



Former Fort Ritchie Property

What You Need to Know

Site Location

Fort Ritchie is located at the foot of Quirauk Mountain in north central Maryland, in the northeastern corner of Washington County off of State Route 550 near the Pennsylvania State line. The site is situated approximately 20 miles north of Frederick and 15 miles northeast of Hagerstown. Fort Ritchie is 638 acres in size and contains numerous buildings including residences, meeting areas, and work centers.

Site History

In about 1889, the Buena Vista Ice Company purchased 400 acres of the land where Fort Ritchie now stands. A lake was built in approximately 1901 and named Lake Royer. A railroad spur was built alongside the southeastern shore of Lake Royer. The locomotives' exhaust laid soot on the ice in the lake, so a second lake, Lake Wastler, was constructed to ensure that the ice would remain clean for cutting. Demand for natural ice declined over the years, and the Buena Vista Ice Company discontinued operations at the site.

In 1926, 580 acres were purchased by the State of Maryland to establish Camp Ritchie as a Maryland National Guard training area. Acquisition of additional property increased the camp to 638 acres by 1940.

During World War II, the U.S. Army leased Camp Ritchie for use by the Military Intelligence Training Center (MITC). Training activities included the firing ordnance into the hillsides in the western portion of the installation. These activities resulted in unexploded ordnance (UXO) remaining at the site after that time. In 1945, the MITC was deactivated and Camp Ritchie returned to the Maryland National Guard.

In 1948, the Army re-acquired control of the facility to support the Alternate Joint Communications Center (AJCC) for a facility located separately from Fort Ritchie. The property title of Fort Ritchie was procured by the Army in 1951.

In 1995, Fort Ritchie was placed on the Base Realignment and Closure (BRAC) list. That same year, construction of a Maryland National Guard Armory was completed at the former skeet range. All Federal military activity at Fort Ritchie ceased by 1998. Fort Ritchie was transferred to PenMar Development Corporation. A total of 22.46 acres were retained for use by the Maryland National Guard.

In September 2016, after having little success with developing the property, it was transferred to Washington County. Washington County is evaluating the future land use of this area.



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Environmental Investigations and Actions

Following its designation for closure under BRAC 95, the Army, the U.S. Environmental Protection Agency (EPA) and the Maryland Department of the Environment (MDE) began meeting with the Army to identify and address environmental issues at the facility.

From 1991 through 1997, MDE's Oil Control Program conducted underground storage tank removal actions across the facility. In addition, the facility removed soil at the former skeet shooting range, and the former incinerator areas, and 12 truckloads of solid waste debris that had been dumped on the property.

In preparation for BRAC 95, the Army prepared an *Environmental Assessment (EA)* in 1993. The EA documented Fort Ritchie's environmental conditions as of 1993. An *Environmental Baseline Survey* was completed in 1996. A total of 16 Operable Units (OU) were designated on the facility for further assessment. The following is a list of each OU and the identified remedial alternative:

- OU 1, Golf Course Maintenance Shop, No Risk due to Army activities (No Action)
- OU 2, Incinerator, Removal Action Completed (No Further Action)
- OU 3, Lakes (No Action after Site Inspection [SI] Level study)
- OU 4, Motor Pool, Remedial Action was conducted
- OU 5, Department of Public Works Maintenance Area, Removal Action Completed (No Further Action with Institutional Controls)
- OU 6, Auto Craft Shop (No Action after SI Level study)
- OU 7, Abandoned Small Arms Ranges (No Action after SI Level study)
- OU 8, Post Exchange Service Station, Oil Control (Close-Out Completed)
- OU 9, Administration Area, Removal Action Completed (No Further Action with Institutional Controls)
- OU 10, Wise Road Disposal Area, Army retaining property to support Maryland National Guard
- OU 11, Wetlands Area (No Action after SI Level study)
- OU 12, Hospital Area (No Action after SI Level study)
- OU 13, Unexploded Ordnance Area, Removal Action conducted
- OU 14, Former Burn Area, Removal Action Completed to address petroleum contamination
- OU 15, Reservoir Road Disposal Area (No Action after SI Level study)
- OU 16, Electrical Substation (No Action after SI Level study)

Two of the OUs discussed above (OU4 and OU13) underwent significant cleanup actions. These actions are discussed below.



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Operable Unit 4 – Motor Pool Building 700

OU4 is located west of Lake Wastler. OU4 served as the maintenance shop and refueling station for the Installation from 1941 to the late 1980s. Tetrachloroethene (PCE), a commonly used automotive degreaser, was found in the subsurface soils and groundwater in the vicinity of Building 700.

