5). In response to a question at the March RAB meeting regarding the cost of the cleanup and demolition of Building 252, Mr. Mayer said the current Building 252 project cost was \$3.61million. That includes cleaning residual contamination in the building, preparing the clearance documents, demolition of the building, excavation and offsite disposal of the contaminated soil underneath, and site restoration.

Mr. Mayer showed a video from the Air Force News Network on the removal of the tent at CS 010 as part of the Focused Strategic Sites project. The video may be viewed at the McClellan webpage at: <http://www.afcec.af.mil/brac/mcclellanafb/index.asp>

Mr. Mayer discussed the design of the Consolidation Unit (CU) being constructed as part of the Focused Strategic Sites remedy. He reminded the group the project includes 11 landfills, some of which will be capped in place and some of which will be excavated and disposed of in the CU.

The CU, he said, is being constructed where site CS 010 and the tent had been, expanding the CS 010 pit from 60,000 cubic yards to 360,000 cubic yards. The new pit will be 50 feet deep and is engineered with sloping walls, dual liners, and built-in monitoring and testing capabilities. He said it meets the strictest of standards for landfill design. It is approximately 7 acres in size. Approximately 6,000 to 7,000 cubic yards of clean soil are being excavated per day for the CU and are being stockpiled at McClellan. He noted that to accommodate the new CU, the existing surface drainage had to be rerouted through a new underground culver that will drain into Magpie Creek. Liner installation is scheduled to begin in mid-July and the CU is scheduled to open and begin accepting contaminated soils in September. He said the CU will be covered through the rainy season to keep rain out and then it will reopen to accept more soils from McClellan next field season. That will continue through 2019 until all the remaining cleanup projects are completed at McClellan.

The Explanation of Significant Difference for the Focused Strategic Sites project documents two changes in the remedy from the ROD. The first is to fully excavate CS 022 instead of a partial excavation; the second change is to expand the capacity of the CU from 280,000 cubic yards to 360,000 cubic yards to hold contaminated soils from other sites at McClellan.

Regarding the last key document, Five-year Review Work Plan, Mr. Mayer said this is the fourth review for McClellan and the third for the Davis site. He explained that the reviews start with a look at the recommendations from the previous reviews. He noted that this review will be a bit different because some of the sites have been transferred to McClellan Park for privatized cleanup with EPA as the lead agency. The review on the privatized sites will be conducted through McClellan Park and EPA and then they will submit their report to the Air Force to be incorporated in the overall McClellan five-year review.

RAB Discussion

Mr. Green asked what are “vegetable oil injections” in the groundwater cleanup program? Mr. Mayer said that is used at the Davis site to degrade the solvents in the groundwater.

Mr. Green asked what is “fracking?” Mr. Mayer said it is used a lot in oil and gas production. It is used to improve the permeability of the formation. At McClellan, the Air Force is trying to loosen up an area of very tight formation through which the groundwater flows very slowly. The contractor will drill a network of wells and inject a substance to open up the ground so that the water will flow more freely. Mr. Mayer said the current production rates in the area are very low. By using the fracturing technique, they are hoping to increase the production rate from approximately 2 gallons per minute to 10 gallons per minute, which would translate to a faster cleanup of contaminants in the groundwater in that area. That area is the slowest to clean up according to the models.

Mr. Collier expressed concern with seismic events associated with fracking in other areas. He asked what is the difference between that fracking and what is being proposed at McClellan.

Mr. Mayer said the McClellan groundwater fracturing is a much shallower process – approximately 100 to 130 feet below the surface, whereas seismic activity is thousands of feet below the surface. He explained that the fracturing process will be a mechanical process, and then a propan, mostly sand, will be injected to hold the fractures open. In addition, a material

will be added that will help to break down the contaminants as well. So it is a mechanical process and a chemical process as well.

Mr. Collier requested a training workshop for additional information on the process. Mr. Mayer said the Air Force can take that as an action for a future meeting. He noted that the fracking process will take some time to demonstrate its efficiency.

Mr. Green asked if the 17-year reduction in cleanup time would translate to cost savings. Mr. Mayer said yes, it would. Mr. Green said that would be a selling point to the community and he suggested that the Air Force calculate the savings. Mr. Mayer said this optimization strategy was undertaken by the groundwater contractor as part of the competitive bid process to speed up the cleanup.

Under the Radiation Program, Mr. Green asked why the radium cleanup at sites CS 043 and CS 069 has been deferred to the Follow-on Strategic Sites (FoSS) remedial action? Mr. Mayer said they had been part of the non-time-critical removal action, but once the excavation and removal action had begun, they found the radium was more extensive and beyond the scope of that project. Because those landfills are being proposed to be excavated under the FoSS ROD, the Air Force decided to wait and complete the removal action when the ROD is implemented.

Mr. Green asked if there was a cost savings associated with the deferral. Mr. Mayer said no. The same work has to be done; it is just a matter of which project funds it. All the soil will go into the CU.

Mr. Green asked how hard will the CU be once it is in place and will there be any security at the site. Mr. Mayer said it will be lined and capped, similar to the Operable Unit D cap which was installed in the 1980s. Mr. Green asked if there had been any consideration about hardening the cap to protect against a bomb. Mr. Mayer said no, the material in the CU would be just soil, and relatively dilute in the contaminant concentrations. The contaminants would not create a problem if bombed. Mr. Mayer said there would be dust, but no issues with contaminants.

Mr. Jorgensen asked how much vegetable oil is being inserted and what happens to it? Mr. Mayer said it dissipates and degrades eventually after enabling the chemical breakdown of the solvents. Mr. Mayer asked Mr. Andy Cramer, program manager with CH2M Hill which has the contract for the Davis groundwater cleanup, how much was injected. Mr. Cramer said he wasn't sure but guessed somewhere around 10,000 gallons.

Note: The following day Mr. Cramer corrected the quantity to 32,400 gallons across three rounds of injections from 2010 to present.

Mr. Jorgensen asked what "VGAC" stands for. Mr. Mayer said vapor granular activated charcoal.

Mr. Jorgensen asked where the clean soil from the CU excavation is being stockpiled? Is it on Air Force property or on McClellan Park property and incurring an additional cost? Mr. Mayer said it is on Air Force property and there is no additional cost. He explained there is a series of six stockpiles. In some cases, such as at CS 24, the landfill on the southern part of the base, clean soil is being pre-staged there to be used as clean fill after that landfill is excavated.

Ms. Suarez-Murias asked the acreage of the groundwater optimization area. Mr. Mayer said it is approximately an acre in size and is a small parking lot. She asked what is the material that will

be fractured and where is the water table? Mr. Mayer said the lithology is silts and clays. The groundwater horizon is 100 to 300 feet below surface. He said all the fracturing work is in the saturated zone, out of the soil vapor range. He said the more porous sand layer is about 500 feet down.

Ms. Suarez-Murias asked if fracturing for groundwater cleanup has been done successfully elsewhere. Mr. Mayer said there are several cases and the Air Force will get back to her on that.

