U.S. Army Corps of Engineers
Formerly Used Defense Sites Program

PROPOSED PLAN

Former Sewart Air Force Base, Smyrna, Tennessee
Formerly Used Defense Site Number G04TN018903

November 2019

INTRODUCTION

This **Proposed Plan**, presented by the U.S. Army Corps of Engineers (Corps), provides an opportunity for public review and comment on the recommended action for the Airport Landfill (Area of Concern [AOC] 1), Sewage Treatment Plant Landfill (AOC 2), and Former Fire Training Area (AOC 3) (please see Figure 1) at the former Sewart Air Force Base **Formerly Used Defense Site** located in Smyrna, Tennessee. The Airport Landfill (AOC 1) and Former Fire Training Area (AOC 3) properties are owned by the Smyrna/Rutherford County Airport Authority. The Corps, Nashville District owns the Sewage Treatment Plant Landfill (AOC 2) property. The entire former Sewart Air Force Base has been declared a Formerly Used Defense Site and assigned Formerly Used Defense Site Project Number G04TN018903.

The Corps is issuing this document in coordination with the Tennessee Department of Environment and Conservation to meet statutory and regulatory requirements for public participation. The Proposed Plan identifies a **No Action** determination for the Airport Landfill (AOC 1), Sewage Treatment Plant Landfill (AOC 2), and Former Fire Training Area (AOC 3). The No Action determination is based on the results of the **Remedial Investigations**, which concluded that contaminants remain at concentrations that do not permit unlimited use and unrestricted exposure and the sites pose no unacceptable risk to people and the environment from the military's use of the sites. Because the Corps has determined that the site is protective of human health and the environment under the current and reasonably anticipated future land use, a response action is not required and a Feasibility Study was not prepared.

PUBLIC COMMENT PERIOD:

November 18 – December 23, 2019

The Corps will accept written comments on this Proposed Plan during the public comment period. Comments or questions concerning this Proposed Plan should be addressed to:

U.S. Army Corps of Engineers
Mobile District
ATTN: Melissa Shirley, P.E., EN-GE
P.O. Box 2288
Mobile, AL 36628-0001

PUBLIC MEETING:

The Corps will present the Proposed Plan at a public meeting on November 20, 2019 from 3:00 to 5:00 PM. Smyrna/Rutherford County Airport Authority

278 Doug Warpoole Road
2nd Floor Conference Room
Smyrna, TN 37167.

The Proposed Plan can be accessed using the following link:

https://www.sam.usace.army.mil/Media/News-Stories/Article/2011580/us-army-corps-of-engineers-formerly-used-defense-sites-program-proposed-plan/

The Administrative Record can be accessed from any computer and any Rutherford County Library System computer terminal by using the follow link:

http://ww3.sam.usace.army.mil/FUDS_HTRW_ADMIN_RECORDS/

The library branch nearest the project site is located at the following address:

Smyrna Public Library
400 Enon Springs Rd West
Smyrna, TN 37167

The Corps is required to issue this Proposed Plan and seek public comment and participation by federal law (the **Comprehensive Environmental Response, Compensation, and Liability Act,** as amended by the Superfund Amendments and Reauthorization Act of 1986 and 300.430(f)(2) of the **National Oil and Hazardous Substances Pollution Contingency Plan**). The Corps conducted fieldwork for the Remedial Investigations from 1992 through 2015, and the results of those investigations form the basis of this Proposed Plan.

Terms shown in **bold letters** are defined in the Glossary found at the end of this document.

