

Buckley AFB Environmental Cleanup Program Quarterly Site Status Report

Only open sites are discussed in this summary and identified in Figures 1 to 3. Further information on any open or previously closed Installation Restoration Program (IRP), Compliance Restoration Program (CRP), and Military Munitions Response Program (MMRP) sites can be found in the Buckley AFB Information Repository located at the Central Branch of the Aurora Public Library.

Note: The Air Force (AF), as the lead agency for environmental cleanup of Buckley AFB sites, works in conjunction with representatives from the Environmental Protection Agency (EPA), Colorado Department of Public Health and Environment (CDPHE), City of Aurora, and Tri-County Health Department. This collaboration is known as the Technical Working Group (TWG). Buckley AFB also coordinates with the Air Force Center for Engineering and the Environment (AFCEE). Public involvement in the site review process is done through a Community Advisory Group (CAG). Updates on site information are provided to the CAG through quarterly Site Status Reports and quarterly meetings. In addition, Draft Final documents are made available at the Central Branch of the Aurora Public Library and email notification of their availability for review is sent to the CAG email list.

Site 1: Fire Training Area # 2

This site covers approximately 8,000 square feet and was used from the early 1950s to 1972 for fire training exercises. During the exercises, an unknown quantity of various fuels and solvents were placed in an unlined circular bermed area, ignited, and subsequently extinguished by the trainees. Investiga-

tions completed at Site 1 determined a small amount of trichloroethylene reached groundwater. A Proposed Plan was completed in 2008 and a Record of Decision was prepared in 2010 with long-term monitoring and land use controls as the preferred remedial alternative. However, based on Dec

2010 groundwater monitoring results showing trichloroethylene concentrations above standards outside the previous plume boundary, the Record of Decision has been delayed until a title search, Environmental Use Restriction Notice, and further investigation are completed.

ACTIVITY LAST QUARTER:

- The contractor conducted a site visit with base personnel to determine permits/waivers required for investigation fieldwork.

UPCOMING ACTIVITIES:

- Draft Investigation Work Plan will be submitted for AF review by the end of Mar 2012.

ACTIVITY LAST QUARTER:

- The AF, CDPHE, and EPA reached a tentative agreement in Dec 2011 on how to proceed with an interim remedy and a separate perchlorate characterization/background study.

UPCOMING ACTIVITIES:

- The AF plans to submit a Draft Final Interim Proposed Plan for Site 3 for TWG/CAG review in Jan 2012.

Site 3: Former Base Landfill

This site was reported to have received a variety of municipal and industrial waste from 1942 to 1982, and landfill waste was burned periodically between 1947 and 1959. Several site investigations occurred from 1982 to 1994 but no contaminants of

concern were found. A supplemental Remedial Investigation in 2007 determined that the existing soil cover over the refuse was inadequate. A Feasibility Study considered remedial alternatives for the site with the presumptive remedy being containment

(through improvement of the existing soil cap), long-term monitoring, and land use controls. A new area with asbestos material has been added to Site 3; it is included in the Interim Proposed Plan and Record of Decision that are being prepared.

Site 10: Former Warehouse Area

Site 10 was used from 1940 to 1996 for multiple purposes to include vehicle maintenance and service, storage of pesticides and herbicides, storage of equipment and supplies delivered by railroad, and storage and transfer of coal for use as fuel in heating systems. The main contaminants of concern found during investigations are chlorinated solvents such as tetrachloroethylene and trichloroethylene. During the Remedial Investigation, which involved quarterly

sampling of dozens of wells both on and off base, a plume contaminated primarily with tetrachloroethylene was shown to flow from the base and under property owned by the City of Aurora. However, no direct impact to area residents has been identified. A 2005 interim remedial action substantially reduced groundwater contaminant concentrations in the on-base source area and is limiting continued flow of contaminated groundwater off base.

Maintenance of the treatment system is ongoing. Treatability studies have been conducted to evaluate remedial technologies for the off-base portion of the plume. After the Final Supplemental Remedial Investigation Report was completed in Sep 2009, monitoring of the chlorinated solvent plume has continued through additional sampling events in 2009 through 2011. Remedial alternatives for Site 10 will be evaluated in a Feasibility Study.

ACTIVITY LAST QUARTER:

- Draft Final 2011 Second Semi-annual Groundwater Monitoring Report was submitted for TWG/CAG review in Nov 2011.
- The AF and contractor met with CDPHE and EPA in Nov and Dec 2011 to discuss the conceptual site model and plans for an investigation for Site 10 data gaps.

