



# Former Miller Chemical and Fertilizer Corporation (MD-123)

## What You Need to Know

### SITE LOCATION

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The former Miller Chemical and Fertilizer Corporation site is located at 2425 Whiteford Road in Whiteford, Harford County, Maryland (“the Site”). The Site occupies approximately 34-acres in the northeast corner of the intersection of Whiteford Road and MD Route 165 and adjoins the former Whiteford Packing Company. A railroad track historically ran along the boundary of these two properties. The Site is mainly wooded with some non-tidal wetland areas. Two small ephemeral streams run through the Site towards the northeast. The two streams converge within the Site boundary to form an unnamed tributary which discharges into Scott Creek. The surrounding area is a mixture of agricultural, residential, and light industrial land uses.

### SITE HISTORY

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From 1958 until 1965, the former Miller Chemical and Fertilizer Corporation (“Miller”) an operating unit of ALCO Industries, Inc., used the Site for manufacturing and distribution of pesticides, herbicides, fertilizers and fungicides containing arsenic, copper, chromium and zinc. Dry chemicals were mixed with water to create liquid fertilizer in the main plant building located in the southwest portion of the Site. Rinse water from the manufacturing process was discharged to two large drainage ponds located in the central portion of the property. This discharge was regulated under an NPDES permit while the facility was active. Overflow from the adjacent Whiteford Packing Company, a vegetable processor, also discharged to the drainage ponds and continued to do so after Miller ceased discharging to the ponds in 1976. In 1981, the ponds were drained and filled, graded to natural contours, and designated on the property deed as a “non-disturb area”. A smaller building located in the northern portion of the Site was also used for manufacturing 2,4-dichlorophenoxyacetic acid (2,4-D). Demolition material from this building was used to fill a smaller waste pond that was adjacent to the plant building.

From the 1980s, the Site was used for mixing dry fertilizers to customer specifications and a distribution facility for pre-packaged line of herbicides and other farm chemicals that were not blended or packaged at the Site.

### ENVIRONMENTAL INVESTIGATION

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In 1984, the U.S. Environmental Protection Agency conducted a Site Investigation at the Site for the presence of dioxin. The results indicated the presence of elevated levels of arsenic in stream samples. At the time, the Site was owned by Trenton Bone Fertilizer Company (“Trenton Bone”).

A follow-up Site Inspection conducted by the Maryland Department of the Environment (MDE) between 2001 and 2002 confirmed the presence of arsenic and other inorganic contamination in stream sediments down gradient of the designated “non-disturb area”. In addition elevated levels of arsenic were detected in the soil sample and sediments in small ditches draining the Site and adjoining Whiteford Packing property. Based on these findings, MDE proposed further investigation of the soil, sediment, groundwater and surface water at the Site.



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An Expanded Site Inspection conducted by MDE in 2003 confirmed elevated levels of arsenic in the stream downstream of the non-disturb area and identified elevated levels of arsenic in the surface soils immediately down gradient of the plant building.

In March 2004, additional soil sampling conducted by SAIC, Inc ("SAIC") the environmental contractor for Miller identified arsenic in the soil immediately north and west of the plant building at concentrations up to 1,680 parts per million (ppm) in the sub-surface soil and 459 ppm in the surface soil.

In 2005, Trenton Bone contacted the former owner Miller and based on an agreement between them, Miller took over the investigation at the Site. Between 2005 and 2014, SAIC conducted multiple soil and groundwater investigations. This included the collection and sampling of hundreds of soil borings, dozens of test pits resulting in over a thousand soil samples. A geophysical investigation using the electromagnetic terrain conductivity method was also carried out in December 2005 in response to allegations of former disposal areas on the Site. The geophysical survey revealed multiple anomalous areas. MDE required additional soil sampling at potential source areas and geophysical anomalies.

In August 2006, test pit investigations were carried out in the anomalous areas and revealed buried drums that contained both arsenic and pesticide residue. During this investigation, SAIC also installed six monitoring wells and three piezometers on Site to monitor groundwater and determine the groundwater flow direction. The study confirmed localized impact to groundwater within the shallow confined aquifer near the former mixing building. Residential well sampling was conducted in September 2006, which indicated that no nearby residential wells were impacted by either arsenic or pesticide. Two years of groundwater sampling was carried out quarterly from July 2006 til October 2008.

In October 2008 SAIC completed a Remedial Action Work Plan (RAWP). Based on available data the Site specific arsenic cleanup level was established at 380 ppm. At this time a wetland delineation study was also conducted. Three additional monitoring wells were installed for analysis of chromium and the existing 12 monitoring wells were analyzed quarterly from 2009 thru 2010.

In January 2013 ERM, Inc. (ERM), the new environmental contractor for Miller submitted a RAWP addendum which included results from additional test pit sampling at the Site. In this addendum a Site specific cleanup goal for hexavalent chromium was established at 42 ppm and copper at 11000 ppm. Approximately 49 locations were identified for immediate excavation and removal. The remediation activities were conducted between October 2012 and May 2013 and included excavation and removal of soil from the former on Site waste disposal pond. Approximately 17225 tons of soil were excavated and removed from the Site. Approximately 400 buried drums were encountered during excavation and were removed along with two 10000 gallon empty storage tanks. Following remediation the excavated areas at the Site was backfilled with clean fill and at least 12 inches of topsoil before being seeded and restored. In 2014, the Site was sold to Whiteford LLC. ("Whiteford").



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### CURRENT STATUS

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Since then Whiteford has conducted additional environmental investigations to delineate the surface soil impacted by arsenic above the risk based cleanup criteria of 26.5 ppm. A Remedial Action Plan was submitted in March 2019 which outlined the proposed remedial activities with special focus on the on-Site wetland areas.