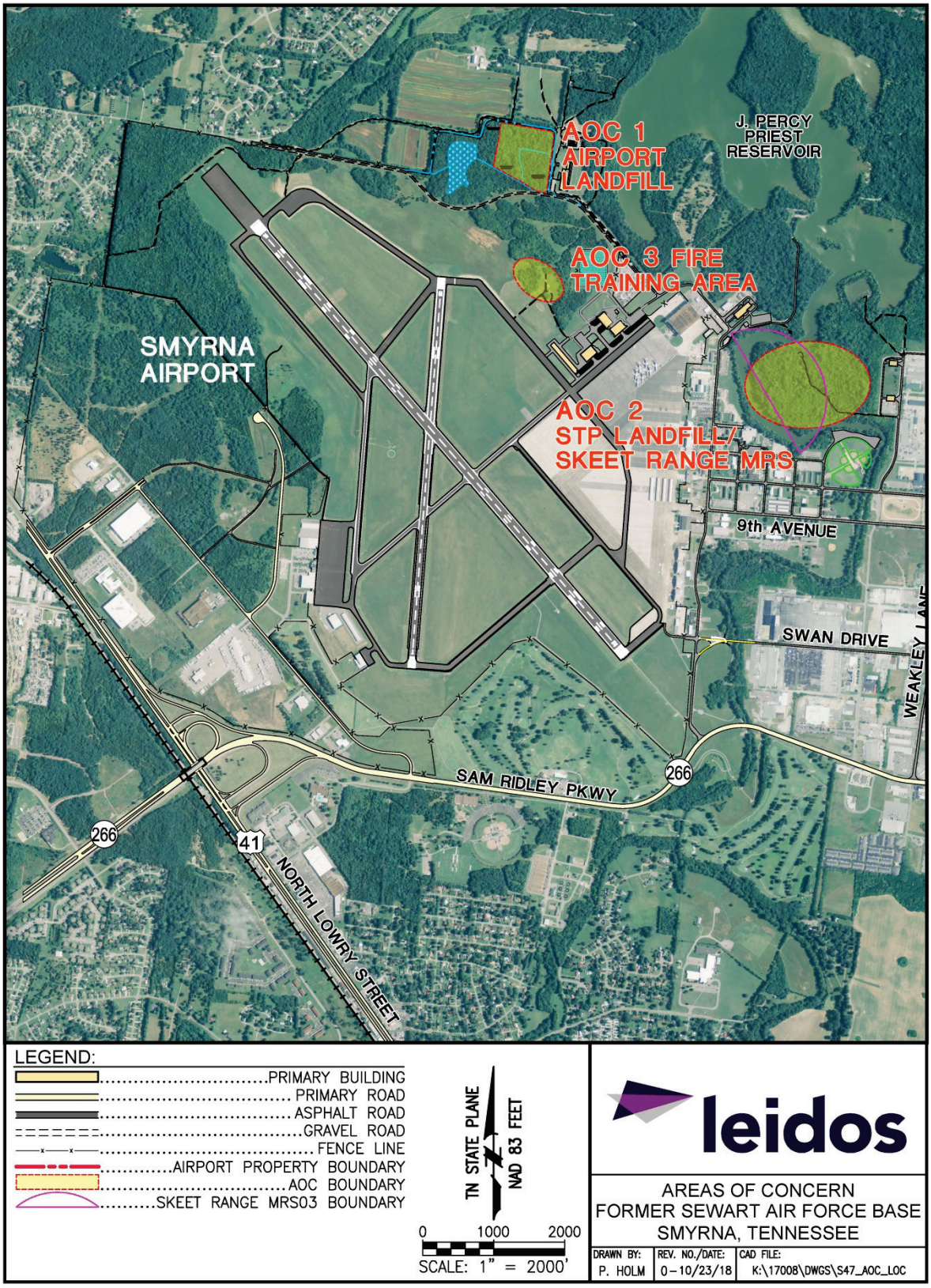

Figure 1: Location of Former Sewart Air Force Base AOCs

This Proposed Plan summarizes information that can be found in detail in the Remedial Investigation reports and other project documents.

PUBLIC INVOLVEMENT PROCESS

Community members and other interested parties are encouraged to review this Proposed Plan and submit comments. Public comments are considered before any action is selected and approved. The Army is the lead agency for the Formerly Used Defense Sites program. The Corps, on behalf of the Army and the U.S. Department of Defense, is the executing agent for the program and is responsible for environmental restoration of properties that were formerly owned, leased, or otherwise possessed by the United States under the jurisdiction of the Secretary of Defense. The Corps is responsible for investigating, reporting, and implementing remedial action at the project sites within the former Sewart Air Force Base.

The Tennessee Department of Environment and Conservation is the regulatory agency for this project. Representatives from the Tennessee Department of Environment and Conservation reviewed and commented on the Remedial Investigation reports. The Tennessee Department of Environment and Conservation comments on the Remedial Investigation reports were resolved and the reports were finalized incorporating Tennessee Department of Environment and Conservation comments.