UPCOMING ACTIVITIES:

- Draft Investigation Work Plan will be submitted for AF review by the end of Mar 2012.
- Final 2011 Second Semiannual Groundwater Monitoring Report is expected to be submitted in Jan 2012.

Site 11: Building 1011 Area

ACTIVITY LAST QUARTER:

- AFCEE has decided to include all work at Site 11, including data gap sampling for natural attenuation parameters and a Feasibility Study, in a future Performance-Based Remediation task order.

UPCOMING ACTIVITIES:

- AFCEE expects to award the Performance-Based Remediation task order during Summer 2012.

Site 11 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 included lead, tetrachloroethylene, trichloroethylene, and polynuclear aromatic hydrocarbons in soil, and tetrachloroethylene and trichloroethylene in groundwater. A Jul 2009 Action Memo-

randum called for the removal of contaminated soil and floating fuel on the groundwater. Absorbent socks were placed in wells to address the floating fuel in 2007 and 2008. About 130 cubic yards of contaminated soil was excavated and disposed of at a permitted landfill in Oct 2009. The Remedial Investigation for groundwater included groundwater sampling on base and, after PCE contamination was found in groundwater at

the base boundary, groundwater, surface water, and sediment sampling occurred off base on City of Aurora property. Results show two chlorinated solvent plumes with no immediate risk to human health or the environment. One plume is about 240 feet long, located solely on base, and the other is about 1,100 feet long with about 400 feet of the plume extending off base (terminating to the north of East Toll Gate Creek).

