

**McClellan Meeting Minutes – Final  
May 18, 2004  
McClellan AFB Restoration Advisory Board (RAB) Meeting  
Bell Avenue School, Sacramento, California**

RAB Members in Attendance:

Kevin Baum, Community Member  
Gary Collier, Community Member  
Kevin Depies, CA Department of Toxic Substances Control  
Joe Healy, U.S. Environmental Protection Agency  
Alan Hersh, McClellan Park  
Jeanette Musil, LRA  
Paul Brunner, AFRPA  
Paul Plummer, Community Member  
James Taylor, CA Regional Water Quality Control Board  
Jennifer Weidhaas, Community Member

**Welcome and Introductions** Joe Saxon, URS Public Affairs Specialist, welcomed all attendees to the McClellan Restoration Advisory Board (RAB) meeting.

Ms. Kelly Ryan, meeting facilitator, reviewed the RAB meeting guidelines. She introduced Kris Escarda, DTSC Public Participation Specialist.

Ms. Ryan announced that James Roberts, community member, has stepped down as a RAB member.

**Introductions**

The RAB members introduced themselves to the public.

**Agenda**

Ms. Ryan reviewed the agenda and handouts. Ms. Ryan explained that the public can make comments at the meeting by filling out the comment cards, and she pointed out how the public can contact members of the RAB and Air Force.

**Comments on Minutes**

No comments were received from the last RAB meeting minutes. The February 2004 meeting minutes were approved and finalized.

**Air Force Cleanup Update**

Paul Brunner presented the cleanup update, referring to a handout in the information packet provided to all RAB members, which contained detailed descriptions of progress at several projects and sites at McClellan. He specifically addressed the following:

- **Groundwater Treatment Plant (GWTP)** – The hexavalent chromium ion exchange treatment system and the ultraviolet oxidation system are operating normally. The GWTP lost electric service due to storm outages on 25 February 2004, resumed operation on 26 February 2004, and was shut down on 27 February 2004 because the

burner coil failed. The burner unit was replaced and the GWTP was restarted on 8 March 2004.

- **Minor Spill Incident** – On 4 March 2004, one-quarter to one-half gallons of sewage was released into Magpie Creek near the former Aero Club. The release was the result of a sewer pipe leak caused from debris build-up from the February storms. The leak was immediately repaired with no apparent environmental impact.
- **Confirmed Site (CS)-10** – Currently, there are approximately 23,400 cubic yards of soil staged inside the tent until funding is obtained to dispose the contaminated waste. The site has continuous perimeter air monitoring for radiation and URS continues to inspect and maintain the area.

The tent at CS-10 suffered damage during the storm event on 25 February 2004. No contaminants were released from CS-10 because of the damage. Repairs are scheduled to begin in late May/June timeframe. (A photo of the tent was displayed.)

Mr. Collier asked if there was breach in the tent (seen on the photo) as indicated by the sun shining through the tent. Mr. Brunner stated that rain did enter into the site, and that the rainwater was later used for dust suppression.

CS-10 was exhumed to confirm that there is no immediate threat. All soil exhumed at the site had low-level contamination. An alternative other than excavation being considered is the potential consolidation of soils from other disposal pits. The regulators and public were invited to make comments on this issue.

- **OU B-1 Cap and OU D Cap**– The first quarter inspection included sediment sampling. There were hits of low-level polychlorinated biphenyls (PCBs) in two sediment traps. Follow-up sampling and analysis will be performed in accordance with McClellan's protocols. The results will be provided in the first quarter report. 9-

Mr. Collier asked if there is movement in the ditch or is it currently only soil. Mr. Brunner stated that there are ecological receptors along the ditch.

- **OU B-1 Drainage Ditch** –The Draft Final Removal Action Completion Report (RACR) was finalized on 26 April 2004.
- **Document Deliverable Status Report (DSR)** – Mr. Brunner pointed out that a list of all the deliverables to be updated by all managers for the next 45 days is included in the handout packet.

**Key Documents of Interest to the RAB** – Mr. Brunner referred to a chart listing documents, some of which have already been developed and some of which will be developed during the next few months. These documents are available to the RAB members upon request.

Mr. Brunner brought attention to the following documents:

- Vadose Zone Monitoring Report,

- Groundwater Quarterly Report,
- Second Five-Year Review,
- Basewide VOC Groundwater Proposed Plan – out for review in June 2004
- Finding of Suitability for Early Transfer (FOSET) – (81 acres), and
- Finding of Suitability of Transfer (FOST) – (97 acres),
- Initial Parcel ROD Sites (McClellan worked on seven sites and anticipates that this document will be signed within the next few weeks with cleanup actions beginning this summer.)

Additionally, a written response to Mr. Collier's comment during the February RAB meeting was distributed to the RAB members.

### **LRA Activities Update**

Jeanette Musil gave an update on the Local Reuse Authority:

**Sanitary Sewer System Project** –This is a \$50 million project. This project begins with transferring the sewer system at McClellan Park from the Air Force to the County. It then involves removing and replacing the system with a new one and disposing of pipe and soil contaminated by previous military activities. The LRA will be the government entity operating the sewer. The responsibilities will include activities such as billing, operations, maintenance and spill notification.

The sanitary sewer system project has two phases, Planning and Design, which began June 2003 and will end June 2004; and Construction, which will begin July 2004 and end December 2008.

