

Buckley Air Force Base Environmental Restoration Program Annual Report to Stakeholders

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Purpose of this Report

This Annual Report to Stakeholders has been prepared to notify the public of activities which occurred in 2009 at Buckley AFB Restoration sites and upcoming activities expected at these sites in 2010. This document is issued by the Air Force, as the lead agency, in conjunction with the Environmental Protection Agency, Colorado Department of Public Health and Environment, City of Aurora, and Tri-County Health Department. The cleanup effort at Buckley AFB pres-

ently includes nine open Installation Restoration Program (IRP) sites and 15 open Military Munitions Response Program (MMRP) sites. A Basewide Preliminary Assessment identified additional areas which are being investigated under a Basewide Site Inspection. A summary of all these activities is included in the following pages of this report. Additional information on these open sites (and also all closed sites such as IRP Sites 6 and 8) can be found in the Buckley AFB Admin-

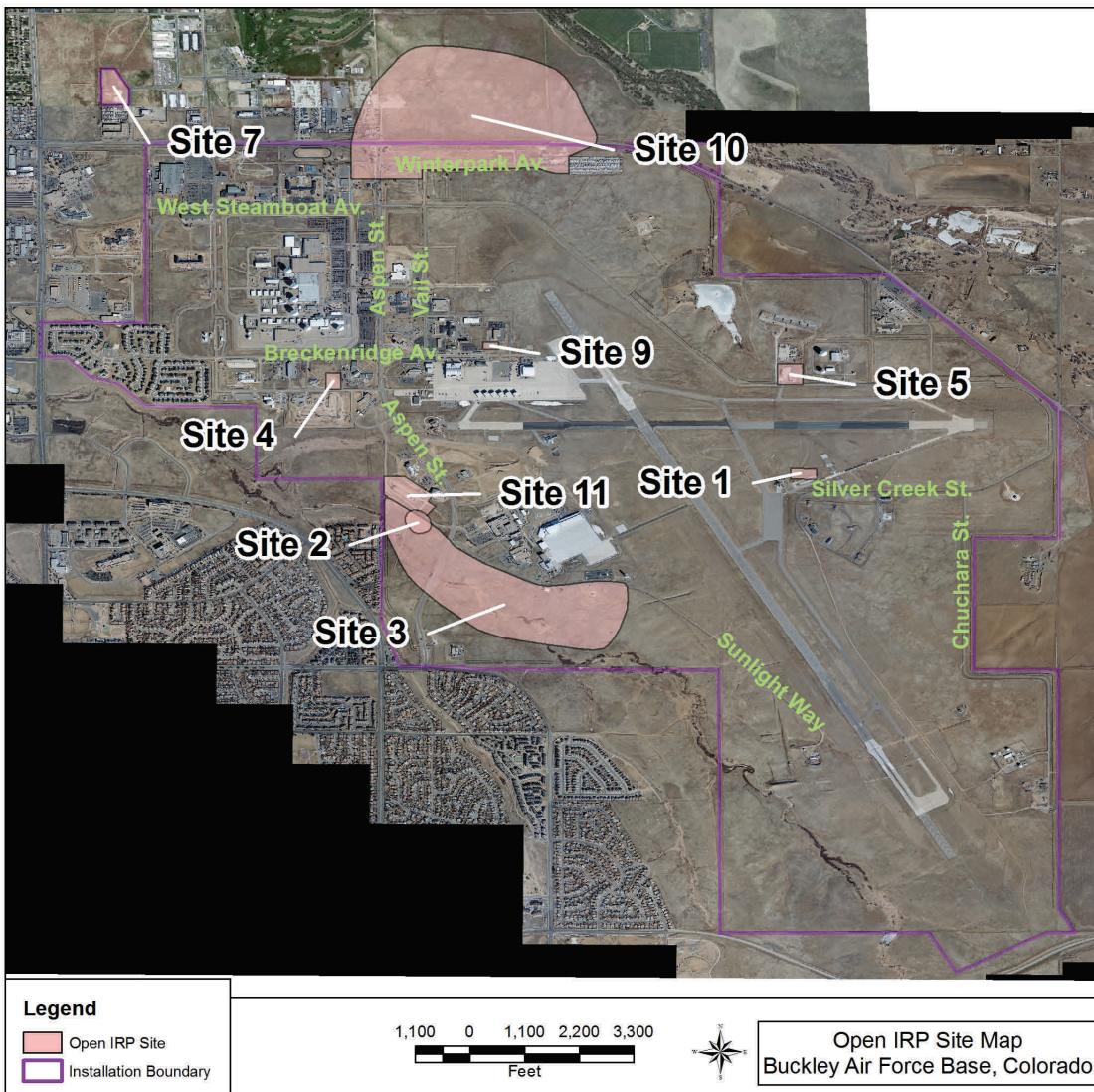


istrative Record/Information Repository files located at the Central Branch of the Aurora Public Library. The community can also learn more about the Buckley AFB Restoration program by attending Community Advisory Group (CAG) meetings which are held quarterly (see page 8 for more information).

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Buckley AFB IRP Site Update



Site 1 Update

2009—Draft Record of Decision prepared

2010—Sign Record of Decision; install wells; begin monitoring

Site 1, also known as Fire Training Area #2, covers approximately 8,000 square feet and was used from the early 1950s to 1972 for fire training exercises. The primary contaminant of concern identified at Site 1 during investigations is trichloro-

ethylene (TCE) in groundwater. A Proposed Plan was released for public comment in 2008 which identified the proposed remedy as long-term monitoring with land use controls. In 2009, a Record of Decision was prepared which is

currently being reviewed by Air Force attorneys. In 2010, it is expected that the Record of Decision will be signed, two new monitoring wells will be installed, and annual long-term monitoring will be initiated along with land use controls.

Sites 2 and 4 Update