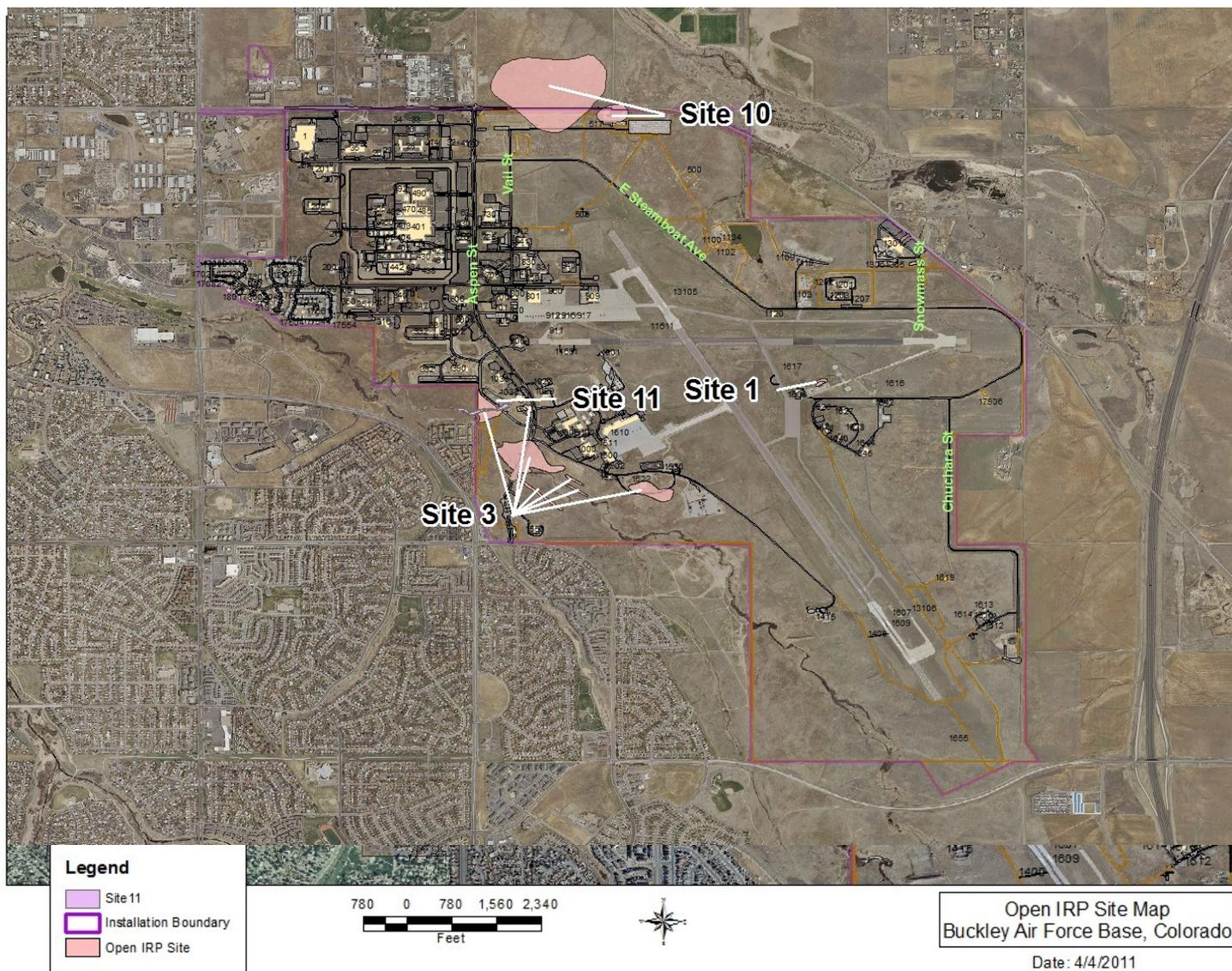


Figure 1: Location of Open IRP Sites

Compliance Restoration Program

A Basewide Site Inspection was completed in Mar 2010 which recommended further investigation at 18 areas of concern. In addition, AFCEE identified 9 other areas of concern at Buckley requiring investigation. These 27 areas fall under a separate AF program called the CRP. The 27 CRP sites were divided into two groups. The first group of seven CRP sites will be further evaluated in 2012 to determine the need for a Site Inspection to achieve site closure. The second group of 20 sites have previous sampling results that indicated the need for a Remedial Investigation. The Remedial Investigation fieldwork was started in Summer 2011 at these 20 sites (8 sites in the East Industrial Area and 12 sites in the Central Industrial Area). Two Remedial Investigation Reports (one for each Industrial Area) are expected in 2012. Initial results indicate no further action will likely be recommended for some of the 20 sites, while a Feasibility Study will be needed for the others to evaluate remedial alternatives.

ACTIVITY LAST QUARTER:

- In Nov 2011, CDPHE and EPA met with the AF and contractor to discuss preliminary Remedial Investigation data for the 20 CRP sites in the Central and East Industrial Areas. Based on that review, additional wells and sampling were recommended at some of the 20 sites. All fieldwork was completed in Dec 2011.

UPCOMING ACTIVITIES:

- Draft Remedial Investigation Reports for the Central and East Industrial Areas will be submitted for AF review in Jan and Feb 2012, respectively.
- A Draft Work Plan for the 7 CRP sites that may require a Site Inspection is expected for AF review by the end of Mar 2012.