The Remedial Investigation reports are part of the **Administrative Record** file that contains all of the documents used in making decisions on the No Action determinations for the Airport Landfill (AOC 1), Sewage Treatment Plant Landfill (AOC 2), and Former Fire Training Area (AOC 3) at the former Sewart Air Force Base.

The purposes of this Proposed Plan are to:

- Provide information about the sites, their history, current use, and future land use
- Identify the No Action decision and explain the rationale for the preference
- Solicit public review and comment on the No Action decision
- Provide information on how the public can be involved in the decision making process.

A **Decision Document** identifying the decision for the sites will be prepared. The Corps' responses to public comments on the Proposed Plan will appear in the **Responsiveness Summary** section of the Decision Document. The flow chart shown in the figure below summarizes the various steps in the development and approval process.

SITE BACKGROUND

Site History

The former Sewart Air Force Base facility was originally constructed by the War Department in 1942 as the Smyrna Army Flying School. In 1942, approximately 2,547 acres of land were purchased for the airfield by the State of Tennessee and leased to the United States of America for $1.00 per year. In 1947, following the end of World War II, the airfield was deactivated. In August 1948, the air base was reopened under the name of Sewart Air Force Base and placed in the custody of the U.S. Air Force. In 1951, the land was transferred in fee from the State of

Tennessee to the United States of America for $1.00 pursuant to the provisions contained in Chapter 103 of the Public Acts of Tennessee of 1949 as amended by Chapter 31 of the Public Acts of Tennessee of 1951.

The U.S. Department of Defense began the 4½-year closure of the former Sewart Air Force Base in 1965. Using a phased closure approach, the facility remained open until July 1970. In August 1970, 386.11 acres of the former Sewart Air Force Base were transferred to the Corps, Nashville District for inclusion in the J. Percy Priest Reservoir.

The majority of the Base (1,708.97 acres free and 530.70 acres easement) was transferred to the Metropolitan Nashville Airport Authority by quitclaim deed on December 7, 1971, for use as a regional airport. The deed specifies that the property can only be used for public airport purposes. The Airport Authority is required to apply for Federal Aviation Administration approvals for non-aviation development. In addition, the *Smyrna/Rutherford County Airport Authority Minimum Development Standards* prohibit residential use of the property (Smyrna/Rutherford County Airport Authority 2008).

An additional 610.09 acres were transferred to Rutherford County, Tennessee, by a quitclaim deed dated December 31, 1971. This property was under the jurisdiction of the Secretary and owned by, leased to, or otherwise possessed by the United States at the time of actions leading to contamination by hazardous substances. The Findings and Determination of Eligibility for this property for inclusion into the Formerly Used Defense Site Program was approved in 1990 because the property was transferred from U.S. Department of Defense's control prior to October 17, 1986. The facility ownership was transferred to the town of Smyrna and Rutherford County, Tennessee, on May 15, 1991.

The former Sewart Air Force Base is now known as the Smyrna Airport and is managed by the Smyrna/Rutherford County Airport Authority. Smyrna Airport currently operates as a joint use facility with the Tennessee Army National Guard. The airport also serves as a military flight training facility as well as a hurricane evacuation point for military bases along the Gulf and East Coasts. The majority of the former Sewart Air Force Base administrative area is east of the airfield and is managed or leased by the Airport Authority. The Smyrna/Rutherford County Airport Authority is currently developing approximately 400 acres west of the airfield into the Smyrna Airport Business Park.

Airport Landfill (AOC 1)—The Airport Landfill is located along the northern perimeter of the Smyrna Airport property and was used by the U.S. Department of Defense from 1968 to 1970 following closure of the Sewage Treatment Plant Landfill in the 1960s (SAIC 2009). The limits of the waste, based on available data, indicate the Airport Landfill occupies approximately 13.6 acres. The Airport Landfill property is owned by the Smyrna/Rutherford County Airport Authority.