Site 2, also known as the Oil Pit, occupies approximately 100 square feet and consisted of a deep concrete walled sump used for the disposal of waste oil from approximately 1950 to 1982. The Oil Pit was taken out of service, backfilled, and buried in 1987. Site 4, also known as Fire Train-

ing Area # 3, is a circular area approximately 100 feet in diameter which was formerly used for fire training exercises from 1972 to 1989. Contaminated soil was removed from Site 4 in 2006. Investigations have shown that no significant risks or threats to public health or environment now exist at ei-

ther site. Therefore, in 2009 a Draft Proposed Plan recommending no further action at both sites was prepared. In 2010, the public will be given the opportunity to comment on the Proposed Plan and changes may be made accordingly. In addition, a Record of Decision will be prepared and signed.

2009—Draft Proposed Plan prepared

2010—Proposed Plan public comment period; sign Record of Decision

Site 3 Update

2009—Draft Feasibility Study Report prepared

2010—Finalize Feasibility Study Report and Proposed Plan; prepare Record of Decision

Site 3, also known as the Base Landfill, was reported to have received a variety of municipal and industrial waste from 1942 to 1982. An area impacted by asbestos containing materials was recently discovered near the site

and has now been added to Site 3. In 2007, the adequacy of the existing soil cover over the refuse was determined to be insufficient. In 2009, a Draft Feasibility Study Report was prepared to evaluate alternatives

for the site. It is expected that in 2010 the Feasibility Study Report and a Proposed Plan will be finalized following a public comment period, and a Record of Decision will be prepared.

Site 5 Update

Site 5, also known as Fire Training Area # 1, was used from the 1940s to the 1950s for fire training exercises, but the size of the fire training area is unknown. The primary contaminants of concern have been vola-

tile organic compounds in soil gas. In 2009, fieldwork for a Supplemental Remedial Investigation included soil, groundwater, and soil gas sampling. The Supplemental Remedial Investigation/Feasibility

Study Report will be finalized in 2010. Results in the Report will determine if further remedial action is needed at the site. A Proposed Plan and Record of Decision will also be prepared in 2010.