McClellan Park is obligated to provide the County with a code-compliant, capacity sufficient sanitation sewer system. The County received \$4.9 million, via a congressional appropriation to assist the Air Force with its remediation costs. This funding is does not detract from other environmental funds at McClellan, and is in addition to current AFRPA funding for McClellan.

Ms. Musil showed a slide showing the sanitary sewer system, which is over 20 miles. A slide was shown giving the areas of where the first, second, third, and fourth year activity.

Ms. Musil further stated that McClellan Park and its contractors have extensively analyzed and performed historical research on sanitary sewer system. McClellan Park will develop a cost estimate based on this information. Ms. Musil offered to review all the agreements at the next RAB meeting.

**Land Use** – there is concern from the regulatory agencies and the Air Force about future development and what safeguards will be in place for future developers at McClellan. The county will meet with County Planning to discuss developing a notification process for flagging the land use controls.

Mr. Brunner asked how many years the improvement project is scheduled for. Alan Hersh stated that the EDA Project would take approximately three years for permits and construction.

Mr. Collier asked for more information on traffic impact. Mr. Brunner stated that that information is in the Environmental Impact Report (EIR).

## **Five-Year Review**

### **Introduction**

Mr. Mike Zabaneh explained the purpose of the Five-Year Review is to determine if the selected remedies are functioning as intended and are protective of human health and the environment. He briefed the RAB members on the Five-Year Review using the hand out and overhead slides on the Five-Year Review findings and recommendations. The overall finding indicates that McClellan's remedies are protective of human health and the environment. The Five-Year Review was reviewed by nine regulatory agencies and was approved and signed by the U.S. EPA, Cal/EPA, and the Air Force.

A detailed handout was included in the handout packet. Additionally, the Five-Year Review is available upon request. Mr. Zabaneh stated that the community can get involved by reviewing the Five-Year Review Report, provide feedback, discuss the Five-Year review at RAB meetings, and provide issues to be considered during the next review.

Ms. Musil stated that it is important that discussions take place concerning the role and funding of land use controls The County has not agreed to implement, fund, and/or administer any of the land use controls since the County is not responsible for the contamination. She emphasized the need for dialog. Mr. Brunner stated that he agrees and the Air Force's goal is to move property and move on. Land use control is a negotiating issue as to who does what and who will fund it.

Mr. Hersh stated that the remedies are only recommendations. It is his opinion that it is too early to discuss institutional controls (i.e., land use controls).

Mr. Healy stated that when there is a ROD, the public is guaranteed an opportunity to review the Proposed Plan, which will identify the recommended remedies at a particular site. The first proposed plans to be submitted are the Groundwater Proposed Plan and the VOC Proposed Plan. The Air Force will propose a remedy; McClellan and the County can make oral comments and/or submit oral comments at the proposed plan meeting. This will be the opportunity for all concern parties to submit comments in writing, because the Air Force will be required to take these comments in account when making decisions and the U.S. EPA will be forced to oversee the comments.

Mr. Healy emphasized the importance of public comments and encouraged the RAB members to pay attention to the documents.

Mr. Brunner stated that McClellan Park and County will get copies of these documents. Mr. Healy stated that the Basewide VOC is an addendum, which analyzes institutional controls as to its protectiveness. This document warrants review and comments.

Mr. Brunner commented that the Air Force will do all of the stated recommendations.

Ms. Musil asked what happens if a remedy is not working. Mr. Healy stated that approximately two years ago, it was discovered that the GWTP was releasing hexavalent chromium that was above the legally allowable limit. As soon as this was discovered, it was addressed and corrected. Mr. Brunner stated that if something is not working it is addressed immediately.

Mr. Depies reiterated that the Five-Year Review is an evaluation on whether a remedy is protective and achieving its goals.

Mr. Collier asked about a tenant damaging the landfill cap – he wanted to know if taxpayers are subsidizing the tenants or if the tenants are responsible for repairing the landfill cap.

Mr. Brunner stated that if the tenants are responsible, then they would be responsible for paying pay for the repairs.

Mr. Hersh stated that the landfill cap is designed to support industrial activity. When it does not, the repair is funded by the Air Force. When the landfill cap is damage by construction, McClellan Park is responsible.

Mr. Collier asked what is the life expectancy of landfill cap. Mr. Brunner stated that the landfill cap will be replaced in five to seven years.

Mr. Collier asked if McClellan will remove the PVC pipe and replace it with something sturdier, Mr. Brunner stated that the cap is protective, if the cap is a final remedy it will be replaced with a better cap.

Mr. Brunner stated that McClellan has tried to be proactive. The Five-Year Review is a significant document to the Air Force, County, and McClellan Park. The Five-Year Review is a tool that allows businesses to see the condition of McClellan and it gives an accurate snapshot.

#### **Public Comment Period**

None.

#### **RAB Members Advice, Comments, and Announcements**

Mr. Baum stated that he appreciates the website. He requested that the Air Force provide a list of relevant public access meetings to the RAB members in order that they might have the opportunity to attend.

Mr. Healy stated that this is the second Five-Year Review for McClellan. During the first Five-Year Review, the U.S. EPA encourage the Air Force to go beyond the letter of the law and go to the spirit of the law by reporting on remediation system that were not a result of the ROD. It is Mr. Healy's opinion that McClellan did a great job looking at remediation whether it came from a ROD or not. U.S. EPA appreciates the effort.

Mr. Paul Plummer requested that the RAB meeting dates be changed in order for other RAB members to attend.