Sewage Treatment Plant Landfill (AOC 2) and Skeet Range Munitions Response Site (MRS03)—The Sewage Treatment Plant Landfill is located in the northeastern part of the former Sewart Air Force Base, adjacent to the Stewart Creek arm of the J. Percy Priest Reservoir, and was operational during the 1950s and 1960s. The landfill reportedly received all solid waste generated by the Base, including sludge from the Sewage Treatment Plant (SAIC 2009). The landfill was used by the U.S. Department of Defense until the area was partially inundated by the J. Percy Priest Reservoir in the late 1960s (approximately 1968). After the Sewage Treatment Plant Landfill was taken out of service, solid waste was taken to the Airport Landfill. The limits of the waste, based on available data, indicate the Sewage Treatment Plant Landfill occupies approximately 28.9 acres. The Corps, Nashville District owns the Sewage Treatment Plant Landfill property for flood control.

Prior to use as a landfill and prior to the flooding of the J. Percy Priest Reservoir in 1968, a 34-acre Skeet Range Munitions Response Site was operated in this area from 1943 to 1953.

The Skeet Range Munitions Response Site was composed of two units: a storehouse for ammunition and targets, and an office. The only munitions associated with the Skeet Range were small arms. Based on the Skeet Range Military Munitions Response Program Site Inspection (Parsons 2010), most of the skeet range ground surface is located under the waste and cover of the Sewage Treatment Plant Landfill. No munitions and explosives of concern or munitions debris were observed during the October 2009 Site Inspection, and there is no record of munitions and explosives of concern being found in the site.

Former Fire Training Area (AOC 3)—The Former Fire Training Area occupies approximately 1.5 acres and is located on a knoll northeast of the northernmost runway and was used after World War II as a firefighter training site by former Sewart Air Force Base personnel. The firefighter training activities consisted of pouring jet propulsion fuel 4 and other flammable liquids onto a mockup 'airplane' that was located within a burn pit (USACE 2019). The 'airplane' was set on fire to enable firefighting training activities. The training activities were conducted at the Former Fire Training Area until Base closure in 1970. The burn pit was reportedly 80 to 100 ft in diameter; however, the exact dimensions are not known. The Former Fire Training Area property is owned by the Smyrna/Rutherford County Airport Authority.

Previous Investigations

The Corps conducted a number of investigations of the Airport Landfill (AOC 1), Sewage Treatment Plant Landfill (AOC 2), and Former Fire Training Area (AOC 3). The Corps completed these field investigations between 1992 and 2015 to evaluate if anything remained from the U.S. Department of Defense activities that could affect the environment. These studies included the following:

- *Engineering Report, Groundwater Contamination Evaluation at the Former Sewart Air Force Base, Smyrna, Tennessee* (TCT 1994).
- *Phase I Remedial Investigation, Former Sewart Air Force Base, Smyrna, Tennessee* (Maxim 1996).
- *Human Health Risk Assessment for the Former Sewart Air Force Base, Smyrna, Tennessee* (Maxim 1999).
- *Ecological Risk Assessment for the Former Sewart Air Force Base* (Maxim 2000).
- *Supplemental Investigation Report for the Former Sewart Air Force Base, Smyrna, Tennessee* (SAIC 2006).
- *Report of the Supplemental Fish Sampling for the Former Sewart Air Force Base at Smyrna, Tennessee* (SAIC 2007).
- *Supplemental Human Health Risk Assessment for Former Sewart Air Force Base, Smyrna, Tennessee* (SAIC 2009).
- *Airport Landfill (AOC-1) Reconnaissance Letter Report for the Former Sewart Air Force Base* (SAIC 2010).
- *Site Inspection Report, Former Sewart Air Force Base (AFB), Rutherford County Tennessee* (Parsons 2010). This document was developed in support of the Formerly Used Defense Sites Military Munitions Response Program Site Inspection Project.
- *Supplemental Remedial Investigation Report, Former Fire Training Area, Former Sewart Air Force Base, Smyrna, Tennessee* (Shaw 2012).
- *Supplemental Remedial Investigation Report Addendum, Former Fire Training Area, Former Sewart Air Force Base, Smyrna, Tennessee* (Shaw 2013).

