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BACKGROUND

The following Environmental Compliance (EC) sites under the Compliance Restoration Program (CRP) require investigation.

SWMU 56 is Former Civil Engineering Storage Yard, Building 3459. Building 3459, where pesticides were reportedly mixed, was demolished in 1994. Construction material along with paint thinners, asphalt, and non-polychlorinated biphenyl (PCB) transformers were stored at the asphalt paved storage yard near Building 3459. Subsurface soil sampling conducted in June 2009 detected several volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, total petroleum hydrocarbons-diesel range organics (TPH-DRO), and TPH-gasoline range organics (TPH-GRO). Groundwater sampling conducted in 2011 detected low levels of VOCs, SVOCs, TPH, and pesticides, although no compounds were detected above the Maximum Contaminant Levels (MCLs) or the USEPA Regional Screening Levels (RSLs). A Phase I PA/SI was completed for this site in October 2013. It summarized the characterization activities, defined exposure pathways, and recommended a RI. A Final UFP-QAPP was completed in 2015, and as of January 2018 the Draft RI completed. According to the RI, no further action is recommended and no feasibility study (FS) required.

OWS 3640 is Oil Water Separator Site 3640. The 5000-gallon concrete vessel utilized as an oil water separator was removed in 1992. Contaminated soil was observed during the removal and some stained soil was excavated. Post-excavation samples revealed residual TPH contamination above Maryland Department of the Environment (MDE) action levels. A Phase I PA/SI was completed for this site in August 2014. Metals, VOCs, PAHs, DRO/GRO and SVOCs exceeded criteria in soil and groundwater. The Phase I RI report was finalized in November 2014. Completion of the Final RI is anticipated by the end of 2018.

SWMU 66 (formerly known as D-5) is a Hardfill Area located near AOC-27 Disposal Pit #3 and the eastern portion of LF-07. The site has an approximate area of 8 acres and reportedly operated from the 1960s to 1970s as a disposal area for construction debris. Site Investigations were completed in 1996, 2005, and 2007. SVOCs and metals were found to exceed ecological screening values in soil. A Phase I PA/SI was completed for this site in August 2014. Metals, VOCs, PAHs, and SVOCs exceeded criteria in soil and PAHs, metals and DRO exceeded criteria in groundwater. The Phase I RI report was finalized in November 2014. The Final RI, with additional sampling for the above mentioned constituents, was completed in October 2017, with the conclusion that PAH and PCB contamination is present in soil. To date, the Working Copy FS was completed in February 2018, suggesting total removal and off-site disposal of debris and contaminated soil as the preferred remedial alternative.

CS-C503 is 50-foot by 500-foot stormwater retention pond located at the intersection of Arnold Avenue and North Perimeter Road. The retention pond contains PCBs, and TPH-contaminated sediment. An electrical substation is located within 500 feet of the retention pond, however, it is not thought to be the source of PCBs at CS-C503 because the stormwater from this area is directed to a separate storm sewer system. Therefore, the possible source of the PCBs is thought to have originated from the pond sediment, possibly from fill used to line the pond during excavation. The Phase I RI report was finalized in December 2013. It recommended no further investigation based upon its findings that PCBs did not exceed the PCB site remediation goal under the CERCLA removal action. A consensus that "the multiple lines of evidence presented in the Phase I RI at CS-C503 support no further action at this site" was achieved at Dec 2013 Tier I meeting. The consensus included the EPA, AF, MDE, and PGCHD.

SWMU 69 is a former fire training area presently under the Military Family Housing Area. The one-acre site was used in the 1960s as a fire training area, burning clean fuel within a bermed area, and fires were reportedly extinguished with protein foam. Soil sampling detected TPH-GRO and TPH-DRO and groundwater sampling detected TPH-GRO, TPH-DRO, and numerous VOCs. A RI was completed in 2015 to further characterize the nature and extent of site contamination and contamination source areas, assess potential exposure risks, and provide data to support a FS to control or mitigate actual or potential exposure risks. The Final FS is anticipated by the end of 2018. To date, no further information about the site is known.

