



July - September 2002

Environmental Action Update

A Quarterly Newsletter About Environmental Activities at McClellan

Confirmed Site 10 excavation nears half-way milestone

One thousand bins containing radiological and chemical contamination have been removed from Confirmed Site 10. Nearly 50 percent complete, the work of excavating soil, debris, and drums from inside the large weatherization tent at the inactive disposal site continues.

A total of 257 55-gallon drums have been excavated from the site since January of this year. Of the 33,000 cubic yards that are expected to require removal, 15,539 cubic yards have been removed as of July 25.

The 1,000th bin containing material removed from the pit was shipped to an

off-site waste disposal facility. Inserted within this newsletter is a fact sheet explaining the removal process, including how bins are transported.

Laboratory glassware is the most commonly found material in the drums. Recently, trace amounts of uranium were found. The uranium was mixed with soil and contained in a 5-gallon pail. The pail was packed in a 55-gallon drum.

Nothing has been uncovered at the levels found during the discovery of the vials of plutonium in 2000. ■



Workers scan the outside of a container for radioactivity before transporting it off site.

Phase III of the Groundwater Treatment Program begins

Field work is underway for Phase III of the McClellan Groundwater Treatment Program. The goal of the third phase is to address areas of groundwater contamination that currently are not being captured by existing extraction wells. The contaminants of primary concern in McClellan's groundwater are chemicals like trichloroethene, which was present in solvents used in industrial activities at the former Air Force base.

The figure on the right outlines where the groundwater is contaminated with trichloroethene, tetrachloroethene, cis-1,2-dichloroethene, and 1,2-dichloroethane.

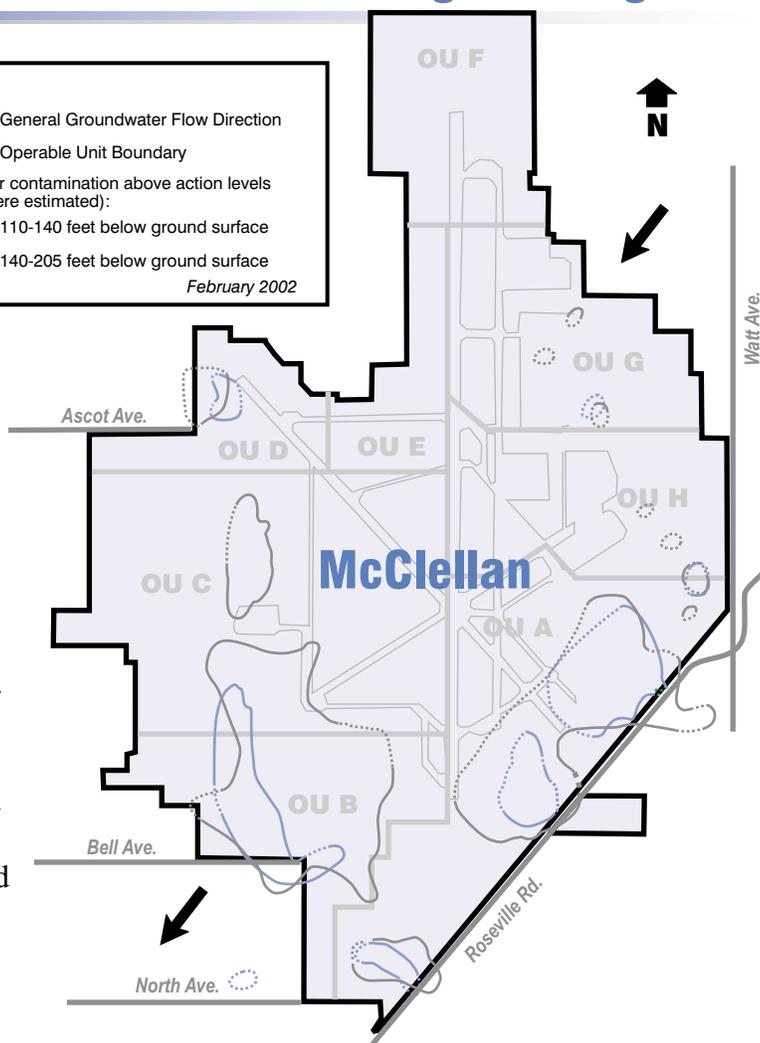
The Groundwater Treatment Program began in 1995 with a plan to address contamination in a phased approach. During Phase I, monitoring and extraction wells were installed in areas with the highest levels of contaminants. The aim of Phase II, which began in 1997, was to contain groundwater contamination that was moving off base.