- *Letter Report for Light Non-Aqueous Phase Liquid (LNAPL) Sampling at the Former Fire Training Area, Former Sewart Air Force Base* (CB&I 2015).
- *Letter Report for Groundwater Sampling Results – December 2015, Former Fire Training Area, Former Sewart Air Force Base* (CB&I 2016).
- *Baseline Human Health Risk Assessment, Former Fire Training Area, Former Sewart Air Force Base, Smyrna, Tennessee* (USACE 2019).

Remedial Investigations: Airport Landfill (AOC 1)

Environmental media samples were collected and analyzed for contaminants related to the military's use of the Airport Landfill to determine the nature and extent of potential contamination. The results were screened against the following criteria:

- **Soil**: Residential and industrial U.S. Environmental Protection Agency regional screening levels dated June 2017 and background criteria established in the *Supplemental Human Health Risk Assessment for Former Sewart Air Force Base, Smyrna, Tennessee* (SAIC 2009).
- **Groundwater**: Federal Safe Drinking Water Act maximum contaminant levels/ Tennessee water quality criteria for domestic water supply and tap water regional screening levels.

The results are as summarized below:

- Surface soil at the Airport Landfill was sampled from six locations during the 1996 Remedial Investigation (Maxim 1996) and at eight locations during the 2010 Airport Landfill reconnaissance (SAIC 2010). During the 2010 reconnaissance, soil was collected from either inside or near seven partially buried drums observed at four locations throughout the landfill. Three volatile organic compounds (acetone, methylene chloride, and toluene) and three pesticides (gamma-chlordane; 4,4'-dichlorodiphenyl-dichloroethane; and 4,4'-dichlorodiphenyltrichloroethane) were detected in surface soil samples collected at the Airport Landfill; however, none of these volatile organic compounds or pesticides were detected above residential or industrial soil regional screening levels. Twenty-one semivolatile organic compounds were detected in surface soil. While none of the semivolatile organic compound concentrations exceeded industrial soil regional screening levels, benzo(a)pyrene and benzo(b)fluoranthene were detected at concentrations exceeding residential soil regional screening levels at one location (SS-1-7). This sample location was collected near a disposal trench where drums had surfaced. Polychlorinated biphenyl-1254 was detected in 5 of 14 surface soil samples, 2 of which had high concentrations of 5,000 µg/kg (AL-SS-04) and 5,800 µg/kg (AL-SS-06). Both of these detections exceeded the residential (240 µg/kg) and industrial soil regional screening levels (970 µg/kg) for polychlorinated biphenyl-1254. These samples were collected in and around drums that had surfaced in disposal trenches. Metals were detected in surface soil at concentrations greater than background; however, only arsenic, cobalt, lead, manganese, and thallium exceeded background and residential soil regional screening levels. Arsenic was the only metal in surface soil to exceed its industrial soil regional screening level.
- Subsurface soil at the Airport Landfill was sampled from 3 locations during the 1993 Site Inspection and 10 locations during the 1996 Remedial Investigation (TCT 1994, Maxim 1996). Sample depths ranged from 1.5 to 20 ft below ground surface during the 1993 Site Inspection and from 2 to 10 ft below ground surface during the 1996 Remedial Investigation. Eleven volatile organic compounds and 19 semivolatile organic compounds were detected in subsurface soil samples collected at the Airport Landfill; however, none of these volatile organic compounds or semivolatile organic compounds

was detected above residential or industrial soil regional screening levels. Seven pesticides were detected in subsurface soil; however, only alpha-hexachlorocyclohexane (162 µg/kg) and beta-hexahydrocyclohexane (419 µg/kg) exceeded the residential soil regional screening levels (86 and 300 µg/kg, respectively) at one sample location (SB-1-1 from 8 to 10 ft below ground surface). These detections did not exceed the industrial soil regional screening levels, and these two pesticides were not detected in any other subsurface soil samples. Polychlorinated biphenyl-1254 was detected in one sample (SB-1-7 from 2 to 2.4 ft below ground surface) at a concentration of 383 µg/kg, exceeding the residential soil regional screening level (240 µg/kg); however, it did not exceed the industrial soil regional screening level (970 µg/kg). Metals were detected in subsurface soil at concentrations greater than background; however, only arsenic, cobalt, iron, and manganese exceeded background and residential soil regional screening levels. Arsenic was the only metal in subsurface soil to exceed its industrial soil regional screening level.