Regarding Building 252, Ms. Suarez-Murias asked what are the use restrictions on that site now that the building has been removed. Mr. Mayer said the site was released for unrestricted use. Ms. Gallino clarified that the site is still subject to Sacramento County zoning. Land use is unrestricted from an environmental point, but not from a zoning point.

Ms. Suarez-Murias asked what is the current use of the CS 10 area. Mr. Mayer said it currently is used for regional fire training and urban search and rescue training. In the past, the Air Force had a location in that area that they used for live fire training. She asked how much excavation would be done there? Mr. Mayer said the hard surfaces have been removed and the area to be capped is being graded for effective draining off the combined cap. He said that sites CS 011, 012, 013 and 014 and the Air Force fire training area are not being excavated. They are being capped in place.

Ms. Suarez-Murias asked about groundwater movement through the area? Mr. Meyer said the landfills had a depth of approximately 25 feet. Groundwater in the area is another 75 feet below that, so there is no interaction between the material in the pit and the groundwater. There are existing wells for soil vapor extraction and groundwater cleanup of volatile organic compounds in area. That cleanup will continue and ongoing monitoring is built in the CU and cap design.

She asked if there are any problematic materials in the pits. He said exploratory trenches and borings didn't show anything. He noted that in the case of landfills the only way to be completely certain of the contents is to excavate the entire thing. In the case of these landfills, they have been there since the 1960s. Every year approximately 2 feet of rain fall on them and there has been very little movement of anything or anything.

Regarding the drainage ditch, Ms. Suarez-Murias asked if that was a remnant of an original creek. Mr. Mayer said no. It was just a surface drainage ditch and it will be redirected through a subsurface culvert. She asked where the runoff from the CU and combined cap will go. Mr. Mayer said drain inlets are built into the design.

Questions from the public

There was a question about the possibility of groundwater contamination in the area of New Testament Baptist Church at 34th St. and Elkhorn Blvd. Mr. Mayer said there is no concern of groundwater contamination in that area. That site is northeast of McClellan and the groundwater flows in the opposite direction, so there is no need for concern. The Air Force has decades of monitoring data and Mr. Mayer offered to share it with the questioner. There is a monitoring well on that lot, but Mr. Mayer said it probably isn't even checked very often. Mr. Mayer said there is a consultation zone there if someone wanted to put in a well, but in terms of a real estate development, Mr. Mayer said he wouldn't have any concerns.

A gentleman asked if wells in the prohibition zone that were closed by the AF can be re-used. Mr. Mayer noted that people were allowed to use those wells for agricultural purposes. The

prohibition was to stop the use for drinking water purposes. He noted that if someone wanted to put in a new well, they would have to go to the County and ask for a variance on the prohibition.

Regarding the vegetable oil injections to feed micro-organisms at the UC Davis site, a gentleman asked if there was a by-product of that process. Mr. Mayer said that the chemical bonds of the chlorinated solvents break down and become less toxic. It takes months for the micro-organisms to consume all of the vegetable oil that has been injected into the aquifer.

The gentleman requested additional information about the vegetable oil injection process. Mr. Mayer said the Public Affairs office can do that. He noted that is different from the material being added to the McClellan fracturing site to break the bonds there and speed the cleanup.

Another gentleman asked what is the process and timeline for removing the prohibition zone. Mr. Taylor said the county is evaluating that. He said the consultation zone will remain in place throughout the county around any known groundwater contaminant plume. He suggested Ms. Gallino check into the status of the prohibition zone. The gentleman asked if there will be a notification and if residents would have to make an application. He said to re-activate a well, it would have to be permitted through the County and that can be done at any time.

Mr. Green said that at the County's briefing to the Rio Linda/Elverta Community Water District Board Meeting the previous night, the speaker gave an estimate of three years from now for lifting the prohibition, and before that happens there would be extensive public workshops and opportunity for public review. Ms. Gallino said the Environmental Management Department is responsible for the well program.

Mr. Collier asked if the City of Sacramento has any oversight of wells? Ms. Gallino said the Sacramento County Environmental Management Department covers the entire county including the incorporated areas.

A gentleman asked if there will be any well-specific monitoring to determine the effectiveness of the fracturing? Mr. Rich Beyak of URS Corp. said there would be monitoring in the area but he wasn't sure about specific wells. He said he would find out for the next meeting.

A gentleman asked how much money has been spent cleaning Building 252 over time? Mr. Meyer said the original intent in the early 1990s was to reuse the building as a conference center. During renovations they found significant mercury contamination. During the subsequent cleaning process, more extensive mercury contamination found and radium paint. Since then, the technology for testing for contaminants has improved. With the new technology, the Air Force scanned every surface of building and found some additional radium and had to remove it. Radium is a health hazard that had to be dealt with, as is the mercury. The Air Force went through a series of decontaminations on the building but ultimately had to address the contamination in the soil. The only way to get to the soil was to remove the building. Before the building could be taken down, the radium had to be removed. More radium was found in soil that had been tested previously. Then the Air Force had to scan the entire building footprint. Several additional areas were found that had to be cleaned up. Finally, site restoration was completed and the site was paved. There could not be any reuse of the property until the Air Force addressed the radium and mercury contamination on the site. The Air Force has now met its obligation of cleaning up that site. It has been a very extensive process of capturing the

radium put there some 50 years ago. Utilities had to be cleaned and sewer lines had contamination.

For costs, Mr. Mayer said we don't have the records from the activities when the building was open. He only has records from since base closure.

V. Local Reuse Authority Activities

Ms. Gallino said she didn't have anything to report at this time. She invited questions from the RAB or the audience.

RAB discussion

There were no questions from the RAB.

Questions from the public

A gentleman asked (in reference to off-base private wells in the prohibition zone) if there is a secondary treatment that can be used on the closed wells if they were reopened. Mr. Taylor said they could only be used for agricultural purposes and not for drinking water. He said treating at the wellhead for drinking water isn't allowed. He said that might change if the County removes the prohibition zone. He added that there are systems that people use to treat well water, but he doesn't have information on them. He reiterated that in this case, though, the County probably wouldn't allow the use of the wells for drinking water even with a treatment system in place.

VII. Regulatory Update

Mr. Bhular introduced Kim Hoang who has joined the EPA McClellan team as a remedial project manager. She is replacing Barbara Maco who retired earlier this year.