PCE and its breakdown products (trichloroethene [TCE], etc.) were identified in shallow groundwater. A removal action using in-situ chemical oxidation (ISCO) with sodium permanganate was conducted from July 2002 to May 2004. ISCO is intended to chemically break down PCE to carbon dioxide and aliphatic hydrocarbons.

A Feasibility Study was completed in 2006, and after public involvement, the Record of Decision (ROD) was signed. The final remedy was specified as “Land Use Controls with Monitoring,” with the assumption that residual permanganate from the ISCO removal action along with other processes such as dilution, dispersion and bioattenuation, would cause PCE and its breakdown products to decline in concentration to below cleanup goals in a reasonable length of time.

The most recent Five-Year Review (December 2017) reported that PCE and TCE concentrations in the groundwater are stable or trending downwards, but remain above the EPA Maximum Contaminant Levels. The Army has initiated a Focused Feasibility Study to evaluate options for achieving Remedial Action Objectives in a shorter timeframe than is currently projected.

Operable Unit 13 – Unexploded Ordnance Area

An Archive Search Report and Engineering Evaluation/Cost Analysis (EE/CA) were completed by 1997. These documents confirmed the presence of munitions and explosives of concern (MEC) including UXO. The MEC removal action was performed from 1999 through 2002. MEC removal did not occur beneath existing pavement, sidewalks, buildings, utilities, and improved drainage features in order to preserve this infrastructure for future use. These areas will be cleared as they become available for redevelopment through UXO construction support activities.

During the 1999-2002 MEC removal action, approximately 212 acres were cleared of MEC using geophysical methods. Approximately 19 of these acres were on privately-owned or State of Maryland owned property offsite west of Fort Ritchie.

The off-site properties and most of the mountainous/hillside were cleared of MEC to a depth of one foot below ground surface (bgs), while the low-lying areas were cleared to a depth of four feet. A total of 355 UXO were recovered and disposed of by explosive detonation. UXO items found included 37mm and 57mm projectiles; 60mm, 81mm, and 3-inch Stokes mortars; hand and rifle grenades; 2.36-inch rockets; and also foreign ordnance (Japanese and German mortars). The majority of UXO items (309 out of 355) were found in the mountainous/ hillside and undeveloped impact area on the western portion of the property. The remaining 46 UXO items were found in the developed



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cantonment area. In addition, approximately 587 intact, inert or practice items were also recovered that contained no explosives and posed no hazard, yet would prompt an emergency response situation if encountered in the future.

In 2002, an additional 38 acre fill area was identified for MEC removal. MEC removal actions in the additional 38 acres, which began in 2002, and after a two-year shutdown to re-locate civilian residential tenants, were concluded in 2005. A total of four UXO were recovered from the 38-acre area, including three 3-inch Stokes mortars and one unfused, anti-personnel land mine. The area was remediated to a depth of four feet. An additional 26 intact, inert items were also recovered that contained no explosives.

Since the completion of the response action in 2005, several UXO removal construction support activities have been undertaken in accordance with the implementation of land use controls (LUCs). These support activities were performed between 2007 and 2011.

Between November 13 and December 19, 2007, approximately 7,250 intrusive investigations were completed on about 2,115 anomaly targets. During this project, one munitions debris item was recovered, a sand-filled, 3 inch Stokes Mortar, and a total of 4,650 pounds of building demolition scrap was collected.

In 2008, a total of three acres were surveyed and geophysically mapped, comprising seven former building footprints along West Record Avenue, as well as the large footprints of Buildings 402 and 403 and the adjacent large parking lot. No MEC or munitions debris items were recovered; however, a total of 12,340 pounds of building demolition/scrap was collected.

MEC construction support activities conducted during 2010-2011 focused on the southern end of the housing area at Fort Ritchie including Former Buildings 450 through 520 and the Building 520 parking lot and adjacent Reckford Avenue areas. Of the total of 43 former building, 39 were cleared and four former buildings (Buildings 461, 463, 465, and 467) were inaccessible due to the presence of stockpiled soil. A total of 4,793 anomalies were identified through geophysical mapping and were investigated by the dig teams. From among these anomalies, 10 munitions debris items were disposed of by explosive detonation.

Current Status/Planned or Potential Future Action

In 2016, the property was transferred to Washington County. The County is evaluating re-use alternatives for the property.