SWMU 75 is Water Tower, Building 4614. A Public Health Assessment performed in 2001 (October 2001 U.S. AF Institute for Environmental, Safety, and Occupational Health (ESOH) Risk Analysis (IERA) Evaluation of Lead in Soil at Bldgs. 3589 and 4614, Andrews AFB) confirmed lead in soil resulting from the 1991 confirmed sandblasting of the tower. Multiple samples collected around the water tower and in the adjacent playground found lead above the 400 mg/kg Housing and Urban Development (HUD) standard. 148 tons of lead-impacted soils were excavated in a removal action during December 2002-January 2003 at the playground area and confirmation samples were less than 210 mg/kg. The water tower was removed in 2012. A Time Critical Removal Action was undertaken to remove lead impacted soil from beneath the former tower in the first half of 2013. A site-specific UFP-QAPP was finalized in December 2012, and EPA and AF signed a Removal Action Completion Report in December 2013. The PP was signed in February 2015, and the ROD for no further action (NFA) was submitted to EPA in November 2015, and approved in early 2016.

SWMU 76 is Water Tower, Building 3589. The water tower was sandblasted during the fall and winter of 1990-1991. Analysis of the removed paint showed lead levels above 20% (200,000 mg/kg). A Public Health Assessment performed in 2001 (October 2001 U.S. AF Institute for Environmental, Safety, and Occupational Health (ESOH) Risk Analysis (IERA) Evaluation of Lead in Soil at Bldgs. 3589 and 4614, Andrews AFB) indicated one elevated lead sample, however, it was determined that there were limited samples collected and further characterization was needed. Samples collected in February 2011 detected lead concentrations above the MDE non-residential soil standard. The water tower was removed in 2012. In April 2013 a Time Critical Removal Action was completed to remove lead impacted soil that was above the MDE residential soil standard from beneath the former tower. The Final ROD, for NFA consideration for this site, was submitted in September 2015 and was subsequently approved by EPA in early 2016.

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SWMU 12 is Former 550-Gallon Waste Oil UST listed as MDE Oil Control Program (OCP) Case Number 95-0531. A 1000-gallon fiberglass replacement tank of the original 550-gallon tank was removed in November 1996. A small pocket of free product was found in the excavation, although the tank had no visible perforations. A March 2007 field investigation was performed and an August 2008 report indicated that various VOCs, SVOCs, and metals were considered to be potential contaminants of concern. A soil and groundwater investigation was completed in January and June 2010. No Contaminants of Potential Concern (COPCs) were identified for soil based on the human health risk screening evaluation. VOCs, chlorinated compounds, and benzene were detected in groundwater. Additional investigation activities were recommended to identify the source of groundwater contamination, to delineate the lateral extent of the detected VOCs, to confirm the localized groundwater flow, and determine the migration direction of the plume. Prior to funding expiring for this site in 2016, a Draft RI was completed to hopefully further define the nature and extent of contamination at the site, and support a baseline human health risk assessment. To date, further funding is expected in the FY 2018/19 timeframe to complete the RI, and to further the RI of the site through at least the FS phase. The AF has discussed the possibility of the USGS becoming directly involved in the remediation of this site, thus receiving the FY2018/19 funding for work through the FS.

CB-C501 is the Historic Base Chapel No. 2, Building 3715. The Chapel is surrounded by mowed grass and a cemetery. During repainting of the exterior portions of the building in approximately 2009, the building was most likely prepared for repainting by scraping off any loose or flaking paint material. The original paint material may have been lead-based. Soil samples collected around the Chapel in April 2010 detected lead concentrations above the MDE non-residential soil standard. An EE/CA, along with a revised SLERA, was prepared for the site and submitted for CERCLA Tier 1 Partnering Team review in December 2012. A removal action completed at this site in the fall of 2013 to remove lead contaminated soil above the MDE residential soil standard of 400 ppm, with a 300 ppm in-field screening level. The removal action was completed and the final removal action report was submitted in April 2014. The PP was finalized in March 2015. The Final ROD, for NFA consideration for this site, was submitted in September 2015 and was approved by EPA in early 2016.