Mr. Depies stated that a poll of RAB members should be taken regarding RAB meeting dates. He also concurred with Mr. Healy that the Air Force did a great job on review and went beyond the ROD.

Mr. Musil asked what is the composition of the RAB and is the RAB full. Mr. Saxon stated that McClellan is in the midst of a membership drive now.

Mr. Collier requested for more information on economic and residual storage in terms of CS 10 and how it impacts other potential excavated sites. He also requested a list of regulatory meetings be made available.

Mr. Brunner stated that a poll was taken several years ago to schedule RAB meetings. The members who could not attend during that time are not on the RAB now. He agrees of re-polling. Additionally, Mr. Brunner has an open-door policy for RAB members to discuss any issue. He is also available to speak to groups, luncheons, etc.

Mr. Brunner said the Air Force will develop and provide a calendar of meetings.

Ms. Weidhaas asked if the RAB members will have an opportunity to review the ROD. Mr. Depies stated that the proposed plan will be distributed June 2004 and comments are due mid-July 2004. This document will be placed on the website.

Mr. Brunner announced that Mr. Gibson's wife passed away; a card was passed for RAB members to sign.

Mr. Collier stated that he recently heard that there are "youngsters" battling cancer in the Rio Linda area. He asked if McClellan is aware of this and has there been contact (it is believed that agriculture products are the cause). Mr. Brunner stated that he was not aware nor was he contacted.

**McClellan Restoration Advisory Board (RAB) Meeting  
 Bell Ave School  
 1900 Bell Ave, Sacramento  
 Tuesday, May 18, 2004  
 6:30 – 8:30 pm**

**AGENDA**

<u>TIME</u>	<u>TOPIC</u>	<u>LEAD</u>
6:30 – 6:35	Welcome	Air Force
6:35 – 6:40	Introductions & Meeting Guidelines	Facilitator
6:40 – 6:45	Agenda, Comments on Minutes	Facilitator
6:45 – 7:15	<b>AF Cleanup Update and LRA Activities</b> <u>Goal:</u> Provide an update of current field activities. <u>Process:</u> Presentation and Q&A	Air Force Paul Brunner LRA Jeanette Musil
7:15 – 8:00	<b>Five Year Review</b> <u>Goal:</u> Provide information on findings and recommendations from the Five-Year Review process <u>Process:</u> Presentation and Discussion	Air Force Mike Zabaneh
8:00 until complete	<b>Public Comment</b> <u>Goal:</u> Provide opportunity for members of the public to comment. <u>Process:</u> Public members fill out a comment card indicating they want to speak. The facilitator will call each person to the microphone. Statements will be timed and are limited to 3 minutes for each speaker. The timer will notify the speaker when they have 30 seconds remaining and when they have reached 3 minutes.	Facilitator
Upon conclusion of public comment	<b>Next RAB Meeting</b> <b>Tuesday, August 17; Place: TBD</b> <b>RAB Members Advice, Comments, &amp; Announcements</b> <u>Goal:</u> Solicit advice from each RAB member for upcoming agendas, and provide an opportunity for RAB members to express brief comments and/or make announcements. <u>Process:</u> Round the table for each member to offer top suggestions for agendas, comment and announcements; comments will be recorded and will form future agendas.	Facilitator  RAB

## **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 experience
- 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

## Restoration Advisory Board Meeting Cleanup Update - May 18, 2004

### 1) Update on Current Cleanup and Field Activities:

- a) **Ground Water Treatment Plant (GWTP).** The GWTP is operating at 1050 gallons per minute (gpm) with wells shutdown due to Operations and Maintenance (O&M) repairs or by BRAC Cleanup Team (BCT) direction. A total of 6 wells are currently shut down. Extraction Well (EW)-377 is off due to a possible hole in the well casing near the bottom of the well; EW-233 is off due to low sustainable water levels in the well; EW-85 and EW-73 are off due to breaches in the well screen (rehabilitation options are being evaluated); EW 87 is off due to concerns about the well screen and casing (rehabilitation options are being evaluated); and EW-309 has been shut down, with BCT concurrence, because Volatile Organic Compound (VOC) concentrations in the D monitoring zone are non-detect or less than Maximum contaminant levels (MCL). Average discharge to Beaver Pond is currently at 35 gpm. The hexavalent chromium ion exchange treatment system and the ultra violet oxidation system (UVOX) are operating normally. The second quarter health and safety audit was completed on 28 April.

The GWTP lost electric service due to storm outages on 25 February, resumed operation on 26 February and shut down on 27 February because the burner core failed. The burner unit was replaced with a new core and was restarted on 8 March. Following restart after the burner replacement, the discharge of the GWTP was routed to the sewer because the system was down more than 7 days. Analytical results were received on 10 March with chromium levels above our average limit. The slip stream for the ion exchange was increased and samples were recollected and analyzed on 11 March. The effluent concentrations were below surface water discharge limits, so the discharge of the effluent was returned to Magpie Creek and Beaver Pond on 12 March 2004.

- b) **Confirmed Site (CS) 10.** There are approximately 23,400 cubic yards of soil staged inside the tent until funding is obtained to properly dispose of the contaminated waste. The site has continuous perimeter air monitoring for radiation and URS continues to inspect and maintain area. The Sheriff's Department continues to provide security during after duty hours and on weekends and holidays.

The tent at CS 10 suffered damage during the storm event on 25 February. No contaminants were released from CS 10 as a result of the damage. Repairs are scheduled to begin in late May/June timeframe.