2009—Supplemental Remedial Investigation fieldwork completed

2010—Finalize Supplemental Remedial Investigation / Feasibility Study Report and Proposed Plan



Site 7 Update

2009—Action Memorandum signed; removal action initiated

2010—Complete Removal action and After-Action Report; finalize Proposed Plan

Site 7, also known as the Sludge Drying Beds, is located on a 4.3 acre parcel of land that served as the base wastewater treatment plant from 1942 to 1978. A 2008 Engineering Evaluation/Cost Analysis called for the removal of soil contaminated with chromium, lead, and five polynuclear aro-

matic hydrocarbons (PAHs). In 2009, an Action Memorandum was signed and approximately 1,300 cubic yards of soil were removed and disposed off-site. However, confirmation samples indicated concentrations remained above standards. The latest data now suggest that an additional 400 cu-

bic yards of soil require removal. The AF has requested additional funding for the added removal effort. In 2010, it is expected that the removal action will be completed including an After-Action Report, and a Proposed Plan recommending no further action will be finalized.

Site 9 Update

Site 9, also known as the Underground Storage Tank (UST) site, is an approximately 3,000-square foot area where four former USTs were located. The USTs, which previously stored oil, were removed from the site in

1987. Historically, contaminants of concern at the site are petroleum hydrocarbons and PAHs in soil. In 2009, fieldwork for a Supplemental Site Inspection included soil and groundwater sampling. The Report for this investigation

is expected in 2010. Results in this Report will determine if further remedial action is needed at the site. If no further action is recommended, the site is expected to be closed via regulatory concurrence with this Report.

2009—Supplemental Site Inspection fieldwork completed

2010—Finalize Supplemental Site Inspection Report

Site 10 Update

2009—Supplemental Remedial Investigation Report finalized; treatability study completed

2010—Finalize Treatability Study Report, Feasibility Study Report, and Proposed Plan

Site 10, also known as the Former Warehouse Area, consists of areas used for vehicle maintenance and storage of pesticides and herbicides. The primary contaminant of concern is tetrachloroethylene (PCE) in groundwater. The

PCE plume extends off base to City of Aurora property; however, no direct impact to area residents has been identified. In 2009, the Supplemental Remedial Investigation Report was finalized and a treatability study was com-

pleted. In 2010, a summary Treatability Study Report will be finalized along with a Feasibility Study Report evaluating alternatives for clean-up. A Proposed Plan for the selected remedy is also expected to be completed in 2010.

Site 11 Update

Site 11, also known as the Building 1011 Area, had many previous operations at the site including a synchronization area, a base motor pool, civil engineering shops, and refueling truck maintenance. The primary contaminants of concern identified during investigations include lead, PCE, TCE, and PAHs in soil and PCE and TCE in groundwater. In 2009, an Action Memorandum called for the removal of contaminated soil and floating fuel on the groundwater. Absorbent socks were

placed in wells to address the floating fuel. The sump and sand filter and associated contaminated soil were removed, as well as contaminated soil in the firing tunnel area. In addition, the remedial investigation for groundwater was initiated in 2009.

Investigations completed in April and July 2009 found PCE contamination in groundwater at the base boundary prompting the need for groundwater, surface water, and sediment sampling off base on City of Aurora property. The Air Force then