Phase III will be a comprehensive effort of investigation and extraction/treatment. The investigations will collect data from many areas on and off base to better define areas of contamination. The dotted lines on the figure on the right show areas where the extent of contamination has yet to be defined. For

LEGEND

- ➔ General Groundwater Flow Direction
- Operable Unit Boundary
- Groundwater contamination above action levels (dashed where estimated):
 - ⋯ 110-140 feet below ground surface
 - ⋯ 140-205 feet below ground surface

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example, to the southwest of McClellan is an area where trichloroethene is sporadically detected above action levels. More data are needed to understand the extent of contamination in this area. The extraction and treatment component of Phase III will involve installing extraction wells in areas where containment is found to be necessary.

Investigations are scheduled to be completed by the end of 2003, and wells will be installed by 2005.

The Air Force began monitoring McClellan's groundwater in 1980 after trichloroethene was detected. Since then, the Air Force and regulatory agencies have worked together to ensure public health is protected. Affected wells on and off base were shut down, and a buffer zone on the west side of the base prohibits use of private wells for drinking water. ■

The McClellan Information Repository/ Administrative Record

**Building 10, First Floor of the West End,
3411 Olson Street, McClellan**

8 a.m. to 3 p.m. Monday - Thursday and every other Friday

For questions about the Repository or special visit needs, please call the librarian, Laraine McQuillen, at (916) 643 1250, Ext. 239.



Fred Kuhn, Deputy Assistant Secretary of the Air Force for Installations, toured McClellan in June 2002. Ray Lidstrom, URS Project Manager for Confirmed Site 10, describes the site activities to Kuhn.

McClellan Environmental Remedial Scoreboard

As of July 1, 2002:

1,111,058

Pounds of volatile organic compound contamination removed from soil and groundwater.

Drinking water standards: where do they come from?

When discussing concentrations of contaminants in groundwater beneath McClellan, the levels are compared with drinking water standards.

Traditionally, cleanup levels for groundwater are set at or near drinking water standards. Cleanup levels are tentatively identified in a proposed plan, along with possible cleanup methods. Public input on a proposed plan is a mandatory and important step in the cleanup process. After public input is considered, cleanup levels and methods are established in a record of decision, the legally binding document that governs a site cleanup.

The record of decision for McClellan's groundwater is expected in 2004. Because drinking water standards are often proposed as cleanup levels, many people ask what those standards are and where they come from.

California drinking water standards limit the amount of specific chemicals allowed to be present in drinking water because the chemicals, known or anticipated to occur in water, can adversely affect public health. Drinking water standards for California are made and regulated by the California Department of Health Services based on federal drinking water standards set by the U.S. EPA. The DHS makes regulations that

are the same as, or more stringent than, federal drinking water regulations.

Drinking water standards are expressed by the term *maximum contaminant levels*. Maximum contaminant levels are the maximum concentrations for specific chemicals allowed in public drinking water systems.

The California Health and Safety Code requires DHS to establish a contaminant's maximum level as close as is technically and economically feasible to its *public health goal*, placing primary emphasis on the protection of public health. Public health goals represent levels of contaminants in drinking water that would pose no significant health risk to individuals consuming the water on a daily basis.

Public health goal values are determined by risk assessments performed by the Office of Environmental Health Hazard Assessment. In most cases, the maximum contaminant level is the same value as the public health goal. Maximum contaminant levels take into account the chemicals' public health goals, their ability to be detected and treated, and the costs of treatment. ■



For more information about drinking water standards, go to the DHS's Drinking Water Program Web site: <http://www.dhs.ca.gov/ps/ddwem>

Treatment of hexavalent chromium becomes time-critical removal action

July 12, 2002, the Air Force designated treatment of hexavalent chromium in McClellan's groundwater a time-critical removal action. This designation allows the Air Force to secure funding and act promptly to address the situation.

The metal hexavalent chromium has been detected on several occasions in outflow from the groundwater treatment plant at levels slightly above the discharge limit that protects freshwater aquatic life. When this happens, the Air Force redirects the treated water to the county's sanitary sewer instead of Magpie Creek. But this is only a short-term solution.

The aim of the time-critical removal action is to modify the groundwater treatment plant with components that remove hexavalent chromium. The Air Force will evaluate the various methods available for removing the metal from extracted groundwater, then present the preferred design to the public in a fact sheet and at a public meeting. ■

If you would like to be added to McClellan's public participation mailing list, please call Dawn Young at (916) 643-1742, extension 233. If you received this newsletter in the mail, you are already on the mailing list.