VIII. Public Comment

Frank Miller: *On the URS 52 fracking wells, when the company salesman made his presentation I asked him how much will the 52 wells cost. He was unable to give me even a ballpark figure. Now this raises red flags to me. When I also asked Steve Mayer how much these 52 fracking wells were going to cost and again I'm met with no answer and nothing but dissembling. These 52 fracking wells will be nothing more than a bogus experiment. This is all hypothetical. You have no idea what this is going to do. You know, I went to graduate school at Columbia in mineral engineering. This is nothing more than a modeling bogus experiment. I did modeling. All these 52 fracking wells is going to do is line your pockets with money while you hose the taxpayer. Now after you get done with wasting money with 52 fracking wells, creating a job for somebody, now over an 8-year period, how are you going to budget over an 8-year period. You're going to do monitoring and testing. These are all high profit center items. Now it will also be nice and convenient that you're choosing to do these 52 fracking wells over a paved area. You know, when I did wells, I had to go out in the boondocks and get stuck in the mud and dirty my shoes. You people will be doing it on a nice clean area. What a nice sweet job. And then when you get done wasting money on 52 fracking wells, you're not even going to use any of this water. At McClellan, you don't use any of your own water. You siphon water from the Sacramento Suburban Water District and my question is how much volume of water is siphoned from the Sacramento Suburban Water District and how does the billing work. Let's talk about how the money flows here. Ok, that'll do.*

Alan Chickos: As far as URS and maintaining and monitoring the wells for the underground contaminants that are being absorbed by the vegetable oil, what's your company mission statement? Do you have one?

Mr. Davis noted that this is a time for public comment, not question and answer. There were no additional public comments. There were additional questions from the public.

Mr. Chickos also asked what are the state of the art standards and techniques being used for maintaining and monitoring the wells. And where can he access that information.

Mr. Beyak said there are accepted standards for monitoring groundwater well. Brian Sytsma with the public affairs office suggested that the PA staff could meet with Mr. Chickos and help further explain the monitoring program and answer any other questions.

Another gentleman asked how water can be appropriate for agricultural use and not for drinking purposes. He said we eat the animals and vegetables that grow from that water.

Mr. Taylor said the state and regional water boards work under Basin Plans that set the objectives and identify "beneficial uses of the waters of the state". One beneficial use is for irrigation. With that designation are standards for water quality for agricultural purposes. There are also industrial purposes and drinking water purposes with different standards for water quality. The standard for agricultural water is not as high as for human consumption. So that the water we drink can be the highest quality.

Mr. Collier said that on the west side of the base there have been a lot of cancers in the 1980s and the wells were shut down. He said people still use the water for their strawberries and there is water in the strawberries. His answer is to not eat the strawberries from Rio Linda.

IX. Privatized Cleanup Update

Mr. Robert Carter introduced himself as a member of the TetraTech McClellan team. He said the new TetraTech project manager for McClellan is Valerie Walker, however, she was unable to attend due to a schedule conflict.

TetraTech is completing the CERCLA cleanup for the privatized sites at McClellan. The EPA is the lead agency for the cleanup. Mr. Carter gave a presentation on the status of the privatized sites (Attachment 6). Only information and comments not presented in the attachment are recorded in these minutes.

RAB discussion

Mr. Green asked if TetraTech coordinates with the Air Force in their privatized cleanup. Mr. Carter said absolutely. It is a team effort with coordination between the Air Force, the regulatory agencies, McClellan Park and TetraTech and information is shared and coordinated. Mr. Green asked if that lowers cost. Mr. Carter said yes. Mr. Hersh said the privatized team takes the body of work to date and moves it forward. They don't recreate it.

Mr. Jorgensen asked for a clarification of the color legend on the FOSET #3 slide (number 10 in the privatized presentation). Mr. Carter did so.

Questions from the public

A gentleman asked if property for FOSET #3 includes the runway. Mr. Mayer said yes it does.

He asked what happens if the contaminants go under the railroad tracks at CS 024. Mr. Mayer said the site was a former landfill, and they have conducted extensive sampling to verify that the trench did stop before the tracks. The pit contents haven't migrated and have stayed in the pit.

XII. RAB Members' Questions, Advice, Comments, and Announcements

Mr. Green announced that his 14th grandchild was born this month.

Ms. Suarez-Murias expressed her appreciation for the materials and the thoughtful explanations during the meeting.

Mr. Jorgensen said this was a very impressive meeting with wonderful turnout. People were able to ask questions and get answers. He thanked everyone for coming.

Mr. Collier thanked everyone for attending

Mr. Bhular said he hasn't seen this type of RAB meeting in a long time. It was very interactive.

Mr. Pay seconded that and thanked everyone for coming. He appreciated all the questions.

Mr. Meyer thanked everyone for coming. He said it is a busy season at McClellan and offered tours of all the activities for anyone interested

Mr. Sytsma pointed out the contact sheet in the packet with contact information for staff and RAB members. He encouraged anyone with questions to get in touch with the Air Force Public Affairs staff or anyone on the sheet.

The meeting adjourned at 8:25 p.m.

Next McClellan RAB meeting: Tuesday September 17, 6:30 p.m. at North Highlands Recreation Center.

Question during June 2013 RAB discussions

A gentleman asked how much money has been spent cleaning Building 252 over time.

Air Force Response: See Attached summary: Former Building 252 at McClellan Air Force Base

June 2013 RAB Meeting Public Comments

***Frank Miller:** On the URS 52 fracking wells, when the company salesman made his presentation I asked him how much will the 52 wells cost. He was unable to give me even a ballpark figure. Now this raises red flags to me. When I also asked Steve Mayer how much these 52 fracking wells were going to cost and again I'm met with no answer and nothing but dissembling. These 52 fracking wells will be nothing more than a bogus experiment. This is all hypothetical. You have no idea what this is going to do. You know, I went to graduate school at Columbia in mineral engineering. This is nothing more than a modeling bogus experiment. I did modeling. All these 52 fracking wells is going to do is line your pockets with money while you hose the taxpayer. Now after you get done with wasting money with 52 fracking wells, creating a job for somebody, now over an 8-year period, how are you going to budget over an 8-year period. You're going to do monitoring and testing. These are all high profit center items. Now it will also be nice and convenient that you're choosing to do these 52 fracking wells over a paved area. You know, when I did wells, I had to go out in the boondocks and get stuck in the mud and dirty my shoes. You people will be doing it on a nice clean area. What a nice sweet job. And then when you get done wasting money on 52 fracking wells, you're not even going to use any of this water. At McClellan, you don't use any of your own water. You siphon water from the Sacramento Suburban Water District and my question is how much volume of water is siphoned from the Sacramento Suburban Water District and how does the billing work. Let's talk about how the money flows here. Ok, that'll do.*

Air Force Response:

The 52 wells are not an Air Force cost. The 52 wells are part of a groundwater remediation optimization strategy being implemented at IC 29. This is part of the larger groundwater remediation performance-based remediation contract awarded to URS Corp in 2012. The contractor selected to implement an optimization strategy at IC 29 at their own cost and risk in an effort to increase the efficiency of the cleanup program. The optimization strategy is expected to save the Air Force significant costs in the long run by decreasing the overall cleanup time (and operational costs) by 17 years.

No water is siphoned from Sacramento Suburban Water District at McClellan. All public and private water users at McClellan are supplied water through Sacramento Suburban Water District and are billed directly for their water usage by Sacramento Suburban Water District. The groundwater the Air Force pumps and treats through the groundwater remediation program at McClellan is cleaned and released into Magpie Creek, where it is available for use by any downstream water purveyor.