Background: Last year, due to budget constraints, the Air Force, under the regulatory oversight, went into a "stand-down" mode regarding the removal/disposal of excavated soil at CS 10. On April 21, 2004, McClellan issued a letter notifying the regulators of their intention to stop soil removal activities and to go into long-term monitoring while remedial alternatives are evaluated. Approximately 28,500 cubic yards of excavated soil/waste has been shipped to waste disposal sites. There are approximately 23,400 cubic yards of excavated contaminated soil remaining in stockpiles within the excavation. One of the alternatives being considered is the potential consolidation of soils from other disposal pits into the CS 10 excavation. This is because the Air Force expects that off-site shipment of wastes from the 48 plus disposal sites at McClellan would be cost prohibitive (approximately \$2.5 billion to \$3 billion).

- c) **Minor Spill Incident:** On 4 March 2004 ¼ to ½ gallons of sewage was released into Magpie Creek near the former Aero Club. Release was result of sewer pipe leak caused from debris build up from February storms. Leak was repaired immediately with no apparent environmental impact.

- d) **Investigative Cluster (IC) 29 Dual-Phase Ground Water Treatment System (GWTS).** The IC 29 air stripper is currently operating normally. The system was offline during the GWTP shutdown in February.
- e) **IC 23 Dual-Phase GWTS.** This system was formerly reported with and considered part of the IC 23 soil vapor extraction (SVE) system. Ground water is treated by liquid-phase granular activated carbon (LGAC), prior to sanitary sewer discharge. The IC 23 groundwater treatment system is operating at approximately 11.2 gpm from the one dual-phase extraction well, EW-367.
- f) **Davis GWTS** The quarterly sampling event at the treatment system and extraction wells was performed on 7 April and the semi-annual groundwater monitoring event (22 wells) was performed from 7 April through 12 April 2004. Mitretek conducted a field audit on 7 April, and an office audit was conducted on 8 April. The system is operating at 315 gpm.
- g) **Ground Water Monitoring Program (GWMP)** The second quarter (2Q) 2004 sampling event began on 5 April. Approximately 120 low flow pumps were installed in March.
- h) **Groundwater Phase 3 Data Gap (DG) Investigation.** Completed the DG fieldwork in 2003. On hold for further DG investigation of the Myrtle Ave. plume. Rights-of-entry (ROEs) and easements were necessary since there are no reasonable public easements available to conduct work. The Army Corps of Engineers (ACE) completed ROEs to the Regency Theater property and step-out location on adjoining commercially developed property to the north. Surveyor determined DG-01A monitoring well was installed in the adjoining parcel west of Taco Bell in what is now owned by Metro Fire District. We are now discussing installation of P3OBEW1AB on the Metro Fire District parcel. Easement tasks for this Extraction Well and the DG-1A Monitoring Well will be executed thru the ACE following modeling confirmation of extraction well placement and necessary easement. Contractor for effort has remobilized a field office trailer. Water Development mobilized May 5<sup>th</sup> and the first Wells to be drilled will be on the Bell Ave. frontage road. Contractor is in progress of selecting a sub-contractor to perform civil & mechanical tasks of the first construction phase. Next On-Base phase is at 30% design with field checking civil & mechanical design details commencing.
- i) **Groundwater Conveyance Line Investigation.** Field Team coordinated Dolver/URS investigation of the Phase 2 groundwater line is in progress. The objective of this investigation is to verify location of remaining old graywater irrigation lateral line valves, inspect and/or remove. Groundwater trunk line verification work is continuing now that encroachment permits are approved. Sites currently being excavated include Patrol Rd., Luce Ave. and along east side of Bldg. 200.
- j) **Soil Vapor Extraction (SVE) Systems (13 of 13 operating).** Health and Safety audit for the second quarter was completed on 27 April.
  - 1) IC 1 vapor-phase granular activated carbon (VGAC) is operating normally.
  - 2) IC 5/7 VGAC is operating normally, treating vapor from only IC 7.
  - 3) IC 19 Thermal Oxidation system is operating normally.
  - 4) IC 23 VGAC is operating.
  - 5) IC 25/27/29/30/31/32 VGAC is operating normally, treating vapors from ICs 29, 30, 31, and 32.
  - 6) IC 34/35/37 flameless thermal oxidation (FTO) is operating normally, treating vapors from IC 37 only.
  - 7) IC 34/35/37 VGAC is operating normally, just treating vapors from ICs 34 and 35.
  - 8) IC 41/42/43 VGAC is operating normally, treating vapors from all sites.
  - 9) Potential Release Location (PRL) T-44 VGAC is operating normally.
  - 10) Operable Unit (OU) C1/PRL 66B FTO is operating normally.
  - 11) OU C1/PRL 66B VGAC is operating normally.
  - 12) OU D Cat Ox is operating normally.
  - 13) Special Study Area 2 FTO is operating normally.
- k) **Petroleum, Oils and Lubricants (POL) activities included:**
  - 1) Initiated a contracting action for shutting down the bioventing system at Tank Farm 2, Tank Farm 7 and the Davis Site. Also initiated action to expand the bioventing system at Bldg 26 and Bldg 764. Work plans associated with the shutdown and expansion will be submitted to the Regulatory Agencies for review and approval by 5 May 04.

