

Papago Park Military Reservation Department of Defense (DoD) Site

Boundaries:

The [Papago Park Military Reservation](#) (PPMR) occupies approximately 480 acres of land and is bounded by Oak Street to the north, 52nd Street to the west, and land owned by the City of Phoenix, Arizona to the south and east. PPMR serves as the Joint Forces Headquarters for the [Arizona Army National Guard](#) (AZARNG). PPMR also hosts operational National Guard units at the installation. The AZARNG leases portions of the installation to the U.S. Air Force for administrative and training purposes.

The PPMR has numerous structures and buildings that are predominantly located along the western portion of the facility. The cumulative activities over time at the PPMR have resulted in the identification of 11 areas that have the potential for environmental concerns. Site PMR-S is located on the southern portion of PPMR located approximately 200 feet north of Building M5705. The lead shot outfall is 11.4 acres in size.



**Army National Guard 640th
Aviation Support Battalion Soldiers
at Welcome Home Ceremony**

Site Status Update:

PPMR is currently a [Resource Conservation and Recovery Act](#) (RCRA) small quantity generator of hazardous waste, and generates various solid and universal wastes. Five of the [Installation Restoration Project](#) sites for PPMR are Response Complete (finished). The Arizona Department of Environmental Quality (ADEQ) has Decision Documents for 13 sites.

AZARNG and ADEQ have agreed to implement land use control (LUC) for Site PMR-S. Closure of Site S is conditional upon implementation of Access and Institutional Controls (physical and administrative LUCs) by amendment to the operational real property master plan for the PPMR facility. The amendment directs maintenance of a perimeter fence and signage, preparation of annual status reports submitted to ADEQ and the [U.S. Army Environmental Command](#) (USAEC), and requires ADEQ and USAEC technical review and approval prior to any disturbance of any soil of Site S or change in LUCs. If ownership is ever transferred outside the military, remediation will be required. Long-term monitoring with [Five-Year Reviews](#) (FYR) for Site S will continue through 2035.

A [Military Munitions Response Program](#) (MMRP) work plan was submitted and approved in May 2010 and work began on Range 1 and Small Arms Range Complex in summer 2010. The draft Remedial Investigation/Feasibility Study (RI/FS) was submitted fall of 2010 and is currently under review.

A FYR is currently underway for the former Skeet Range and ADEQ commented on the first draft of the report in October 2010.

Community Involvement Activities:

It was determined that a restoration advisory board is not needed. No community involvement activities are planned at this time.

Site History - PPMR:

1930 to present: The AZARNG was established on April 21, 1930 by Public Law 92 of the 71st Congress. The act served to abolish the [Papago-Saguaro National Monument](#) and reserve public lands for military purposes, specifically a rifle range. Since the congressional designation in 1930, PPMR has been an active military facility and rifle range. The current and historical activities at the facility include training and administration, aircraft fueling and maintenance activities, motor vehicle fueling and maintenance activities, fuel and [solvent](#) storage areas, gunnery ranges, detonation areas, and bunkers.



**Arizona Military Academy at
Papago Park Military Reservation**

The PPMR mission has been consistent with training and administration since the facility was established in 1930. On-site training activities have, and continue to include: aircraft fueling and maintenance, motor vehicle fueling and maintenance activities, fuel and bunker storage areas. Several training and operational practices were discontinued in the past including solvent storage areas, gunnery ranges, detonation areas, and long-term storage of hazardous materials.

1946-1985: In 1946, a combined support maintenance shop (CSMS) (Building M5354) was established for the purpose of servicing and maintaining approximately 150 vehicles. Since that time, two more CSMSs have been established at the facility (Buildings M5340 and M5370). However, only Building M5370 currently continues to operate as a CSMS facility. In 1973 and 1985 operational maintenance shops #4 and #7, respectively, were established to service and maintain small vehicles. Both facilities remain as maintenance facilities. Based on the few records available and interviews with past and present employees, [petroleum naphtha](#) has historically been the primary solvent used. Limited quantities of [trichloroethane](#) (TCA) and chlorinated hydrocarbons have been used, primarily by the Army Aviation Support Facility (AASF) and wash racks. Prior to 1973, the AZARNG did not maintain purchase and use records for solvents. Throughout the history of the facility, numerous underground and above ground storage tanks have been used for storage of fuels, waste oil and solvents.

