



Facts About...

Elkton Farm Firehole State Master List Site (MD-533)

Site Location

The Elkton Farm Firehole Site is located two miles northwest of Elkton, Cecil County, Maryland on a 55-acre portion of a 400-acre farm. The Firehole is located near the intersection of Zeitler Road and Fishers Lane, just south of Zeitler Road and between Little Elk Creek and Laurel Run. The most recent use of the site has been as a working farm. During the decade before and during World War II, the parcel had been the site of activity related to the manufacture of fireworks and munitions.

Site History

The site is on a portion of the property once owned by Triumph Explosives Industries (TEI), a World War II era munitions manufacturer. From late 1942 through the end of 1945, TEI operated an open burning pit on the Elkton Farm property. Waste munitions and explosive materials were spread in the pit and allowed to burn until consumed. Following the closure of TEI in 1947, the property was split into a number of different parcels. The parcel on which the burn pit was located reverted to farmland.

The Elkton Farm site was also the scene of illegal storage of hazardous chemical wastes during the period between 1979 and 1992. Discovery of hazardous material by the Maryland Department of the Environment (MDE) led to an Emergency Removal Action by the U.S. Environmental Protection Agency (EPA) in 1992. Subsequent investigation of the farm property led to the discovery of additional waste units including the Firehole. Since 1992, there has been no documented waste disposal activity on the site. The only ongoing operation is farming.

In 1992, TechLaw, Inc. conducted an investigation of the site operations and ownership history of TEI. This report identified an area on the Zeitler Farm south of Zeitler Road as the Firehole, an area for the disposal of waste ordnance and explosives material. Waste explosive material was reportedly collected in drums and kept wetted with alcohol or ether. This waste was then carried to a shallow pit off Zeitler Road, spread thinly and allowed to burn.

A geophysical survey conducted in July 2002 for MDE by NAEVA Geophysics, Inc. (NAEVA) indicated several distinct anomalies on the portion of the property east of Laurel Run and south of Zeitler Road. Waste ordnance disposed at the site has been documented to include: 40 mm antiaircraft shells, six and ten pound thermite bombs, 81 mm mortars, slap flares and float light propellant motors. The total quantity of hazardous waste disposed of in the Firehole is unknown. The thickness of the ash and debris layer documented so far for the Firehole has ranged from one to three feet thick. Observations indicate that the Firehole is not one discrete area, but rather a series of long burn pits located across the property covering an approximate 32-acre area.



The site is currently owned by Herron 393, LLC, a development corporation, which plans to develop the property into a residential community. From 1948 through 2006 the property was owned by the Herron family/MARVA Limited Partnership. During the years of World War II, TEI purchased the farm from the Zeitler family. At the end of the War, the Herron Family purchased the farm from TEI. MARVA Limited Partnership is the corporate successor for the Herron family farm.

Environmental Investigations

On October 15, 1991, MDE accompanied the Roy F. Weston Corporation Technical Assistance Team as they performed a site investigation. Aqueous samples were taken from drums stored in and around barns and outbuildings at the site. Results indicated that all samples were high in cyanides, four were weakly acidic, four were flammable and one was extremely caustic with a pH of 14.

EPA determined that the site met criteria for an emergency removal action and on February 24, 1992, a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) removal action was initiated. All drums were overpacked and 10 tons of contaminated soil were contained and removed. On August 19, 1992, the EPA declared the site closed.

In April 2001, MDE performed a site survey of the Elkton Farm site to determine whether further action was necessary. The finding of this survey was that further action was required in order to document potential hazards associated with a release of site contaminants to the ground and surface waters of the State of Maryland, resulting from the burning of waste in the Firehole that occurred during WWII.

Several investigations were initiated on the property beginning in July 2002.

- In July 2002, a geophysical investigation documented the limits of the Firehole.
- In September 2002, an Expanded Site Investigation on the “Firehole” parcel.
- In May 2003, a groundwater investigation of the Firehole and the Thiokol Motor Recovery Area.
- In December 2004 and January 2005, a Formerly Used Defense Site Investigation of the Firehole.

Remedial Activities

In February 2006, EPA began Phase I of a Time Critical Removal Action on the Firehole. The U.S. Army Corps of Engineers oversaw contractor activity to remove and detonate several thousand pieces of waste military ordnance scattered over approximately 28 acres of the site. Phase II of this Time Critical Removal Action is scheduled to begin in January 2007 with removal of ordnance from the remaining acreage.

Current Status

The Firehole is a unit of the historic TEI site. The site is on the State Master List that identifies potential hazardous waste sites in Maryland. The State Master List includes sites currently identified by the EPA’s Comprehensive Environmental Response, Compensation and Liability Information System. Although the initial site was an Emergency Removal Action under CERCLA, several Units have been determined to be Formerly Used Defense Sites and will be addressed as such. The information contained in the fact sheet presents a summary of past investigations and site conditions currently known to MDE.



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