Site 1: Fire Training Area 1. Site 1 is located approximately 3,500 feet north of the base boundary, on the Mansfield Lahm Airport property. Site 1 is the most recently used Fire Training Area for the base — from the 1960s to 1985. According to the Preliminary Assessment, the site was a circular area measuring between 100 and 150 feet in diameter. Two narrow drainage channels approximately four inches wide and two inches deep were used to drain fuel and water overflow from the pit south into an overgrown area and southwest to an adjacent service road. An unnamed tributary of Brubaker Creek is located in the vicinity of the drainage channels. Waste oils, solvents, and paint products from the maintenance facilities were mixed with jet fuel to form the fuel mixture for the burns at Fire Training Area 1. During each fire training exercise, the fuel mixture was poured directly onto the water base and ignited. According to base personnel, protein foam, not related to PFAS/PFOA (discussed later), was used to extinguish the fires. Using United States Environmental Protection Agency (U.S. EPA) guidance, preliminary remediation goals were developed for soil, sediment, and groundwater during the Site Investigation to determine potential threats to human health and the environment from residual contamination at Site 1. The Site Investigation concluded soils at Site 1 may have been contaminated by past fire training activities. The Site Investigation indicated a potential threat to human health and the environment might be present at Site 1 in the soils due to levels of organic compounds and metals found above U.S. EPA preliminary remediation goals. Analytes detected in groundwater were screened against the Ohio Standards for Public Water Supplies and preliminary remediation goals developed for residential usage of groundwater to identify contaminants of potential concern. Standards for Public Water Supplies values were determined to be Applicable or Relevant and Appropriate Requirements for metals in groundwater at the site. The Site Investigation concluded groundwater at Site 1 has not been contaminated by previous fire training activities. Volatile organic compounds and semi-volatile organic compounds were found at levels below screening values in the groundwater. Metals were found in groundwater at Site 1 at levels exceeding Standards for Public Water Supplies values.

The Remedial Investigation was performed to confirm or deny results of the Site Investigation. During the Remedial Investigation, Ohio EPA requested U.S. EPA Region IX Preliminary Remediation Goals be used to screen for Contaminants of Potential Concern since they were the most stringent criteria available. The Contaminant of Potential Concern detected in soil samples at Site 1 which exceeded U.S. EPA Preliminary Remediation Goal screening criteria was arsenic. Contaminants of Potential Concern in the groundwater at Site 1 were determined to be antimony, arsenic, chromium, and lead. During the first groundwater sampling event, antimony, arsenic, chromium, and lead were detected above screening criteria in samples collected from groundwater monitoring wells.

During the Feasibility Study conducted at Site 1, it was determined the arsenic detected in the soil could be attributed to background concentrations; therefore, No Further Action was recommended for the soil at Site 1. During the Feasibility Study, subsequent groundwater sampling events were conducted and no contaminants were detected above Preliminary Remediation Goals or Applicable or Relevant Appropriate Requirements at Site 1. It was determined metals concentrations detected in the groundwater samples collected during the first sampling event were associated with sedimentation in the samples and No Further Action was recommended for the groundwater at Site 1. The Ohio EPA concurrence with No Further Action at Site 1 is documented in the Final No Further Action Decision Document for IRP Sites 1, 2, 3, 6, and 8, dated July 2004.