- 2) Capehart Gas Station. - Biovent unit was shutdown on May 12, 2003 to prevent interference with groundwater investigation and sampling activities being conducted by Brown and Caldwell. A new contractor, GEO-Marine/URS commenced sampling 10 March 2004. A vapor well damaged by landscapers has also been repaired.
  - 3) The Capehart Gas Station groundwater investigation was completed in November 2003. Based on the result of groundwater measurement, the groundwater gradient indicated that the groundwater flow direction might be multidirectional.
  - 4) Mat K Bioventing – In the process of installing a new bioventing system near Bldg 756 (PRL T-48) in accordance with the Water Board approved Work Plan. Five-soil borings were drilled and five soil samples were taken in accordance with the Bioventing Installation Work plan for (PRL T-48). Further required actions will be assessed after reviewing the sample analysis. Preliminary field measurement and analytical results indicated that the current Total Petroleum Hydrocarbon (TPH) contamination beneath Bldg 756 (Site PRL-48) did not meet the decision rule action criteria for installation of a bioventing system. The draft Investigation Summary Report for Bldg 756 Bioventing work was forwarded for Agency review 22 March 2004. Agency review comments were received. A bioventing system is not planned for installation.
  - 5) A Ground Penetrating Radar (GPR) survey was performed on 05 April within Area of Concern H-13. The site is a former auto hobby shop and is located in the Commissary/BX parking lot. No significant findings were identified
- l) Radiation Program.**
- 1) Confirmed Site (CS) 10: See Item b).
  - 2) Sewer Survey: Industrial Waste Line/Sewer Survey (inside pipe): Submitted final Field Sampling Plan Document April 16, 2004.
  - 3) Revised Reference Area Survey (Background) Report comments from Department of Health Services (DHS) have been received – comment deadline is 18 May.
  - 4) All Radiation sites are inspected daily and all protective measures remain intact.
  - 5) Interviews and Historical Record List – Commenced work on a prioritized list.
  - 6) Basewide Remedial Investigation (RI) – Cabrera has received and is reviewing six Conceptual Site Models (CSM). Discussion of classification is occurring.
  - 7) Airfield RI – A meeting is needed to establish a stakeholder’s consensus for release criteria. Cabrera is also performing ongoing work on the technical memo.
  - 8) A6C Parcel – Draft final was submitted on March 31. Comments from DHS were received 26 April; the final is due May 26.
  - 9) Buildings 339 and 336 – Will be submitting information for delisting from the radiation list because they were not used as Technical Operations Division (TOD) laboratories; they were TOD Administrative Offices.
  - 10) Aviation Museum – DHS has provided comments via email. Cabrera is working on response to comments. The draft final is due June 14.
- m) OU B1 Cap and OU D Cap** - A new contractor, BEM/TetraTech, took over the contract for cap inspection and maintenance beginning in March 04. The first quarter (Q1) inspection took place the last week in March and included sediment sampling. There were hits of low-level Polychlorinated Biphenyls in two sediment traps and we are performing some follow-up sampling and analysis per our protocols. Once we have these analytical results we will provide more detail and issue the Q1 report.
- n) OU B1 Drainage Ditch** - The Removal Action Completion Report document was finalized on 26 April 04.
- o) Initial Parcel Remedial Action** – A kick-off meeting was held 27 April with the contractor awarded the project, Environmental Quality Management. We are awaiting signature of the Record of Decision by Air Force and the regulatory agencies before issuing the notice to proceed on development of the work plans.
- p) Technology Demos:** - Considering additional bench scale testing to analyze future use.
- q) Industrial Waste Collection System Survey:** The Field Team, in conjunction with Sewer Systems operations, is assisting with sanitary sewer transfer, and industrial wasteline (IWL) shutdown, studying remaining effluent flows to the former IWL system and identifying IWL inlets that receive

storm water. The intent is to assist McClellan Park identify storm water drainage deficiencies and necessary alterations upon IWL sewer shutdown.

- r) **Drainage Channel Maintenance & Cleaning** is performed by Sacramento County. County has requested to perform maintenance in various “naturally” lined portions. This work will require further review and approval by US Fish and Wildlife Service (USFWS). The Air Force is working with USFWS to incorporate channel maintenance activities and compensation requirements into the Base Disposal Biological Opinion.
- s) **Vernal pool** field oversight to protect the vernal pool areas by the Field Team is ongoing.
- t) **Herbicides** use on leased properties at McClellan Park is performed, in accordance with a spray zone maintenance map. Field oversight of the herbicide use restrictions by the Field Team is ongoing.
- u) **River Dock** elderberry shrub continues to encroach on the walkway impeding tenant access to the dock. The Air Force notified the River Dock lessee (Grant Union School Dist.) via letter with mitigation options for their consideration; however, no response has been received to date. The Air Force met with the School District last week to review proposed repairs to the site.
- v) **Early Transfer with Privatized Cleanup.** County, McClellan Park, Air Force, and Regulators evaluating privatized cleanup effort at McClellan. County has proposed an area for cleanup, which is with the Air Force for review. Next meeting set for 25 May with all stakeholders to further discuss proposal.

2) **Document Deliverable Status Report (DSR):** See attached for documents scheduled for completion or review within the next 45 days.