Alan Chickos: As far as URS and maintaining and monitoring the wells for the underground contaminants that are being absorbed by the vegetable oil, what's your company mission statement? Do you have one?

Air Force response: The vegetable oil injection was done at the Davis Site under a contract with CH2M Hill.

URS Vision statement: "To be the best at what we do: making a positive difference to the environment and the people who work with us."

Former Building 252 at McClellan Air Force Base

Building 252 housed various Air Force maintenance operations from 1939 to the late 1980s including shops to repair cameras, parachutes, bombsights, radios, gyroscopes, and mercury-containing manometers. Luminous paint containing Radium-226 (Ra-226) was used on the first and second floors of Building 252 from 1939 to the 1960s to paint aircraft instrument dials. The building, and the sanitary sewer lines and soils adjacent to and under the building were contaminated with radium-226 and mercury as a result of operations inside the building.

In the early 1990s, the 55,275 sq. ft. building was mostly gutted for a major remodeling to support offices and a conference center. At one point it was scheduled to hold the Television-Audio Support Activity from the Sacramento Army Depot closed under the Base Realignment and Closure Commission (BRAC). During initial renovations, mercury was detected in some vacuum lines, and an investigation was initiated. The use of radium-226 was also documented on the first floor and parts of the second floor, and the need for a radiological site investigation was identified.

Subsequent activities in the early 1990s, with the intent of re-using the building, included asbestos removal, radiological scoping survey, radiological decontamination of the floors, walls, stairways and roof, sanitary sewer line removal, and identification of lead-based paint, however it was not remediated.

In July 1995 the Base Realignment and Closure Commission announced that McClellan would close. With the BRAC announcement, the focus at McClellan became environmental restoration under Comprehensive Environmental Response, Compensation, and Liability Act CERCLA, and property transfer under BRAC.

The goal of the Building 252 project, post-BRAC, was two-fold: 1) clear the building of radiological contaminants as required by the Air Force and California Department of Public Health prior to property transfer; and 2) clean the soil at the site, as required under the CERCLA. This could only be accomplished by removing Building 252 and 253 onsite.

To meet those goals, the post-BRAC cleanup project was a three-step process. The steps and total costs since implementation of BRAC in 1998:

1. Decontamination and decommissioning of Building 252 (\$2.5 million)
2. Demolition of Building 252 and 2 other buildings onsite to clear access for soil remediation around and under the former buildings (\$2.1 million)
3. CERCLA investigations, soil excavation and off-site disposal, and site restoration (\$3.4 million)

Total CERCLA-related cost for Building 252 site since BRAC is approximately \$8 million.

Building 252 CERCLA-related tasks since BRAC announcement included:

1999: Characterization Survey: Additional parts of the building were surveyed for radium contamination. The bottom of the elevator shaft, the basement sump, and the overhead catwalk on the Building 252 end, two basement drains, and concrete and asphalt surfaces surrounding the building showed elevated radiological readings.

2000: An Environmental Baseline Survey was conducted in 2000 documenting site inspection observations and findings inside Building 252.

2008 - 2009: Additional data gap sampling in subsurface soils and along former sanitary sewer line showed Ra-226 and mercury were still present at various locations in the soil under the building, and Ra-226 on the west and south sides of the building.

September 2009 through November 2010: Areas within the building with residual surface contamination exceeding the acceptance criteria for the site were identified, decontaminated, and waste disposed. Historic impact mitigation and documentation was completed because the building was part of a National Historic District.

February 2011: Final Status Survey completed showing the building to be free of Ra-226 and suitable for unrestricted release. Report accepted by Air Force Radioisotope Committee in December 2011.

2012-2013: 55,275 sq ft. building demolished and 3972 bcy of contaminated soils beneath the footprint were excavated and disposed of. Site restoration consisted of filling excavation with clean soil and paving excavated footprint to match surrounding environment.



McClellan Restoration Advisory Board Meeting

Tuesday, June 18, 2013

Add to
Mailing
List?

Name/Organization	Address	Email	Add to Mailing List?
Don White			
Peter Donnic Bryant			
OTTIS Berry,			
CHARNIT BHULZAR			
Robert L Carter			
Frank Miller			
Evelyn FRAZIER			
Stephen Pay			
JAMES Taylor			
Alan Chiklos			
Warren Myhre			



McClellan Restoration Advisory Board Meeting

Tuesday, June 18, 2013

Add to
Mailing
List?

Name/Organization	Address	Email	Add to Mailing List?
Kim Hoang			
Kathy Collins			
Warren Jinks			
Charles Winger			
LEE WHITEHEAD	See		
Tina Suarez-Murias			
Tiffany Mendoza			
Rich Beyak			
Gary McGlinn			
Paul Bernheisel			

**McClellan Restoration Advisory Board (RAB) Meeting
North Highlands Recreation Center
Tuesday, June 18, 2013, 6:30 – 8:30 pm**

AGENDA

<u>TIME</u>	<u>TOPIC</u>	<u>LEAD</u>
6:30 – 6:35	Welcome & Introductions	Bill Davis, Facilitator
6:35 – 6:45	Agenda & Comments on March Minutes	Bill Davis, Facilitator
6:45 – 6:50	RAB Co-chair Update	Community Co-chair Robert Blanchard
6:50 – 7:15	Air Force Cleanup Update <i>Goal: Provide an update of current field activities and key documents.</i> <i>Process: Presentation and Q&A</i>	Air Force Steve Mayer
7:15 – 7:20	Local Reuse Authority Activities <i>Goal: Provide an update of Local Reuse Authority activities.</i> <i>Process: Presentation and Q&A</i>	LRA Kathy Gallino
7:20 – 7:25	Regulatory Update	Regulatory Agencies
7:25 – 7:45	Privatized Cleanup Update <i>Goal: Update on the privatized cleanup projects in FOSET #1 and FOSET #2.</i> <i>Process: Presentation and Q&A</i>	TetraTech Robert Carter
7:45 – 8:00	Public Comment <i>Goal: Provide opportunity for members of the public to comment.</i> <i>Process: Public members fill out a comment card indicating their desire to speak. The facilitator will call each person to the microphone. Speakers are asked to limit their comments to 3 minutes, however, more time may be allowed as necessary and available.</i>	Bill Davis, Facilitator
8:00 – 8:15	RAB Members Advice, Comments, & Announcements <i>Goal: Solicit advice from each RAB member for upcoming agendas, and provide an opportunity for RAB members to express brief comments and/or make announcements.</i> <i>Process: Around the table for each member to offer agenda suggestions, comments, and announcements; comments will be recorded and will form future agendas.</i>	RAB

Next McClellan RAB Meeting: Tuesday, September 17, 6:30 p.m.