2012 Community Advisory Group Meetings (6-8 pm):

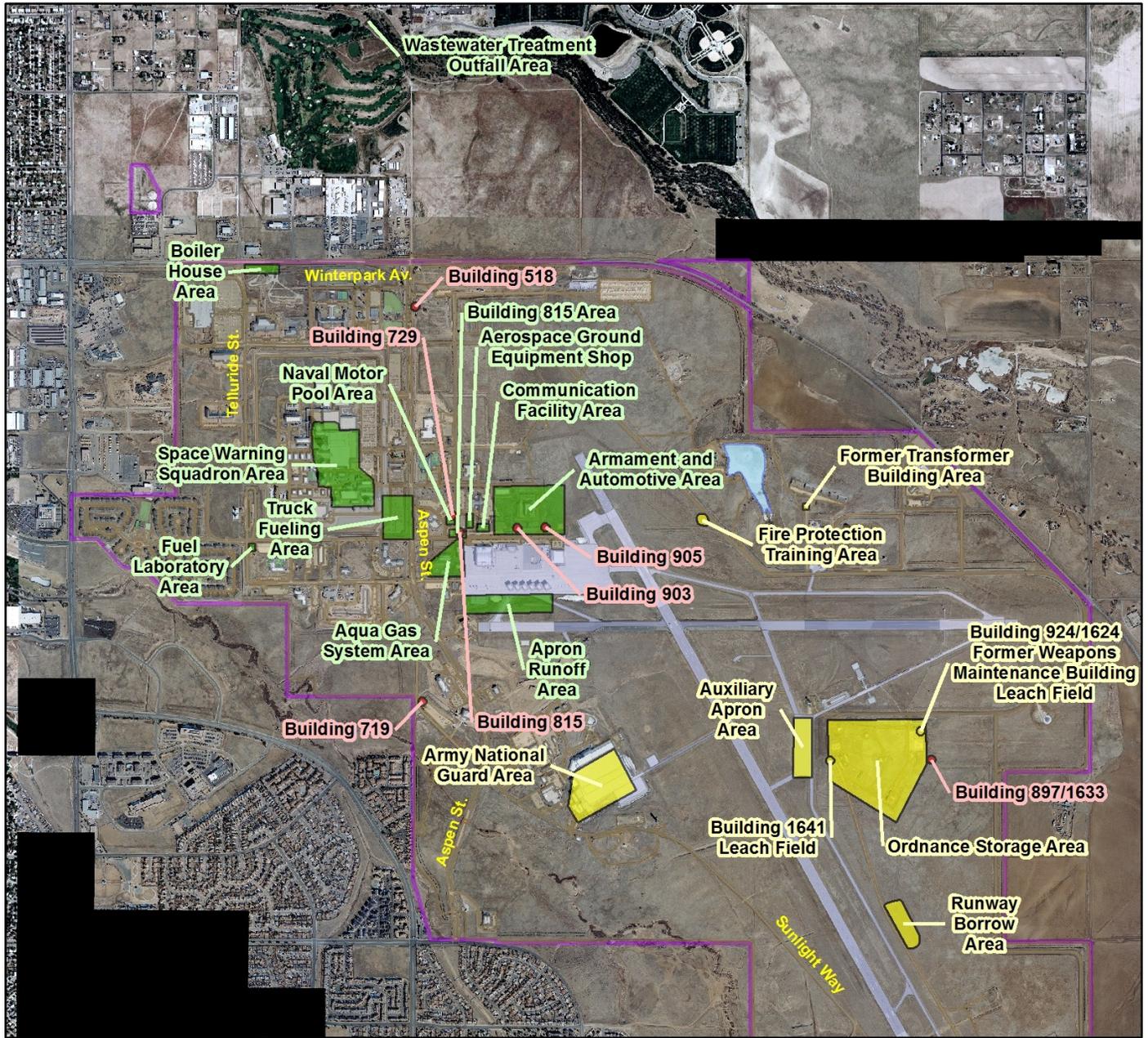
January 19

April 19

July 19 (will include Base tour of sites)

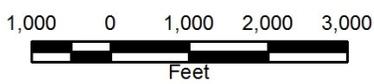
October 18

**Location for all CAG Meetings
(except July Base tour):
Aurora Chamber of Commerce
14305 E. Alameda Ave, Ste 300**



Legend

- Central Industrial Area
- East Industrial Area
- Site Inspection Required
- Installation Boundary



CRP Site Map
Buckley Air Force Base, Colorado

Figure 2: Location of Open CRP Sites

Military Munitions Response Program

The MMRP addresses issues related to munitions and explosives of concern, chemical warfare material, and munitions constituents associated with munitions response areas, 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 activities, which are comparable to the Preliminary Assessment and Site Inspection phases in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, were performed at Buckley from 2005 – 2008. To date, a total of 17 munitions response areas have been investigated

during the Comprehensive Site Evaluation process. Eight of these received a no further action decision at the conclusion of the Comprehensive Site Evaluation Phase I. The nine remaining munitions response areas were evaluated during the Comprehensive Site Evaluation Phase II. At the conclusion of Phase II, these munitions response areas were divided into 15 munitions response sites (MRSs), all but one of which (TS102) was recommended for further evaluation. An Engineering Evaluation/Cost Analysis for the 14 munitions response sites was finalized in Feb 2009 with up to four alternatives evaluated for each munitions response site. A re-

moval action was initiated in Nov 2009 which included subsurface anomaly investigations, surface clearance, and removal of soil containing lead contamination above residential screening levels. The Final After-Action Report was completed in Sep 2011. This Report recommended a remedial investigation for 6 MRSs (SR101, SR101B, MB103, LF105, MB106, MB107) and no further action for the remaining MRSs (SR101A, MB103A, CW104, CW104A, CW104B, CW112, CW112A, MB117). TS102 was also added to the no further action Proposed Plan/Record of Decision that is being prepared for a total of 9 MRSs.

ACTIVITY LAST QUARTER:

- AF reviewed and provided comments on a Draft Remedial Investigation Work Plan for 6 MRSs in Nov 2011.
- Submitted a Draft Final Proposed Plan for no further action at 9 MRSs for TWG/CAG review in Nov 2011 and the Final version in Dec 2011.
- Proposed Plan public comment period for no further action at 9 MRSs was initiated on 29 December 2011.