# Five-Year Review

RAB Presentation

18 May 04

By: Mike Zabaneh

1

## The purpose of this Five-Year Review is to Determine If:

- The selected remedies are functioning as intended
- The remedies are protective of human health and the environment
- Overall Finding –
  - McClellan's remedies are protective of human health and the environment
  - Reviewed by nine regulatory agencies
  - Approved and signed by USEPA and CA EPA

2

## Why is the Five-Year Review Required?

- Two regulations require the Five-Year Review:
  - The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
  - The National Contingency Plan (NCP)
- Guidance Document: The Comprehensive Five-Year Review Guidance, USEPA, June 2001
- Triggered by: The start of construction for the cap at OU B1 on April 11, 1994.
- First Five-Year Review was completed by April 1999.
- Current Five-Year Review was signed by 14 May 04

3

## Who is the Lead Agency?

- At McClellan, the Air Force is the lead agency for the Five-Year Review
  - Other members of the review team include:
    - US Environmental Protection Agency (USEPA)
    - Cal-EPA/Department of Toxic Substances Control (DTSC)
    - Regional Water Quality Control Board (RWQCB)
    - Department of Health Services (DHS)
    - CA Fish and Game
    - US Fish and Wildlife
    - Sacramento Metropolitan Air Quality Management District (SMAQMD)
    - Agency for Toxic Substances and Disease Registry (ATSDR)
    - Biological Technical Advisory Group (BTAG)

4

## Review Involved:

- Groundwater Operable Unit
- Volatile Organic Compound (VOC) Vadose Zone
- Operable Unit B1 Cap and Drainage Ditches
- Operable Unit D Cap
- Potential Release Location (PRL) S-033
- Potential Release Location 32
- Confirmed Site (CS) 10
- Fuel Sites
- Land Use Controls
- Ecological Sites
- No Action ROD Sites

5

## Groundwater Operable Unit

- **Findings**
  - The remedy, pump and treat, is functioning as intended
- **Recommendations**
  - Complete VOC plume investigation
  - Complete the design and installation of the Groundwater Treatment Plant expansion
  - Continue monitoring for non-VOC contamination.
  - Continue monitoring Groundwater Treatment Plant effluent

6

## Soil Vapor Extraction Systems

- **Findings**

- The remedy, soil vapor extraction, is functioning as intended.
- Removed 1.2M pounds of Total Volatile Hydrocarbons Mass since 1995

- **Recommendations**

- Continue to monitor and evaluate the SVE systems stack emissions from the
- Continue to monitor radon gas concentrations in carbon vessels

7

## Operable Unit B1 Cap and Drainage Ditch

- **Findings:**

- The cap has reduced the human health risk posed by the PCBs in the soil
- It has reduced or eliminated the potential for exposure by site workers and visitors.
- The operation and maintenance of the cap has been effective.

- **Recommendations:**

- Continue sampling and evaluating the sediment traps
- Develop criteria to evaluate monitoring results and make recommendations.
- Ensure that any Institutional Controls are monitored and responsibility is delegated to an appropriate party upon property transfer

8

## Operable Unit D Cap

- **Findings:**

- The cap has reduced or eliminated the potential for exposure to site workers and visitors.
- Prompt repairs of the cap ensures that the cap is operating properly and is protective

- **Recommendations:**

- There are no recommendations for the OU D Cap in the 5yr Review Report

9

## Potential Release Location S-033

- **Findings:**

- The contaminated soils were removed from the site
- The site was cleared for unrestricted use

- **Recommendations:**

- There are no recommendations for PRL S-033

10

## Potential Release Location 32

- **Findings:**
  - The remedy at PRL 32 is functioning as intended.
  - Soil excavation had been completed
  - Preliminary sampling of the excavation area confirmed that soils contaminated with radium-226 above the cleanup goal were removed.
  - Sampling plan is being prepared to sample at PRL 32 for plutonium due to discovery of plutonium at CS10.
- **Recommendations:**
  - Complete the sampling and evaluation of radiological contaminants

11

## Confirmed Site 10

- **Findings:**
  - The remedy is functioning as intended by the TCRA Work Plan
  - The ongoing excavation beneath the weatherized tent, the security measures, drainage control, and ongoing air monitoring are functioning as intended
- **Recommendations:**
  - Develop cleanup levels to verify completion of the excavation.
  - Resume off-site disposal of contaminated soils currently stored in the tent as soon as funding becomes available.

12

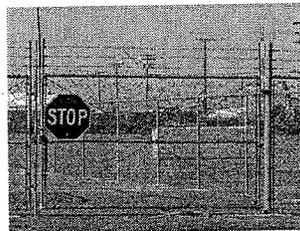
## FUEL SITES

- **Findings:**
  - Investigation is ongoing, no remedy has been designated for these sites, yet
- **Recommendations:**
  - Complete Site Investigations and segregate appropriately

13

## Land Use Controls

- Four general Land Use Controls mechanisms are being used:
  - Administrative
  - Legal
  - Physical
  - Other mechanisms



14

## Land Use Controls

- **Findings:**
  - The interim program is functioning as intended
- **Recommendations:**
  - Develop tracking method for breaches of controls
  - Reevaluate the parcels following discovery and confirmation of any new COPCs.
  - Ensure that any ICs established in the site-specific RODs are monitored
  - Ensure responsibility is delegated upon property transfer

15

## Ecological Sites

- **Findings:**
  - No remedies in place at the ecological sites, with the exception of the removal of contaminated soil from the unlined sections of the OU B1 Drainage Ditches
- **Recommendations:**
  - Complete ongoing ecological investigations, assessments, and/or future action plans
  - Cleanup of sites that could pose an ongoing risk to ecological receptors
  - Complete appropriate documents and remove contaminated tailings