MEETING GUIDELINES

Ground Rules

- *Be progress oriented*
- *Participate*
- *Speak one at a time*
- *Be concise*
- *Use “I” statements when expressing opinions*
- *Express concerns and interests (not positions)*
- *Focus on issues not personalities*
- *Focus on what CAN be changed (not on what can not be changed)*
- *Listen to understand (not to formulate your response for the win!)*
- *Draw on each others’ experiences*
- *Discuss history only as it contributes to progress*

Facilitator Assumptions

- *We are dealing with complex issues and no one person has all the answers*
- *Open discussions ensure informed decision making*
- *Managed conflict is good and stimulates creativity and innovation*
- *All the members of the group can contribute something to the process*
- *Everyone is doing the best they can with the knowledge they have now*
- *Blame is unproductive and dis-empowering*

The McClellan Restoration Advisory Board provides a forum through which the local community, regulatory agencies, and the Air Force can share information on the current and future environmental cleanup programs and reuse at the former base. RABs offer members the opportunity to influence cleanup decisions through discussion and to provide input to the installation decision makers.

RAB members are volunteers representing their communities. Environmental restoration experience is not required for RAB membership. Rather, RAB membership criteria emphasize the diversity an individual will bring to the RAB and the individual’s commitment toward achieving the RAB’s goals.

**BRAC Cleanup Team and Stakeholders Meeting
20 June 2013**

FIELD REVIEW:

Groundwater Program Activities

a) McClellan Ground Water Treatment System (GWTS)

- 1) The GWTS is operating at approximately 1450 gpm (100% uptime); with the following extraction wells (EW) shut down for rebound monitoring because VOC concentrations are less than the MCLs:
 - OU A: *EW-336 (A/B), EW-456 (A/B groundwater monitoring zone), EW-297 (B), EW-435 (A/B)*
 - OU B: *EW-443 (A), EW 140 (B), EW-307 (C)*
 - OU C: *EW-144 (A/B), EW-137 (B), EW-446 (A)*
 - OU D: *EW-86 (A/B)*
 - OU G & H: *EW-451 (B)*
- 2) Flow to Beaver Pond has been shutdown since 1 November 2012 with the Beaver Pond water level currently at 2.0 ft. The CERCLA treatment system is operational. The ion exchange system is operating normally.
- 3) *EW-444 and EW-445 were shutdown on 29 April 2013 due to well utility line interference with CU drainage culvert pipe construction. Wells should be reconnected later this week.*

b) Ground Water Monitoring Program (GWMP). The 2Q13 groundwater sampling event was completed by 22 April. *3Q13 sampling to begin 22 July.*

c) Davis GWTS. Davis GWTS is shut down. Additional round of vegetable oil injections ongoing.

d) IC 29 Groundwater RPO (in-situ fracturing). Baseline groundwater sampling of compliance/performance groundwater monitoring wells installed in 1Q13 occurred in 2Q13 (12 wells at 9 locations). *Site preparation (concrete coring, fencing, etc.) for fracture well drilling to begin 24 June (drilling expected June - August, and fracturing in September).*

Soil Vapor Extraction (SVE) Program Activities

e) Soil Vapor Extraction (SVE) Systems

All shutdown for rebound 29 June 2012 except IC 37 oxidizer, OU C1 oxidizer, and IC 19 oxidizer (now VGAC). *Sampled for rebound in 1Q13, confirmation in 2Q13.*

(4 of 12 SVE systems are **operating**, removing vapors from 4 of 10 SVE sites).

- 1) IC 1 SVE shutdown 29 June 2012. Little rebound, proceeding with STOP evaluation.
- 2) IC 7 SVE shutdown 29 June 2012. Little rebound, proceeding with STOP evaluation.
- 3) IC 19 Flameless Thermal Oxidizer (FTO) not operating; replaced by IC 19 VGAC on 2 October 2012. New SVE well EW-498 sampled 9/5/12 began operating 10/2/12.
- 4) **IC 19 VGAC was restarted 2 October 2012** to replace IC 19 FTO because it allows more airflow (needed for new well). Unit shut down on 1 March 2013 so it could be relocated off of proposed cap; restarted 16 April 2013.
- 5) IC 31 SVE shutdown 29 June 2012. Little rebound, proceeding with STOP evaluation.
- 6) **IC 34/35/37 FTO system is operating normally**, extracting from IC 37 wells only.
- 7) IC 34/35/37 SVE shutdown 29 June 2012. Little rebound, proceeding with STOP evaluation.
- 8) **OU C1 FTO system is operating normally.** EW-494 shutdown 10/31/12 to allow CH2MHill to excavate area; well back online 15 March 2013.
- 9) OU C1 VGAC is not operating.
- 10) OU D VGAC shutdown for rebound 29 June 2012.
- 11) **OU D Thermal Oxidizer is operating normally.** Limited rebound in two areas after 29 June 2012 shutdown. System restarted 8 April 2013 to address these areas.

NOTE: *Italicized text represent update changes*

BCT & RPM Field Activities Update 20 June 2013

Margin or Underlined text represent corrective changes

- 12) B243 (PRL S-008 only) SVE shutdown for rebound 29 June 2012. Little rebound, proceeding with STOP evaluation.

Petroleum, Oil, and Lubricants (POL) Cleanup Activities

f) POL Program:

- a) **PRL S-40 Biovent System** – Shutdown for rebound 1 June 2012. Rebound soil gas sampling conducted 5 December 2012. Relatively little rebound. 4Q12 monitoring report recommended site closure; closure report being prepared.
- b) **Basewide Fuels Investigation** – The Bldg. 4 and Bldg. 1036 biovent systems were shutdown for rebound 1 June 2012. Rebound soil gas sampling conducted 5 December 2012. Relatively little rebound. 4Q12 monitoring report recommended site closure; closure reports being prepared.

Soils Remediation Program Activities

g) Radiation Program.

- 1) CS-10 – Site controls are being conducted by URS. Tent demolished *and materials to be shipped off site now that the Tent Survey Report was approved on 14 June.*
- 2) SVS and B252 NTCRA – Excavations are completed at all sites (PRL S-018/CS T-030, aka B252; CS 040, and the gas header at CS B-005). Restoration of the sites is nearly complete.
- 3) FOSET #3 NTCRA - Excavations and final status surveys are completed at all sites, and the sites are restored. Excavation of the radium at CS 043 and CS 069 has been deferred to the FOSS RD/RA.
- 4) FSS – Work plans and CU design were issued as final documents. Monitoring of BMPs at CS 22 is ongoing. CU excavation, outside of the CS 10 site, was started on 22 April. Culvert construction started on 24 April. Pipelines installed. Junction boxes and drains being installed. Work was at a stoppage while awaiting approval of the FSSR during the week of 20 May. *Re-commenced excavation of CU on 31 May upon receiving verbal approval from the AF RIC. Approximately 160K cy removed as of 14 June. All excavated soil is being stockpiled in stockpile locations A and E. Soil stockpiles receiving stormwater BMPs as required by the SWPPP, including bonded fiber matrix application. Conducting weekly SWPPP BMP monitoring inspections throughout work areas. Continuing with demolition, grading, and compaction of the Combined Cap area. SMUD conducted demolition of telephone pole power supporting arms within the CU. Will recycle tent materials this week based on verbal approval from the AF RIC.*
- 5) AOC 314 and PRL S030A – Soil excavation and post removal surveys have been completed at AOC 314 and PRL S030A. Data packages for AOC 314 have been submitted. Data packages for PRLS030A have been sent to the Air Force and McClellan Park and have been approved. RACR/FSSR for PRLS030A will be submitted later this week. *Site restoration at both sites is being planned for July.*