TU-139 A Preliminary Assessment (PA) was undertaken by contractor, Bay West LLC, in January 2016 that presented an analysis of the data collected and an extensive records search for the TU-139 underground storage tank (UST) site, located along East Perimeter road at JBA Naval Air Facility Washington (JBA). After extensive research the conclusion reached by the Bay West team was that the records previously generated for TU-139 were erroneous and the tank in question may be the USTs located north of Hangar 15, an area considered to be part of existing ERP Site SS-26. It was Bay West's conclusion that TU-139 was misidentified due to a clerical error, a typographical error. The site was subsequently recommended for administrative closure, NFA consideration, in 2016.

SA-506 The Boston Road Storage Area, SA506, is an approximately 3.2 acre site located along the JBA boundary at the end of Boston Road in the western portion of JBA. The site reportedly contained yard waste, construction debris, and oily road debris. During the PA/SI at SA506, field observations indicated no visible contamination and limited debris consisting of mainly pallets, stumps, and pieces of concrete. Soil analytical data collected during the SI reported levels of arsenic in excess of the RSL, but within the naturally occurring arsenic levels for the region. Groundwater analytical data collected during the SI reported levels of total iron in one well in excess of the tap water RSL; however the dissolved iron concentration was below the tap water RSL. Additionally, TPH-GRO was over the project action limit in one groundwater sample. Based on field observations, the analytical data, and the comparison to the project action limits, No Further Action (NFA) is recommended for SA506, the Boston Road Storage Area.

SA-507 The Former Greenhouse Area, SA507, is an approximately 5 acre site located along the Georgia Avenue perimeter fence at the end of Georgia Avenue in the western portion of JBA. Meetinghouse Creek runs along the backside of the site; while the site itself is comprised of an inactive Greenhouse and storage building, a mulch storage yard, and a fenced-in storage yard. During the PA/SI at SA507, field observations showed no visible contamination at the site, but an empty flammable materials storage locker was present at the Open Storage Yard. However, the PA/SI did determine the presence of PAHs in the soil in excess of its industrial RSL throughout the site, while the groundwater analytical data reported levels of total metals (arsenic, cobalt, iron, and manganese), and dissolved metals (arsenic, cobalt, iron, and manganese), as well as herbicides (MCPA and MCPP), and TPH-DRO present at levels in excess of their respective project action limits. Pesticides in sediment samples were also reported at levels in excess of the BTAG Freshwater Sediment Screening Benchmarks. Based on field observations, the analytical data, and the comparison to the project action limits, additional evaluation for SA507 was recommended by the contractor, Tidewater Inc., to perform an RI/FS to further investigate the nature and extent of PAHs, metals, and herbicides present in the soil, groundwater and the sediment at the site. In April 2017 the Air Force ERP proposed to the USEPA that SA507 be added as a new Operable Unit (OU) to the JBA Federal Facility Agreement (FFA). The request was subsequently granted by the USEPA (Region 3) on 13 April 2017.

SA-502 The former Aboveground Storage Tank (AST) at Civil Air Patrol, is an approximately 0.2 acre site located in the eastern portion of JBA within Pathfinder, and immediately north of the Air Sovereignty Alert (ASA). During the PA/SI performed by Tidewater Inc. at TA502, the field observations indicated no visible contamination and limited concrete debris remaining from the removal of the concrete AST pad. Soil analytical data collected during the SI reported levels of arsenic in excess of the RSL, but within the naturally occurring arsenic levels for the region. Groundwater analytical data collected during the SI reported levels of total and dissolved cobalt and manganese in one well in excess of the tap water RSL; however the cobalt concentrations were within the installation background levels. Based on field observations, the analytical data, and the comparison to the project action limits, the contractor recommended NFA for TA502. The AF subsequently recommended administrative closure, NFA consideration, for the site in 2016.