16

## No Further Action (NFA) Sites

- Six soil sites have been listed as needing no further action. They were included in the No Action ROD
- **Findings:** No remedies in place
- **Recommendations:** No recommendations

17

## How Can The Community Get Involved?

- Reviewing the Five-Year Review Report and providing feed-back
- Discussions at RAB meetings
- Providing info that will be considered during the next review

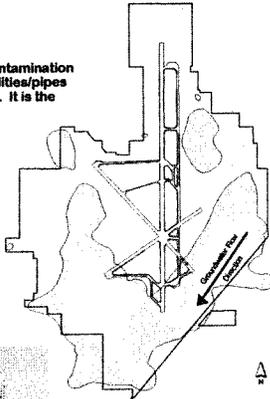
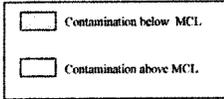
18



# Groundwater OU

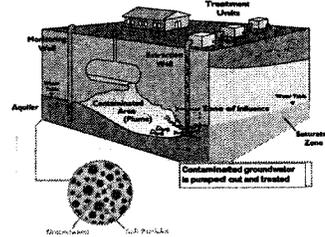
## Background

McClellan was a large industrial city and contamination from past disposal practices or leaking facilities/pipes resulted in extensive groundwater pollution. It is the largest cleanup effort in the Air Force.



## Contaminants of Concern

Numerous contaminants have been found in the groundwater beneath McClellan, including: trichloroethene (TCE), Carbon Tetrachloride (CCl4), tetrachloroethene (PCE), 1,2-dichloroethene (1,2-DCE) and 1,2-dichloroethene (1,2-DCA). Other detected organic and inorganic constituents include 1,4-dioxane, hexavalent chromium and other metals.



Groundwater Treatment Plant

## McClellan Groundwater Treatment System

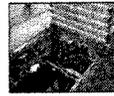
- 57 extraction wells: being expanded by the Phase III IROD
- Over 400 active monitoring wells
- Approximately 5 miles of pipeline
- Groundwater treatment plant can treat up to 2,000 gallons per minute



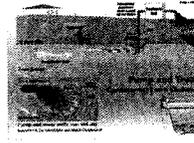
Piezometer



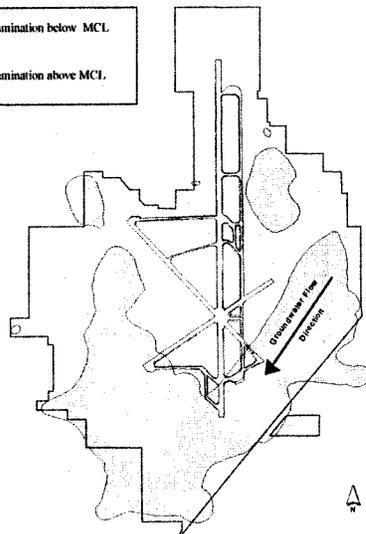
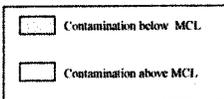
Monitoring Well



Extraction Well

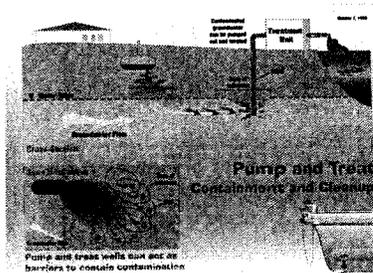


# Groundwater OU



## Contaminants of Concern

- Trichloroethene (TCE)
- Tetrachloroethene (PCE)
- Cis1,2-Dichloroethene (1,2-DCE)
- 1,1 Dichloroethene (1,1-DCE)
- 1,2 Dichloroethene (1,2-DCA)
- 1,4-Dioxane
- Carbon Tetrachloride (CCl4)
- Hexavalent Chromium

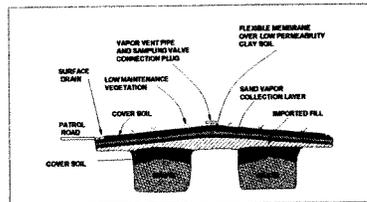


Pump and treat wells work as barriers to contain contamination



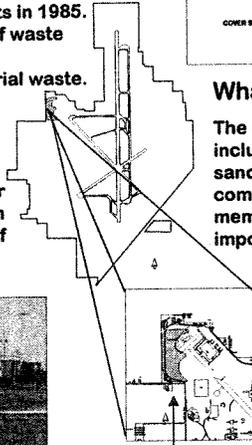
# OU D CAP

The Operable Unit D CAP is an engineered cover that was placed over eight disposal pits in 1985. The waste pits were used to dispose of waste solvents, fuels and oils from aircraft maintenance, and sludge from industrial waste. The cap is a temporary measure to prevent infiltration from rainfall and to control off-gas emissions. These waste pits are unlined and have no collection sumps. There are soil vapor extraction and groundwater extraction systems on site to prevent migration of contamination from the site.



## What is the engineered CAP?

The cap consists of five layers which include granular fill, six inches of sand and gravel, 18 inches of compacted clay, a 40-mil plastic membrane and two to three feet of imported top soil.