- Groundwater at the Airport Landfill was sampled from four monitoring wells in 2004 (SAIC 2006). While groundwater data at the Airport Landfill were collected prior to 2004, only the 2004 groundwater data were used to determine the nature and extent of potential contamination and to evaluate site risks. Three volatile organic compounds (acetone, benzene, and ethylbenzene) were detected in groundwater at the Airport Landfill in 2004. Of these volatile organic compounds, only benzene was detected at one location (SMW-1) at a concentration (1 µg/L) greater than the tap water regional screening level of 0.46 µg/L; however, the concentration did not exceed the maximum contaminant level/Tennessee water quality criteria of 5 µg/L. Benzene was not detected in any of the other monitoring wells during the 2004 sampling event. Bis(2-ethylhexyl)phthalate is the only semivolatile organic compound that was detected in groundwater at the Airport Landfill. Bis(2-ethylhexyl)phthalate was detected in one monitoring well (SMW-2) at a concentration of 52 µg/L, which exceeded the tap water regional screening level of 5.6 µg/L and the maximum contaminant level of 6 µg/L. Sixteen metals were detected in groundwater at the Airport Landfill in 2004. Manganese was detected in monitoring well SMW-2 at a concentration of 0.796 mg/L, which exceeded the tap water regional screening level of 0.43 mg/L. No other metals were detected above criteria in 2004. Between 1996 and 2004, manganese was consistently detected above criteria in monitoring well SMW-2.

The results indicated that a limited number of contaminants were identified at the Airport Landfill. The risk assessment identified no chemicals of concern in the surface soil, subsurface soil, or groundwater for the current and deed-restricted future land use of the landfill for public airport purposes. In addition, no ecological chemicals of concern were identified.

Remedial Investigations: Sewage Treatment Plant Landfill (AOC 2) and Skeet Range Munitions Response Site (MRS03)

Environmental media samples were collected and analyzed for contaminants related to the military's use of the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site to determine the nature and extent of potential contamination. The results were screened against the following criteria:

- **Soil and Sediment**: Regional screening levels dated June 2017 and background criteria established in the *Supplemental Human Health Risk Assessment for Former Sewart Air Force Base, Smyrna, Tennessee* (SAIC 2009).
- **Groundwater, Seep Water, and Surface Water**: Maximum contaminant levels/Tennessee water quality criteria for domestic water supply and tap water regional screening levels.

The results are summarized below:

- Surface soil at the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site was sampled from six locations during the 1993 Site Inspection, seven locations during the 1996 Remedial Investigation, and four locations during the 2009 Military Munitions Response Program Site Inspection (TCT 1994, Maxim 1996, Parsons 2010). Acetone, chlorobenzene, and methylene chloride were the only volatile organic compounds detected in surface soil samples collected at the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site; however, none of these volatile organic compounds were detected above residential or industrial soil regional screening levels. Several semivolatile organic compounds and pesticides were detected in surface soil; however, only benzo(a)pyrene and dieldrin exceeded residential soil regional screening levels. Benzo(a)pyrene was detected above the residential soil regional screening level of 110 µg/kg at three locations—130J µg/kg at SS-2-4, 190 µg/kg at MRS03-SS-06-11, and 440 µg/kg at SS-2-2. None of these detections exceeded the industrial soil regional screening level of 2,100 µg/kg. Dieldrin was detected at a concentration greater than the residential soil regional screening level (34 µg/kg) at one location (78 µg/kg at SS-2-6); however, the concentration did not exceed the industrial soil regional screening level of 140 µg/kg. Twenty-four metals were detected in surface soil; only arsenic was detected in surface soil at concentrations greater than background and the residential soil regional screening level. In addition, arsenic was frequently detected above the industrial soil regional screening level. All other metals were either below background or residential soil regional screening levels.
- Subsurface soil at the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site was sampled from one location during the 1993 Site Inspection and four locations during the 1996 Remedial Investigation (TCT 1994, Maxim 1996). Sample depths ranged from 3 to 5 ft below ground surface during the 1993 Site Inspection and from 1 to 8.5 ft below ground surface during the 1996 Remedial Investigation. Seven volatile organic compounds, seven semivolatile organic compounds, and two pesticides were detected in subsurface soil samples collected at the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site; however, none of these volatile organic compounds, semivolatile organic compounds, or pesticides were detected above residential or industrial soil regional screening levels. Polychlorinated biphenyl-1254 was detected in one subsurface soil sample (SMW-5 from 1 to 3 ft below ground surface) at a concentration of 1,860 µg/kg, which exceeded the industrial and residential soil regional screening levels. This polychlorinated biphenyl-1254 detection is suspect because the detection was collected from a field duplicate sample and polychlorinated biphenyl-1254 was not detected in the associated original sample. Twenty-one metals were detected in subsurface soil. Arsenic was detected in subsurface soil at concentrations greater than background, the residential soil regional screening level, and the industrial soil regional screening level in two samples—5.5 mg/kg in SMW-12 from 3 to 4 ft below ground surface and 8.9 mg/kg in SAFB-8 from 3 to 5 ft below ground surface. All other metals were either below background or residential soil regional screening levels.
- Groundwater at the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site was sampled from five monitoring wells in 2004 (SAIC 2006). While groundwater data at the sites were collected prior to 2004, only the 2004 groundwater data are used to determine the nature and extent of contamination and to evaluate site risks. Four volatile organic compounds (1,4-dichlorobenzene; acetone; chlorobenzene; and toluene) were detected in groundwater at the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site in 2004; however, only 1,4-dichlorobenzene exceeded groundwater screening criteria. It was detected in one monitoring well (SMW-5) at a concentration of 1.1J µg/L, which exceeded the tap water regional screening level of 0.48 µg/L; however, 1,4-dichlorobenzene does not exceed the