Other Management Activities

- h) **OU D Cap O&M.** *2Q13 inspections conducted 13 May and 30 May (after mowing). Minor maintenance completed by 7 June.*
- i) **Wetlands/Habitats Management Maintenance and Miscellaneous Activities** – *Comments on the Draft Final Biological Resources Technical Memorandum and Mitigation Plan for FSS project were received from CDFW. Biological monitoring is ongoing.*
- j) **Ecological Sites Proposed Plan/ROD** – The Draft Remedial Action Work Plan was distributed on 15 March 2013. Comments from the regulatory agencies have been received, and the Draft Final RAWP is in preparation. *The contract mod for the Offbase Creeks Work Plan was awarded 14 June, and target date for submittal to agencies is 11 July 13.*
- k) **Wetland Delineation Update** – Field work for the 2013 wetland delineation update of Air Force retained properties has been completed and preparation of the report is in progress.

NOTE: *Italicized text represent update changes*

BCT & RPM Field Activities Update 20 June 2013

Margin or Underlined text represent corrective changes

Current Key Documents and Events of Interest to the RAB

June 18, 2013 RAB Meeting

	Document	Document Description	Status	FOSET
1	Ecological Sites Remedial Action Work Plan	Details the work plan and schedule for the cleanup action at the Ecological Sites	Agency comments on draft received mid-May. Draft final to be issued late July.	FOSET #3
2	Radiological Non-time-critical Removal Action Final Status Survey Reports (FSSR).	Documents the results of the final scan and survey to confirm removal of radiological contaminants at the site. Report is reviewed by Air Force Radioisotope Committee (RIC) and by California Department of Public Health.	See separate handout	FOSETs #2 & 3
3	Follow-on Strategic Sites Record of Decision (ROD)	Details the Air Force's cleanup decision for the Follow-on Strategic Sites	Agency comments on draft being reviewed by Air Force. Draft Final to be issued August.	FOSET #3
4	Focused Strategic Sites CS 10 FSSR	Documents the results of the final scan and survey to confirm removal of radiological contaminants at the site. Report is reviewed by Air Force Radioisotope Committee (RIC) and by California Department of Public Health.	Final to go to RIC this week.	FOSET #3
5	Focused Strategic Sites Integrated Remedial Action Work Plan	Details the work plan and schedule for the cleanup action at the Focused Strategic Sites.	Final issued in May.	FOSET #3
6	Focused Strategic Sites Consolidation Unit and Combined Cap Remedial Design	Documents basis of design, construction drawings, and specifications for CU and combined cap.	Final issued in May.	FOSET #3
7	Focused Strategic Sites Explanation of Significant Difference (ESD)	Describes the differences in the remedy specified in the ROD for CS 022, and the actual remedy that will be implemented and the rationale for the different remedy.	Air Force signed in late May. Circulating for agency signatures.	FOSET #3
8	Groundwater Remedial Process Optimization ESD	Describes the differences and rationale from the remedy specified in the Basewide VOC Groundwater ROD and the proposed remedy to allow fracturing of the groundwater aquifer in IC 29.	Final awaiting Air Force and agency signatures.	

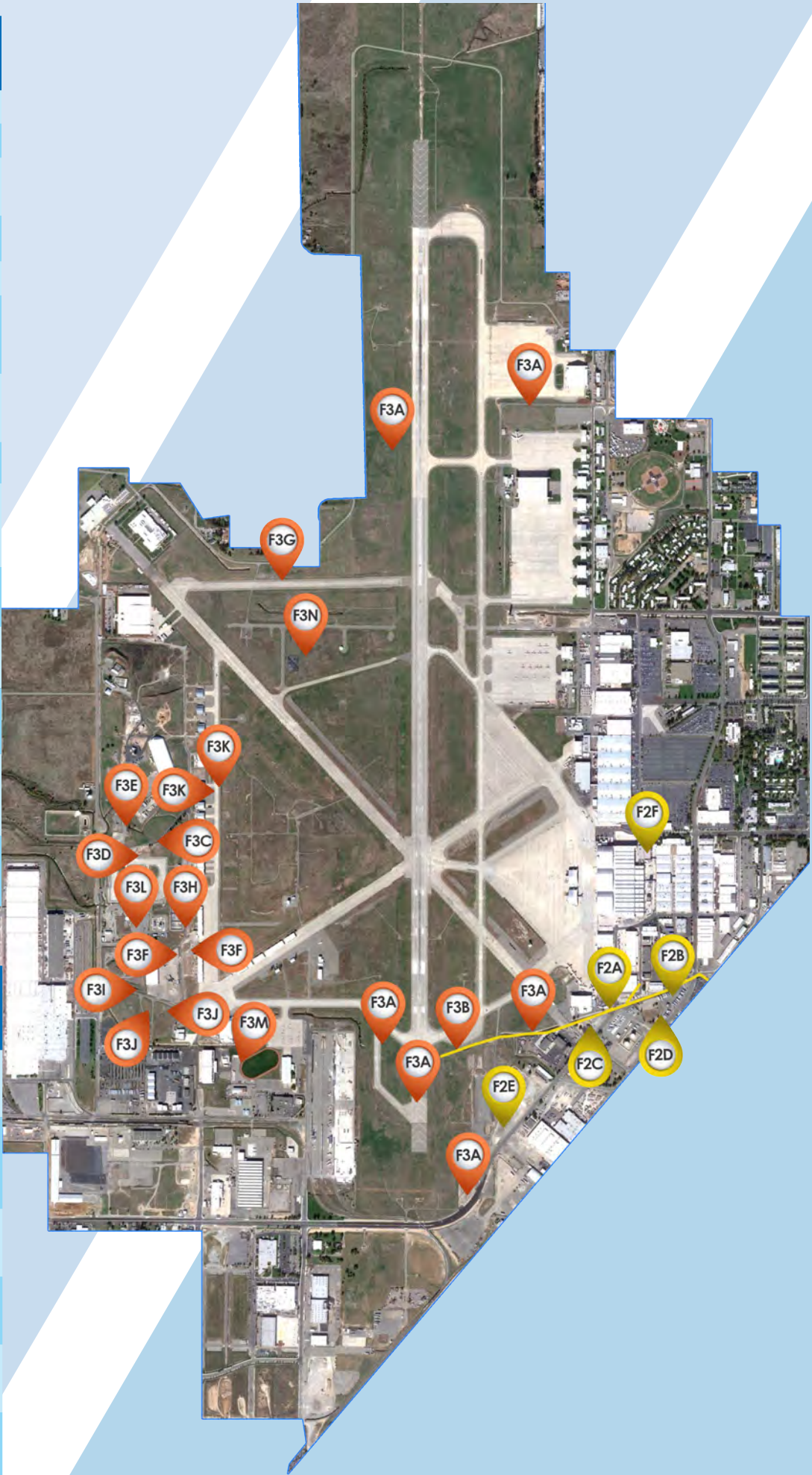
9	McClellan 5-year Review Work Plan	Documents the requirements and process for the 5-year review of CERCLA remedies at McClellan and at the Davis site.	Draft issued for agency review in May.	
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FOSET #3 Non Time-critical Removal Action Sites