OU D Cap

## Contaminants of Concern

- VOCs
- SVOCs
- Metals

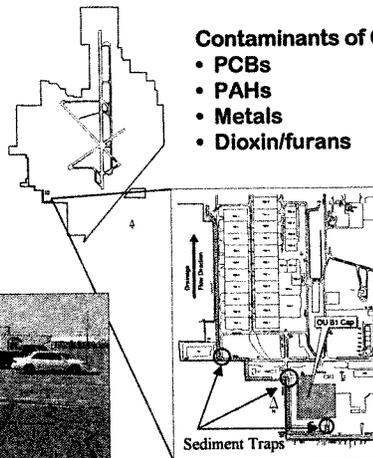


# OU B1 CAP and Drainage Ditches

The OU B1 CAP is a nine-acre asphalt cap that was installed over the Defense Reutilization and Marketing Office storage yard in 1994 to prevent exposure to PCBs. Some drainage ditches in that area received runoff from the storage yard. The area is bordered by industrial, warehouses and former aircraft operations areas. Two feet of soil was removed from the entire length of the ditches and sent to an appropriate off-site landfill facility in 2002. Afterwards, the ditches were restored to promote proper drainage.

## Contaminants of Concern

- PCBs
- PAHs
- Metals
- Dioxin/furans



Excavation of OU B1 sediment



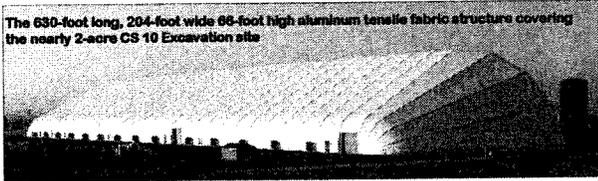
# Confirmed Site (CS) 10

Confirmed Site 10 was a disposal site used from 1949 to the mid-1960s to dispose of radioactive, industrial and chemical waste. The site covers nearly two acres in the western unincorporated area of McClellan.

In August 2000, the Air Force began removing surface contamination of radium 226 and investigating the contents of the disposal site. In September 2000, work was halted when several small jars and vials of liquid containing plutonium were discovered. A Time Critical Removal Action was implemented to remediate the site. This site is now excavated. The entire site was contaminated with Radium 226 and metals. After the initial finding, no additional plutonium was found.

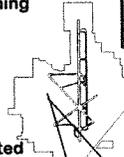
About 28,500 cubic yards of excavated soil was shipped to waste disposal sites. About 23,400 cubic yards of excavated contaminated soil remains stockpiled. The Air Force is considering stockpiling soils from other McClellan disposal pits into the CS 10 excavation to save future disposal cost.

The 630-foot long, 204-foot wide 66-foot high aluminum tensile fabric structure covering the nearly 2-acre CS 10 Excavation site

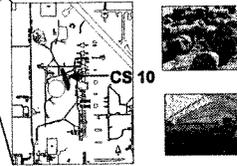


## Contaminants of Concern

- Radium 226
- And other fission products (Plutonium)
- Metals (eg. Lead, Chromium, Cadmium)



Right: Typical condition of drums found in CS 10; 108 overpacked drums; A bin is inspected before shipping; drum sampled for radiological material; jars and vials containing plutonium

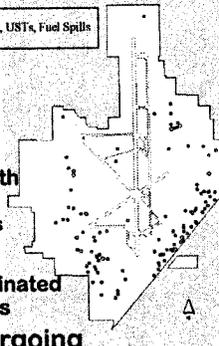


# CERCLA Sites with Fuel Components

ASTs, USTs, Fuel Spills

## Two Programs

- CERCLA
  - fuel products comingled with CERCLA contaminants
- State RWQCB
  - Sites contaminated only with fuels

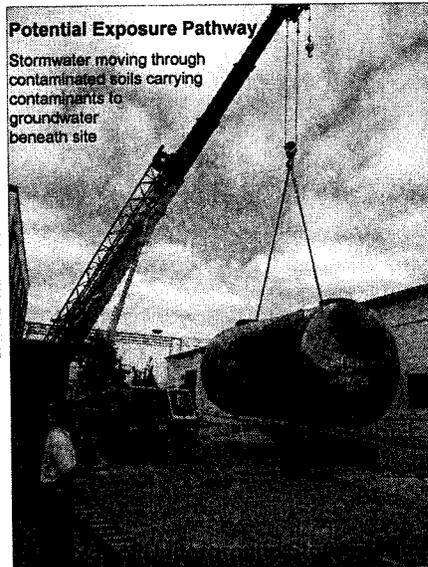


## All fuels sites undergoing screening

- 113 fuels related sites identified
  - 4 Aboveground Storage Tanks (ASTs)
  - 64 Underground Storage Tanks (USTs)
  - 45 Fuel Spills

## Potential Exposure Pathway

Stormwater moving through contaminated soils carrying contaminants to groundwater beneath site



# Key Documents of Interest to RAB

Document	Status
• Vadose Zone Quarterly (CY04-1 <sup>st</sup> ) Monitoring Report	Will receive in June 04
• Groundwater Quarterly (CY03-4 <sup>th</sup> ) Monitoring Report	Received in May 04
• 2 <sup>nd</sup> Five Year Review	Signed by Air Force. Seeking regulator signatures
• Finding of Suitability for Early Transfer Parcels A5, A6a, A6c (82 acres)	Available in Fall 04
• Finding of Suitability to Transfer Parcels A1, A2, A3, A7, L1, and part L3 (96 acres)	Available in Spring 04
• LRA Initial Parcel ROD #1	Final in June 04
• Basewide Groundwater Volatile Organic Compound (VOC) Feasibility Study Addendum	Final in May 04
• Basewide Groundwater VOC Proposed Plan	Final in June 04