maximum contaminant level of 75 µg/L. Bis(2-ethylhexyl)phthalate was the only semivolatile organic compound detected in groundwater above criteria at the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site. Bis(2-ethylhexyl)phthalate was detected in only one monitoring well (SMW-5) at a concentration of 7.7J µg/L, which exceeded the tap water regional screening level of 5.6 µg/L and the maximum contaminant level of 6 µg/L. Dieldrin was the only pesticide detected in groundwater at this AOC. It was detected in one monitoring well (SMW-5) at an estimated concentration of 0.0098J µg/L, which exceeded the tap water regional screening level of 0.0018 µg/L. Dieldrin does not have a maximum contaminant level/Tennessee water quality criteria. Three metals (arsenic, iron, and manganese) were detected in groundwater at concentrations greater than tap water regional screening levels. Arsenic was detected in one monitoring well (SGW-7) at a concentration of 0.011 mg/L, which exceeded the tap water regional screening level of 0.000052 mg/L; however, this detection was just slightly greater than the maximum contaminant level/Tennessee water quality criteria (0.01 mg/L). Arsenic was not detected in any of the other monitoring wells during the 2004 sampling event. Iron was detected in three of five monitoring wells, and manganese was detected in all five monitoring wells at concentrations that exceeded the tap water regional screening levels. For manganese and iron, no maximum contaminant levels/Tennessee water quality criteria are available for comparison.

- During the 1996 Remedial Investigation sampling, a sample of water was collected from a groundwater seep that was found along the northern perimeter of the Sewage Treatment Plant Landfill. No volatile organic compounds were detected above tap water regional screening levels or maximum contaminant levels/Tennessee water quality criteria, and no semivolatile organic compounds were detected. Four metals (arsenic, cobalt, iron, and manganese) were detected above tap water regional screening levels; however, arsenic was not detected above the maximum contaminant level/Tennessee water quality criteria. None of the other metals have associated maximum contaminant levels/Tennessee water quality criteria.
- Surface water at the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site was sampled from two locations during the 1996 Remedial Investigation and one location during the 2009 Military Munitions Response Program Site Inspection (Maxim 1996, Parsons 2010). No volatile organic compounds or semivolatile organic compounds were detected above tap water regional screening levels or maximum contaminant levels/Tennessee water quality criteria in the surface water samples collected from Stewart Creek located adjacent to the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site. Arsenic (0.00072J mg/L) was detected in surface water above the tap water regional screening level (0.000052 mg/L); however, it was not detected above its maximum contaminant level/Tennessee water quality criteria (0.01 mg/L). Arsenic was only detected in one surface water sample located adjacent to the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site (MRS03-SW-01). No other metals were detected above screening criteria.
- Sediment at the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site was sampled from two locations during the 1996 Remedial Investigation and one location during the 2009 Military Munitions Response Program Site Inspection (Maxim 1996, Parsons 2010). Three volatile organic compounds and three pesticides were detected in sediment samples collected at the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site; however, none of these volatile organic compounds or pesticides were detected above residential or industrial soil regional screening levels. While several semivolatile organic compounds were detected in sediment, benzo(a)pyrene was the only semivolatile organic compound detected that exceeded criteria. It was detected above the residential soil regional screening level