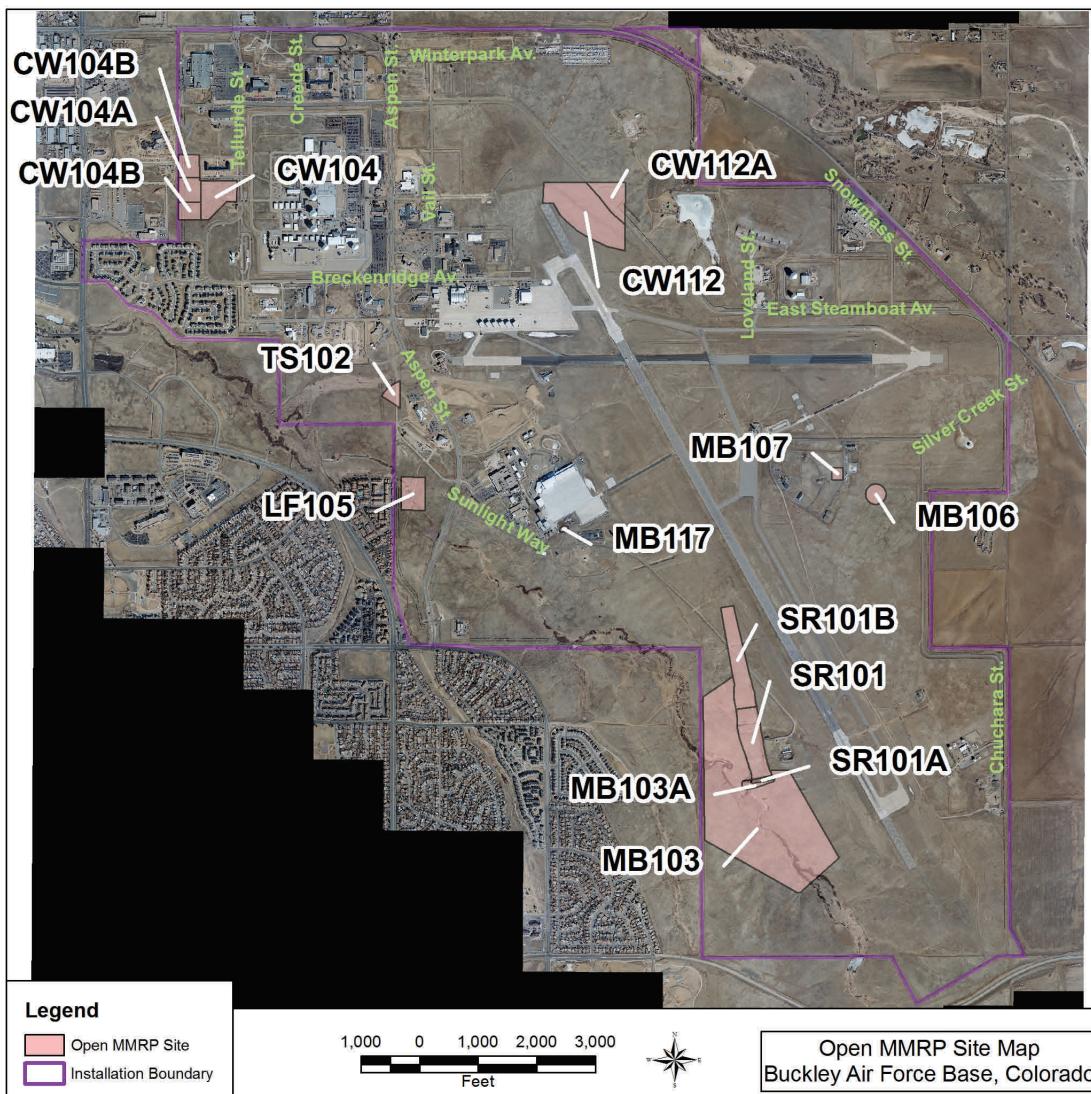
Completed sump and sand filter excavation at Site 11 in November 2009.

completed an access agreement with the City of Aurora and additional sampling will be completed as soon as weather conditions allow. In 2010, the remedial investigation will be completed along with a report, and a feasibility study will be finalized.

2009—Soil removal actions completed; groundwater remedial investigation initiated

2010—Finalize Remedial Investigation and Feasibility Study Reports

Buckley AFB MMRP Site Update



MMRP Site Update

The MMRP addresses issues related to munitions and explosives of concern (MEC), chemical warfare material, and munitions constituents associated with munitions response areas (MRAs), as well as related hazardous substances, pollutants, and potential contaminants of concern on other-than-operational ranges. Phase I and Phase II Comprehensive

Site Evaluation (CSE) activities were performed at Buckley AFB from 2005 – 2008. To date, a total of 17 MRAs have been investigated during the CSE process. Eight of these received a no further action (NFA) decision at the conclusion of the CSE Phase I. The nine remaining MRAs were evaluated during the CSE Phase II. At the conclusion of the CSE Phase II,

these MRAs were divided into 15 munitions response sites (MRSs), all but one of which (TS102) was recommended for further evaluation. In 2009, an Engineering Evaluation/Cost Analysis for the 14 MRSs was finalized with up to four alternatives evaluated for each MRS (see table on page 7 for specific alternatives selected for each MRS).