Ref	Site	Excavation Status	Soil status	Final Soil Volume (cubic yards)	Site Survey	Site Restoration	FSSR
F3A	AOC 321 - Airfield	✓	At CS 022	790	✓	✓	Preparing Final
F3B	CS 037 - Disposal Pits	✓	At CS 022	1,726	✓	✓	In regulatory review
F3C	CS 043 - Disposal and Burn Area	✓	At CS 022	None Removed	Part of FoSS Remedy	Backfilled. Awaiting FoSS ROD.	Part of FoSS Remedy
F3D	CS 052 - Disposal Pit	✓	At CS 022	64	✓	✓	Preparing Final
F3E	CS 067 - Disposal Pit	✓	At CS 022	29	✓	✓	In regulatory review
F3F	CS 069 - Disposal Pits	✓	At CS 022	1,330	Part of FoSS Remedy	Partially backfilled. SWPP in place. Awaiting FoSS ROD.	Part of FoSS Remedy
F3G	Northwest Taxiway - Radiological Release Location	✓	At CS 022	3,190	✓	✓	In regulatory review
F3H	PRL 020 - Disposal and Burn Pit	✓	At CS 022	22	✓	✓	Preparing Final
F3I	PRL 032 - Hazardous Waste and Low-Level Radioactive Waste Storage Area	✓	At CS 022	138	✓	✓	In regulatory review
F3J	PRL 056/057 - Treated Wastewater Discharge Area	✓	At CS 022	259	✓	✓	In regulatory review
F3K	PRL 066C/PRL L-007C - Drainage Ditch and Industrial Waste Line	✓	At CS 022	35	✓	✓	Preparing Final
F3L	PRL 068 - Unlined Storage Tanks and Former IWTP 1 Tanks	✓	At CS 022	6,251	✓	✓	In regulatory review
F3M	SD 290 - Old Magpie Creek Channel, Historic Creek Channel Buried During Realignment	✓	At CS 022	3,010	✓	✓	In regulatory review
F3N	Taxiway 7612 - Radiological Release Location	✓	At CS 022	4,877	✓	✓	In regulatory review

FOSET #2 Non Time-critical Removal Action Sites

Ref	Site	Excavation Status	Soil status	Final Soil Volume (cubic yards)	Site Survey	Site Restoration	FSSR
F2A	SA 109 - Magpie Creek East of the Runway	✓	Disposed off site	16,160	✓	✓	Preparing Draft Final
F2B	SA 109 - Radiological Release Above North Bank of Magpie Creek	In Progress	Disposed off site	TBD	✓	Awaiting completion of removal action	Preparing Draft Final
F2C	CS B-005 - Disposal Trenches	In Progress	Disposed off site	TBD	✓	In progress	Preparing Draft Final
F2D	CS 040/PRL S-006 - Former Wastewater Treatment Facility	In Progress	Disposed off site	TBD	✓	In progress	Preparing Draft Final
F2E	Dudley Blvd. Site - Radiological Release Location	✓	Disposed off site	120	✓	✓	✓
F2F	PRL S-018 - Bldg. 252, Radium Paint Shop	In Progress	Disposed off site	TBD	Awaiting completion of removal action	In Progress	Preparing Draft Final








McClellan RAB Presentation

Former McClellan AFB, California
18 JUN 2013






McCLELLAN PARK

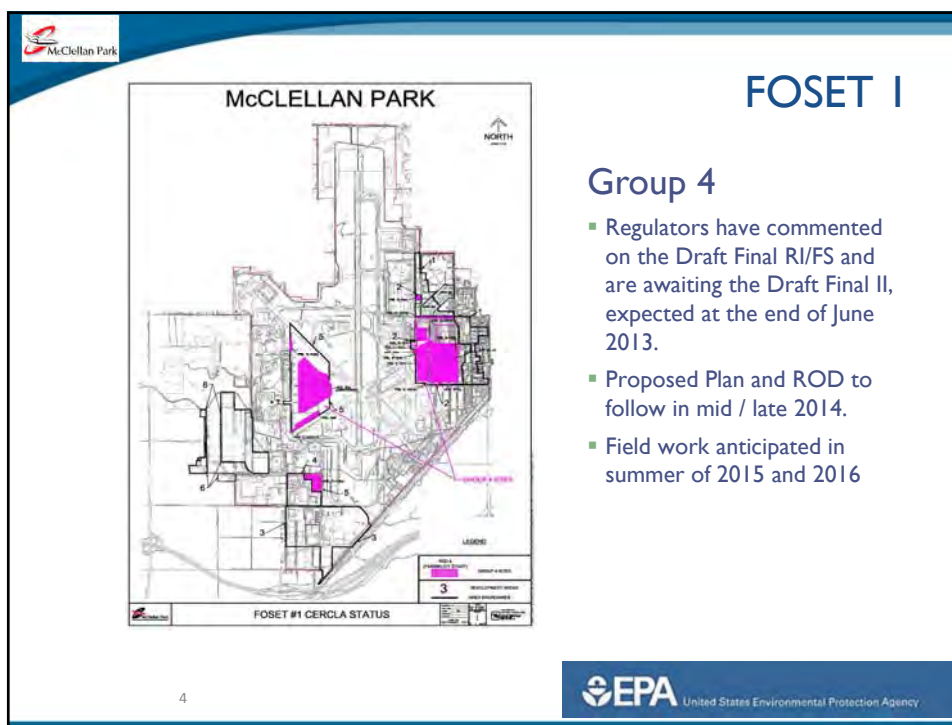
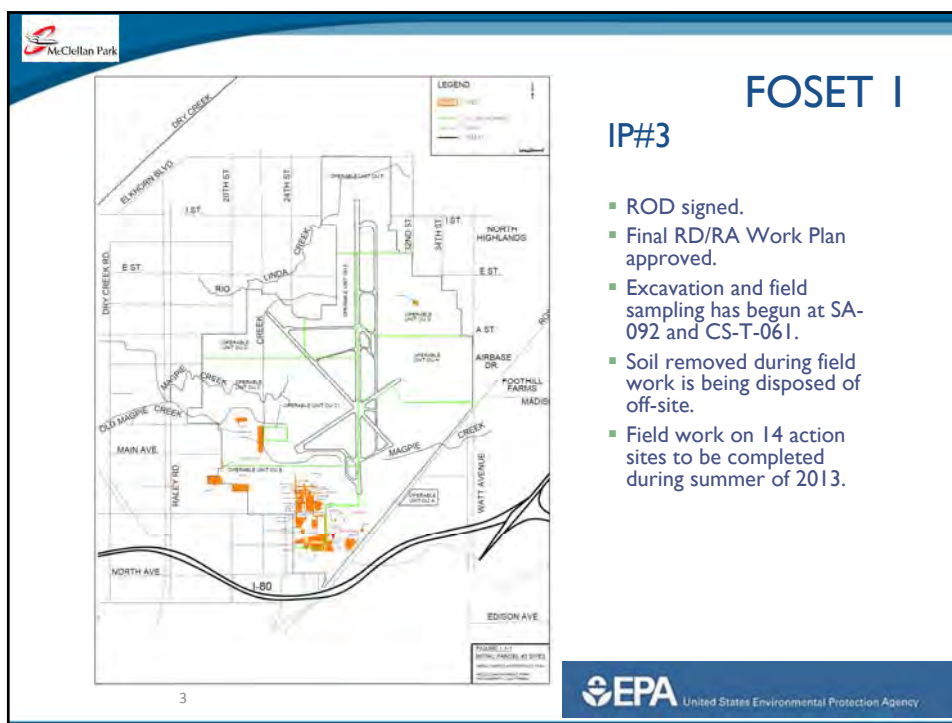