UPCOMING ACTIVITIES:

- Draft Final Remedial Investigation Work Plan for 6 MRSs to be submitted for TWG/CAG review in Jan 2012.
- Proposed Plan public comment period for no further action at 9 MRSs ends on 27 January 2012 with public meeting on 19 January 2012.

To be added to the Community Advisory Group email list, contact Mr. John Spann, Chief of Public Affairs, at john.spann@us.af.mil or 720-847-9431 .

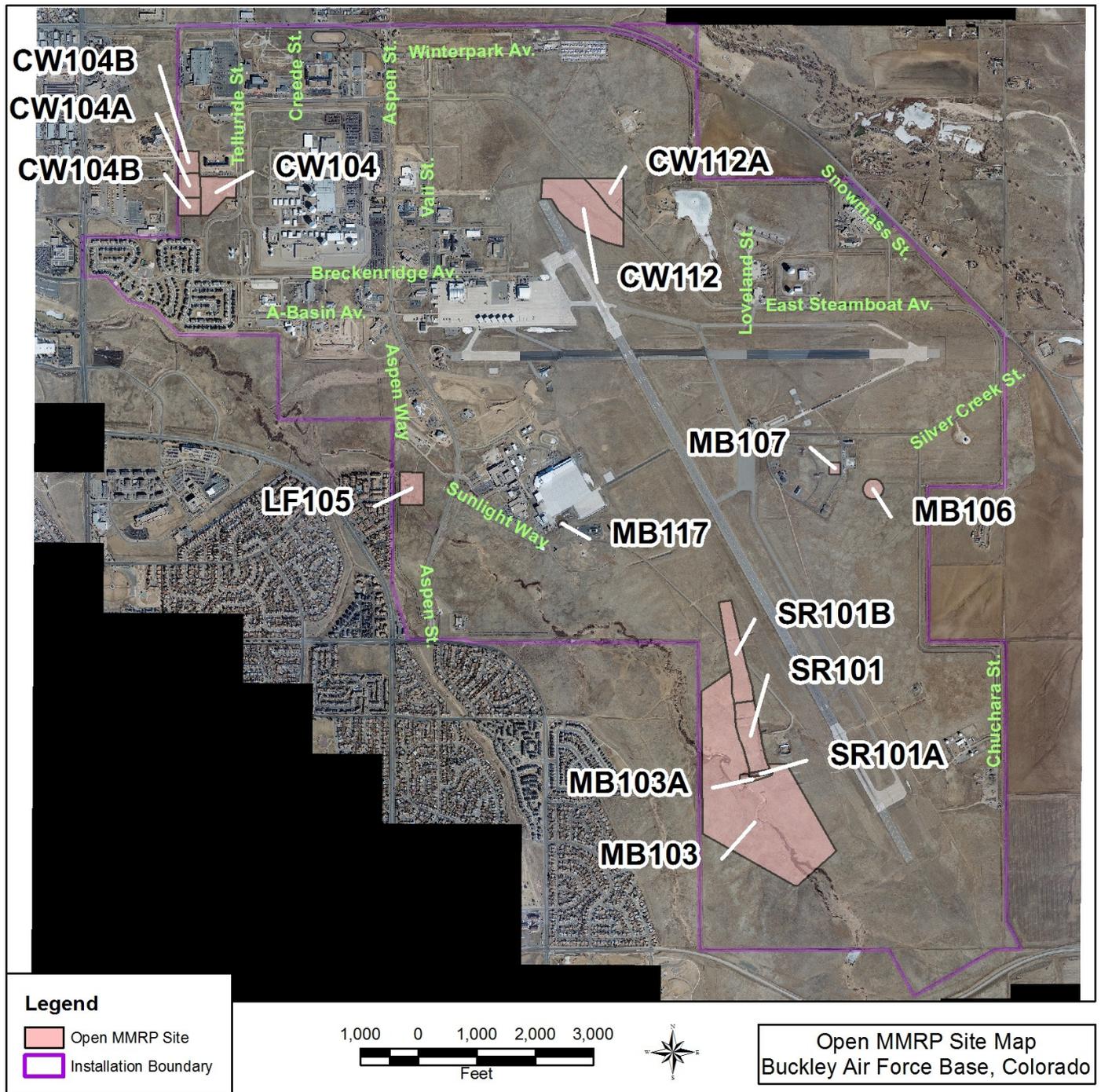


Figure 3: Location of Open MMRP Sites