1950-1983: Prior to 1957, and on occasion through 1983, waste oils and solvents were spread on roadway surfaces as dust control agents. Beginning in 1983, with the exception of the above, waste oils and solvents have been collected in storage tanks and 55-gallon drums and turned over

to the Defense Property Disposal Office at [Luke Air Force Base](#) for disposal, although during 1980 and 1981, waste oils and solvents at the AASF were collected in 55-gallon drums and disposed of by a private vendor. The AASF shop is reported to have had a 35-gallon solvent tank that was used for storing TCA. Additional historical information regarding waste disposal is not available.

The facility was connected to the City of Phoenix sanitary sewer in the mid-1950s. Prior to that time, a number of the facility operations, including maintenance and administrative offices, were serviced by septic systems and leach fields, which may have received hazardous waste substances. Reportedly, construction debris was buried on the site prior to 1992; however, there was no information indicating that other waste may have been buried on the property.

1985-present: Since the mid-1980s, numerous environmental investigations have been conducted at multiple PPMR locations for specific environmental concerns. Due to the age of the facility, earlier records are not available for many of the historical environmental practices. PPMR is currently a RCRA small quantity generator of hazardous waste, and generates various solid and universal wastes. The facility has not applied for a RCRA Part A or Part B treatment, storage and disposal facility permit. According to ADEQ, the facility has not received a [Notice of Violation](#) for noncompliance with environmental regulations.

2003: The Phase 3 Army Range Inventory was completed at PPMR in May. The inventory identified one site as eligible for the MMRP. The Phase 3 Inventory serves as the preliminary assessment under [Comprehensive Environmental Response Compensation and Liability Act \(CERCLA\)](#).

2004-2005: A site investigation began in May 2004 and was completed in the Fall 2005. An additional MMRP site was discovered during the site investigation that indicated the presence of contamination. Follow-up phases/actions were executed as required in the individual [site cleanup strategies](#).

2010 – An RI/FS) Workplan was submitted in May as per the recommendation of the Site Inspection conducted in 2005. In June, field work began at the Site and the RI/FS draft report was submitted to ADEQ for review in September.

Site History – Former Skeet Range:

1954-present: Located to the south of McDowell Road, the former Skeet Range Site is currently vacant property with no buildings or structures. A shooting range was used for skeet target practice from 1954 to 1977. Lead pellets and clay pigeon fragments were deposited on the surface during the course of normal range operations. Currently, the site is known as Lake Owens. During construction, soil from the former skeet range was moved to northeast of the Moreland Street Armory. Laboratory analysis of soil samples collected from the stockpile area indicated the presence of [lead](#) and [polycyclic aromatic hydrocarbon](#) compounds above the ADEQ [soil remediation level](#). Fifty additional soil samples were collected from the outfall to assess possible No Further Action/LUC and delineation of range footprint.

Soil investigation revealed that the site characterization was adequate and no further remediation or investigation is required. A program decision document was finalized and approved by ADEQ. The first long-term monitoring status inspection was conducted in 2006. A LUC is in place for the site. No residential development is allowed. Long-term monitoring consists of institutional controls at this site for 30 years and five-year reviews.

The FYR began in 2010 and a final report is expected to be submitted in 2011.

Site History – Range 1:

1954-present: Range 1 is located on an area that is now covered by numerous improvements including buildings, parking lots, an airstrip, and a baseball field. The Closed, Transferring or Transferred Range Inventory Report identified only this one range, consisting of approximately 27 acres. However, during the historical record review, two additional former small arms ranges were also identified. They are partially overlain by an operational range. The non-operational range portions of these former ranges, consisting of approximately 11 acres, are now included in this site. This 27-acre "range complex" is located northeast of the intersection of McDowell Road and 52nd Street. The three former ranges were used for small arms.