Groundwater samples analyzed for radioactivity

Because of the discovery of radioactive material in a former disposal site at McClellan, the Air Force is analyzing McClellan's groundwater to confirm the absence of radioactive contaminants.

The samples are collected from areas where there was the potential for a release of radionuclides. The study will use groundwater samples collected in two quarters: first quarter 2002 (collected in February) and third quarter 2002 (collected in August). The first quarter represents winter conditions; the third quarter, summer.

The analytical results of the first set of samples are presented in the *First Quarter*

2002 Groundwater Monitoring Program Report, dated July 2002. The types and levels of radioactive contaminants detected in the first set of samples are below maximum contaminant levels. A maximum contaminant level is the maximum level of a radionuclide allowed in drinking water. Scientists need the results from the second set of samples before they can draw conclusions.

Conclusions and recommendations from the study are expected to be released in February 2003 in the third quarter report. The reports will be available to the public in McClellan's Information Repository. ■

New soil vapor extraction unit at Investigation Cluster 19 will speed cleanup

Groundwork has begun for the installation of a new treatment unit for the soil vapor extraction system at Investigation Cluster 19, a group of former disposal pits.

Two soil vapor extraction wells and two dual-phase extraction (groundwater and vapor) wells are already in operation at IC 19. The vapors are currently pumped to a treatment plant to the north in Operable Unit D.

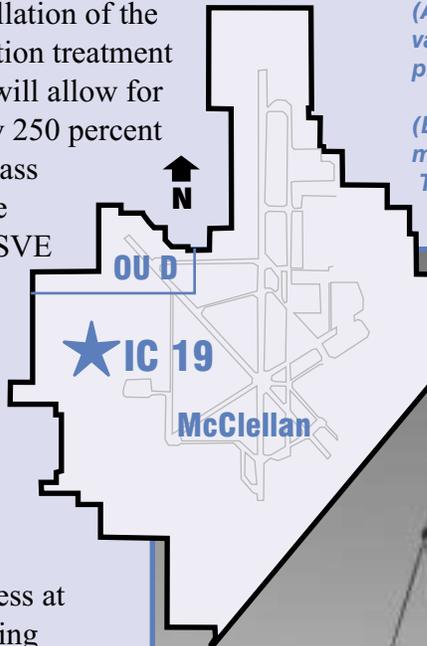
Because the OU D system is limited in capacity, installation of the soil vapor extraction treatment system at IC 19 will allow for an approximately 250 percent increase in the mass removal rate. The dedicated IC 19 SVE treatment system will have the added benefit of eliminating the IC 19 wells from the OU D system. This will increase removal action effectiveness at OU D by increasing extraction rates of the wells at OU D.

System startup is tentatively scheduled for fall 2002. The system is expected to remain at the site for five years. ■



(Above) Workers prepare the foundation for a new soil vapor extraction system at a group of former disposal pits collectively known as Investigation Cluster 19.

(Below) The system being installed is one that can be moved from site to site as needed. The soil vapor extraction unit was previously located at IC 29, where it was used from 1997 to 1999.



Meet the RAB

The McClellan Restoration Advisory Board is in the process of a significant outreach effort to find additional RAB members. The goal is to make RAB membership representative of the diverse group of stakeholders affected by the cleanup and closure of the former base. The outreach effort so far has been successful in adding members from the west side of the base and members who represent students and environmental interest groups. The outreach effort continues to look for members who represent the communities to the north and east of McClellan (for example, North Highlands, Foothill Farms, Antelope and other communities). If you are interested in volunteering for this community position, please contact Dawn Young at (916) 643-1742, extension 233.



Janis Heple was selected as a RAB member because of her interaction with the Environmental Council of Sacramento, a coalition of environmentally oriented groups in the Sacramento area. As a RAB member, Heple's connection with local environmental interest groups will be useful in bringing ideas to the RAB and in disseminating information about McClellan cleanup efforts to a variety of groups. Heple works as Program Director of the Occupational and Environmental Management unit at UC Davis Extension.

Igor Kravets is a resident from the west side of McClellan and joins the RAB with a geotechnical/engineering perspective. Kravets says he hopes he can use his background in engineering to bring technical support to this significant community project. He looks forward to the duties of reviewing and commenting on technical documents and activities associated with the environmental cleanup program.



Angela Moore, a doctorate student in civil and environmental engineering, has worked on several interdisciplinary research projects, including her current research with a large U.S. EPA Superfund project. She is enthusiastic about the RAB and its effort to incorporate viewpoints from diverse sectors of the community and to actively disseminate important information to the scientific regulatory, and public communities.