FOSET I

IP#2
Completed;
Development Area I
RACR: Approval
received 11 January 2013

FOSET 600 ACRE CERCLA STATUS





McClellan Park

Non-Time Critical Removal Action Sites

AOC 314
PRL S-030

FOSET I

FOSET #1 CERCLA STATUS

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5

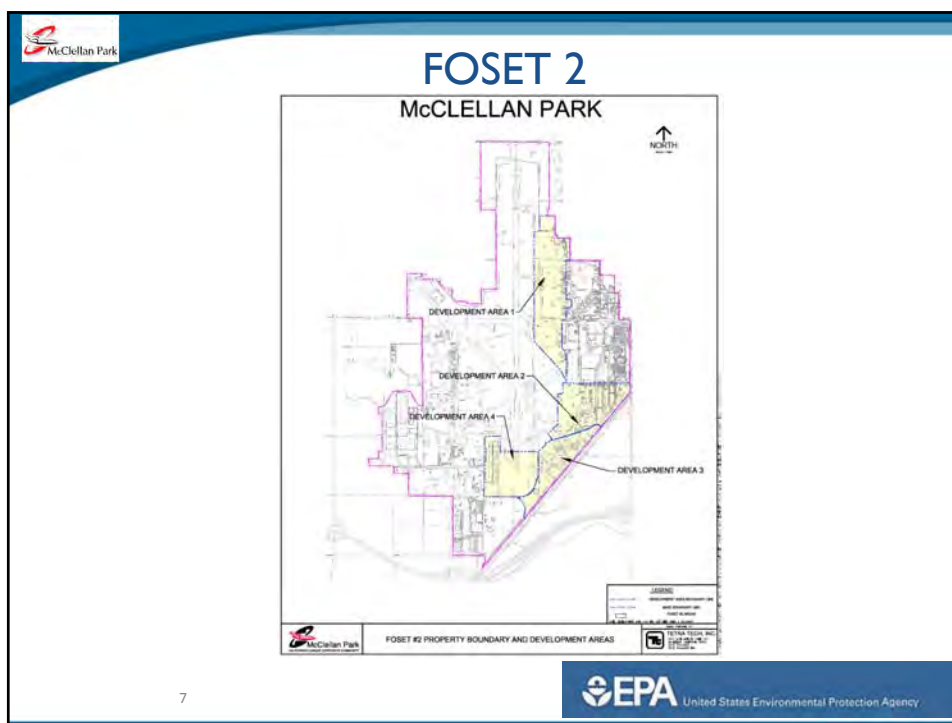
McClellan Park

AOC 314 / PRL S-030A Delayed Transfer Project

- Approaching Completion
 - Excavation completed
 - Radiological surveys completed
 - Soils from AOC 314 and PRL S-030A have been shipped off-site via rail
 - Shipping the soil off site using the rail method reduced emissions, and the carbon footprint while increasing public safety.
 - Final Status Survey Reports (FSSR) & Removal Action Completion (RAC) pending
 - Site restoration pending

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6



FOSET 2


- FOSET 2 transferred 528 acres of former McClellan AFB and includes 131 Installation Restoration Program (IRP) sites.
- The FOSET 2 kickoff meeting was held on 20 March 2013.
- Three Proposed Plans are currently being drafted by the EPA: No Further Action Sites, Institutional Control Only Sites, and Action Sites. Three Records of Decision will follow.
- Updates are being made to the *Supplemental Community Involvement Plan for Privatized Parcels Cleanup* to include FOSET 2.
- Awaiting State regulators' comments on the Draft Remedial Design / Remedial Action (RD/RA) Work Plan for Ecological Site PRL P-007 and will issue the Draft Final soon after receipt of those comments.

8

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McClellan Park

FOSET 2 Ecological Site PRL P-007



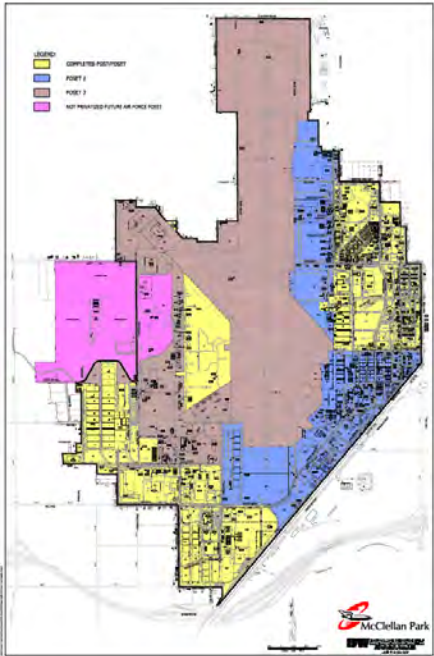
- RD/RA Work Plan to address estimated 470 cubic yards of PAH-impacted creek sediment.
- Fieldwork anticipated in late Summer 2013.

9

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McClellan Park

FOSET 3



- FOSET 3: Final portions of the former base
- Property transfer anticipated in 2014

McClellan Park

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McClellan Park RAB – JUN 2013

Questions?

For more information, contact:

Alan Hersh
(916) 965-7100
ash@mcclellanpark.com

or



Bob Fitzgerald
(415) 947-4171
fitzgerald.bob@epa.gov

or



Valerie Walker
(916) 643-4826 x124
valerie.walker@tetrattech.com