MMRP Site Update (continued)

**2009—
Engineering
Evaluation/Cost
Analysis and
Action Memo
finalized;
fieldwork initiated**

**2010—Complete
fieldwork and
After-Action
Report**

A public meeting was held during a 30-day public comment period to discuss the MMRP effort. An Action Memorandum was also signed in 2009 and fieldwork was initiated. The fieldwork associated with each of the

alternatives in the table below is expected to continue through June 2010. Public notice was also provided at a CAG meeting to warn that the community surrounding Buckley AFB may possibly hear explo-

sions during this MMRP fieldwork. Upon completion of fieldwork, an After-Action Report will be finalized in 2010 to document results and determine what additional actions may be required at each MRS.

MRS	Alternatives Selected in 2009 Engineering Evaluation/Cost Analysis
SR101	Alternative Three: MEC Surface Clearance and Subsurface MEC Evaluation
SR101A	Alternative Four: Excavation and Off-site Disposal of Lead Contaminated Soil
SR101B	Alternative Three: MEC Surface Clearance and Subsurface MEC Evaluation
MB103	Alternative Three: MEC Surface Clearance and Subsurface MEC Evaluation
MB103A	Alternative Four: Excavation and Off-site Disposal of Lead Contaminated Soil
CW104	Alternative Three: MEC Surface Clearance and Subsurface MEC Evaluation
CW104A	Alternative Three: MEC Surface Clearance and Subsurface MEC Evaluation
CW104B	Alternative Three: MEC Surface Clearance and Subsurface MEC Evaluation
LF105	Alternative Two: Institutional Controls
MB106	Alternative Three: MEC Surface Clearance and Subsurface MEC Evaluation Alternative Four: Excavation and Off-site Disposal of Lead Contaminated Soil
MB107	Alternative Three: MEC Surface Clearance and Subsurface MEC Evaluation
CW112	Alternative Three: MEC Surface Clearance and Subsurface MEC Evaluation
CW112A	Alternative Three: MEC Surface Clearance and Subsurface MEC Evaluation
MB117	Alternative Three: MEC Surface Clearance and Subsurface MEC Evaluation

Basewide Site Inspection Update

A Basewide Preliminary Assessment was completed in 2007 which identified 23 areas of interest (AOIs) requiring further investigation in a Site Inspection. In addition, two leach fields and a debris area were identified by base personnel after completion of the

Basewide Preliminary Assessment Report. These additional AOIs were also added to the Site Inspection. Each AOI underwent soil and groundwater sampling, as needed. The Outfall area formerly associated with Site 7 was also recently added to the Basewide Site

Inspection. In 2009, the Site Inspection fieldwork was completed and the Report will be finalized in 2010. It is expected that some AOIs will be closed with no further action needed, while others will be validated as sites that will require further investigation.

2009—Basewide Site Inspection fieldwork completed

2010—Finalize Basewide Site Inspection Report

2010 CAG Meeting Information

The mission of the Buckley AFB CAG is to promote community awareness, serve as an information source, and obtain timely constructive community review and comments on proposed Restoration activities. CAG membership consists of any members of the local community who are interested in

learning more about the Buckley AFB Restoration program, as well as representatives from Buckley AFB, state and federal agencies, and local government. Meetings are held from 6–8 pm. The Jan 21st meeting will be at the Crowne Plaza DIA Hotel, 15500 East 40th Avenue, Denver, CO. The Jul

15th meeting will be held on base to tour the sites. The locations for the Apr 22nd and Oct 21st meetings have not been finalized. **To be added to the CAG email list, contact Mr. John Spann, Chief of Public Affairs, at john.spann@buckley.af.mil or 720-847-9431.**

**2010 CAG Meeting Dates:
January 21, April 22, July 15, and October 21**

2009 Community Involvement Efforts



The Buckley AFB Community Involvement Plan was updated in the first half of 2009. This effort included over 50 interviews with elected officials, city and county officials, Buckley officials, base housing residents, nearby business owners/managers, and community members living in the area surrounding Buckley AFB. Input from these interviews led to new

community involvement initiatives such as this report. In addition, an updated CAG Charter outlining the CAG's role for providing public input was signed on 13 October 2009.