A portion of Range 1 was identified as a potential practice grenade range, which is Response Complete per ADEQ. The location of the former practice grenade range is now buried under 10 feet of [soil fill](#) used to construct the baseball field. The results of previous geophysical and soil investigations of the grenade range indicated no Munitions and Explosives of Concern were found, and lead, [mercury](#), and [dinitrotoluene](#) detections were below regulatory guidelines. Preliminary contaminants of concern at the ranges include metals and explosives. A site investigation was completed in the Fall 2005.

An RI/FS, including the installation of groundwater monitoring wells, will be completed. This will be followed by soil removal and off-site transportation and waste disposal.

2010 – An RI/FS Workplan was submitted in May as per the recommendation of the Site Inspection conducted in 2005. In June, field work began at the Site and the RI/FS draft report was submitted to ADEQ for review in September.

Site History – Small Arms Range Complex:

1947-present: The Small Arms Range Complex is comprised of 11.60 acres and is located directly north of Range 1. The site is comprised of several historical small arms ranges that were in use as early as 1947 and as late as 1996. These ranges were identified in aerial photographs. The majority of the site is undeveloped except for the southern boundary, which has some office buildings and parking areas used by installation personnel on it. Because no historical records were available to delineate the size and operation of these ranges, an estimated footprint of the ranges was developed by establishing a boundary around the approximate firing points and [berms](#) associated with each range.

The following items were found on the range: expended projectiles, shell casings, and expended 7.62mm rounds. A site investigation was completed in the Fall 2005. An RI/FS, including the installation of groundwater monitoring wells, will be completed. This will be followed by soil removal and off-site transportation and waste disposal.

2010 – An RI/FS Workplan was submitted in May as per the recommendation of the Site Inspection conducted in 2005. In June, field work began at the Site and the RI/FS draft report was submitted to ADEQ for review in September.

Contaminants:

Current and historical hazardous substances associated with PPMR operations include: oil and lubricants, hydraulic fluid, brake fluid, antifreeze, gasoline (leaded and unleaded), diesel, aviation fuels, [solvents](#), paint-related materials, cleaning compounds/detergents, welding gases, pesticides, polychlorinated biphenyls ([PCBs](#)), batteries, and munitions. The contaminants of concern include metals and explosives. Contaminants of concern may change as new data become available.

Public Health Impacts:

Groundwater monitor wells at the landfill are monitored semi-annually. Contamination is limited to the subsurface soil. Groundwater has not been impacted. There are no known health risks from this site.

Site Hydrogeology:

The PPMR lies within the West Salt River Valley area of the [Phoenix Active Management Area](#). Since 1947, depth to groundwater in the unconsolidated [alluvial](#) sediment near PPMR has increased regional and local changes in the direction of flow. Generally, historical groundwater movement was primarily westward toward the Salt River channel. Because the PPMR is on [bedrock](#) highlands and is largely underlain by crystalline rock, very little water, if any, is present in its vicinity. Depth to groundwater beneath the site ranges from 6 to 42 feet below grade; however, groundwater does not exist everywhere beneath PPMR.

Contacts:

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*In Arizona, but outside the Phoenix area, call toll-free at (800) 234-5677.

Information Repository:

Interested parties can review select site information at the PPMR (entry at the Main Guard Gate), 5636 E. McDowell Road, in Phoenix.

Site information is also available at the ADEQ Main Office located at 1110 W. Washington Street in Phoenix. Please contact (602) 771-4380 or (800) 234-5677 to schedule an appointment with 24-hour notice to review these documents. Once all documents requested have been collected, you will be contacted for a review Monday through Friday from 8:30 a.m. to 4:30 p.m. at the ADEQ Records Management Center, 1110 W. Washington Street in Phoenix, AZ.