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TU-214 is an approximately 0.2 acre site located in the eastern portion of JBA at the location of the former Building 3214. No records were found on the use of the building. According to the Maryland Department of the Environment (MDE) Oil Control Program (OCP), TU214 is listed with the Case Number 00-1908-PG1. The petroleum subsurface investigation/remediation case under the MDE OCP was closed on February 27, 2006. The UST that was most likely used to heat the building was also removed; however, no records (i.e., the size, the tank contents, the removal dates and details, and other monitoring well network nearby, etc.) exist. During the PA/SI, carried out by Tidewater, Inc. in 2014, field observations indicated no visible contamination and no evidence of the former UST. Soil analytical data collected during the SI reported levels of arsenic in excess of the RSL, but within the naturally occurring arsenic levels for the region. Groundwater analytical data collected during the SI reported levels of total and dissolved arsenic, cobalt, iron, lead, and manganese in the wells in excess of the MCLS or tap water RSLs. Six VOCs and two SVOCs were also reported in excess of the MCLS or tap water RSLs, and TPH-DRO and TPH-GRO were over the project action limit in the groundwater samples. Based on field observations, the analytical data, and the comparison to the project action limits, additional evaluation was recommended for TU214, to perform an RI/FS to further investigate the nature and extent of metals, VOC, SVOCs, and TPH present at the site.

In November 2016 the AF generated and sent a memo to AFCEC/CZR for consideration of site closure justification for TU214. The memo reiterated that, based on a thorough evaluation of all available information, particularly considering the location of Site TU214 being entirely within the greater footprint of Site SS-22, and the fact that all of the contaminants at Site TU214 have also been associated with Site SS-22, JBA ERP recommended Site Closure (SC) for JBA ERP Site TU214. The memo also stated that any remaining environmental liability associated with the TU214 data should be managed as part of Site SS-22, in that it is also regulated under the MDE OCP.

SS-288 is located at the southwest corner of Building 1288 south of South Dakota Avenue and within Pathfinder, and is the current location of an abandoned in place 6,000-gallon heating oil underground storage tank (UST) and a 3,000-gallon diesel fuel UST. Review of available information indicated that four petroleum spills occurred at the site during the mid to late 1990s, and most recently in 2013. In August 2015 a Site Investigation (SI) was completed in accordance with the approved UFP-QAPP (Amec Foster Wheeler, 2015) to investigate possible soil and groundwater contamination as a result of the 2013 diesel spill at the site, and to determine whether a corrective action was appropriate to address residual spilled product in the subsurface. Environmental sampling consisted of collecting both soil and groundwater samples from direct-push borings.

Results of the SI determined that for soil sampling results; a total of 17 petroleum-related VOCs were detected in one or more of the five soil samples collected from the site, but none of the samples exceeded MDE generic soil cleanup standards. For BTEX compounds, results determined that all concentrations were well below the MDE generic residential soil cleanup standards. Soil sampling results for DRO/GRO determined that both DRO and GRO were found at levels exceeding the MDE residential cleanup standard in three of five samples.

Groundwater sampling results at the site determined that a total of 17 petroleum-related VOCs were detected in one or more of the five groundwater samples collected from SS-288, but that of these only benzene, methyl-tertiary-butyl ether (MTBE), and naphthalene exceeded MDE groundwater standards; while DRO and/or GRO exceeded the MDE residential groundwater cleanup standard in each of the five groundwater samples collected. Benzene and Naphthalene exceeded the MDE cleanup level in four of five groundwater samples at the site.

The history and site conditions at ERP Site SS-288 as defined in the No Further Remedial Action Planned Guide, indicate that this site qualified for no further response action planned status. A comparison of site conditions against the required Seven Risk Factors of the MEAT document (MDE, 2003), indicated that Site SS-288 represented a negligible risk to human health and the environment. Therefore, in September 2016 the USAF requested that the MDE Oil Control Program (OCP) issue a letter stating the closure by MDE for Site SS-288. A closure letter for the site from the MDE OCP was signed and received by the AF in October 2016.