McClellan Environmental July-September 2002

The *Environmental Action Update* is a publication of the Air Force Base Conversion Agency (AFBCA) at McClellan, California, designed to keep the public informed of environmental activities at the base. For questions, comments, or to be added to the mailing list, please write to AFBCA/DD-McClellan, 3411 Olson Street, McClellan, CA 95652-1003 or phone (916) 643-1742 ext. 233.

www.afbca.hq.af.mil/mcclellanem

BRAC Environmental Coordinator **Paul Brunner**
Community Relations Coordinator and Editor **Dawn Young**

Environmental Action
Update



Hal Morris lives in the area west of the former base and will be opening a business at McClellan Park. He currently serves as the Chairperson of the Rio Linda/Elverta Community Planning Advisory Council. Morris hopes to act as a liaison with the community to encourage public participation, advice and comment on the McClellan cleanup program.

Nathan Dietrich is a newly assigned Staff Assistant in Congressman Robert T. Matsui's Sacramento District Office. Dietrich handles constituent concerns and issues relating to the Department of Defense, Military Affairs, Veterans Administration and a variety of other federal agencies on behalf of the Congressman. A recent graduate of UC Davis, he has spent time with the Democratic Policy Committee in the U.S. Senate and also interned for Congressman Sam Farr. Dietrich replaces Jillian Tullis as Matsui's representative on the RAB and says he looks forward to being actively involved with the RAB to ensure the cleanup continues.



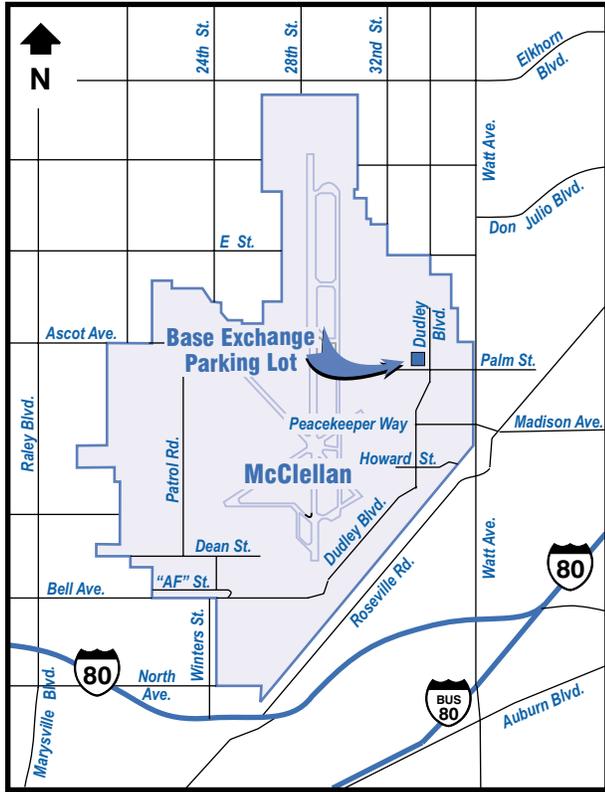
Jeanette Musil is the Environmental Program Manager of Sacramento County's Local Redevelopment Authority. As such, Musil is involved with all environmental issues associated with remediation and redevelopment of the former base. Musil, who replaces Katy Jacobson on the RAB, has interacted with McClellan and its neighbors during the last 13 years. "I love serving the citizens of Sacramento County. I am very pleased to be working again with the Air Force, the community and McClellan Business Park to develop the former base while ensuring the protection of public health and the environment."

Kevin Spesert is the Deputy District Director for Congressman Doug Ose and is involved with issues in Sacramento and Yolo Counties. Spesert has worked for Ose for more than four years. He replaces Dan Sharpe as the RAB member representing the Congressman's constituents. ■



Would your organization or business be interested in a presentation on the progress of McClellan's environmental cleanup program?

If so, please contact Dawn Young at (916) 643-1742, extension 233.



McClellan Environmental Open House

Saturday September 21, 2002

9 a.m. - 2 p.m.

McClellan Park
Base Exchange Parking Lot
5443 Dudley Blvd.

You are invited to an **Open House** at McClellan Park.

Learn more about the McClellan Environmental Program through display boards, tours of cleanup activities and environmental experts who can answer your questions. Air Force and regulatory agency representatives will also be available to answer questions.

For additional information contact Dawn Young at (916) 643-1742, ext. 233.

www.afbca.hq.af.mil/mcclellanem

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For More Information
about McClellan's Installation
Restoration Program, please call:



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