(110 µg/kg) in only one sample location (SD2-3) at a concentration of 290J µg/kg. However, this concentration did not exceed the industrial soil regional screening level of 2,100 µg/kg. Twenty-two metals were detected in sediment. Arsenic was detected in all sediment samples above the residential soil regional screening level of 0.68 mg/kg. The maximum detection of arsenic in samples collected adjacent to the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site was from sample location MRS03-SD-01, where arsenic was detected at a concentration of 3.2 mg/kg, which exceeded the industrial soil regional screening level of 3 mg/kg. While arsenic concentrations in sediment adjacent to the AOC are elevated relative to regional screening levels, two upgradient samples contain arsenic at concentrations that are either the same or greater than the samples collected adjacent to the AOC (3.2 mg/kg in SD2-1 and 3.7 mg/kg in AMB-SD-02). All other metals were below residential soil regional screening levels.

- Based on the Phase I Remedial Investigation (Maxim 1999), a theoretical risk to a recreational sportsman from ingestion of contaminated fish tissue was identified for the Sewage Treatment Plant Landfill, with the primary chemical of concern being benzo(a)pyrene. In 2007, five fish samples were collected at the Sewage Treatment Plant Landfill to evaluate risk.

The results indicated that a limited number of contaminants were identified in the soil, groundwater, surface water, sediment, and seep water at the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site. The risk assessment identified no human health or ecological chemicals of concern for the current and reasonably anticipated future land use of the landfill for flood control and military training purposes. In addition, the Supplemental Fish Sampling Report concluded that no risk to human health existed through ingestion of fish (SAIC 2007).

Remedial Investigations: Former Fire Training Area (AOC 3)

Environmental media samples were collected and analyzed for contaminants related to the military's use of the Former Fire Training Area to determine the nature and extent of potential contamination. The results were screened against the following criteria:

- **Soil**: Regional screening levels dated June 2017 and background criteria established in the *Supplemental Human Health Risk Assessment for Former Sewart Air Force Base, Smyrna, Tennessee* (SAIC 2009).

- **Groundwater**: Maximum contaminant levels/Tennessee water quality criteria for domestic water supply and tap water regional screening levels.

The results are summarized below:

- Surface soil at the Former Fire Training Area was sampled from two locations during the 2011 Supplemental Remedial Investigation (Shaw 2012). Two semivolatile organic compounds (benzo[g,h,i]perylene and benzyl alcohol) were detected in surface soil at the Former Fire Training Area. Neither semivolatile organic compound was detected above residential or industrial soil regional screening levels. No volatile organic compounds were detected in surface soil. Metals, pesticides, and polychlorinated biphenyls were not collected from surface soil at the Former Fire Training Area.
- Subsurface soil at the Former Fire Training Area was sampled from 4 locations during the 1993 Site Inspection, 9 locations during the 1996 Remedial Investigation, 1 location during the 2005 Supplemental Remedial Investigation, and 36 locations during the 2011 Supplemental Remedial Investigation (TCT 1994, Maxim 1996, SAIC 2006, Shaw 2012). Sample depths ranged from 4 to 20 ft below ground surface during the 1993 Site Inspection, 2 to 10 ft below ground surface during the 1996 Remedial Investigation,

12 to 14.2 ft below ground surface during the 2005 Supplemental Remedial Investigation, and 1 to 28 ft below ground surface during the 2011 Supplemental Remedial Investigation. Seventeen volatile organic compounds and seven semivolatile organic compounds were detected in subsurface soil samples collected at the Former Fire Training Area; however, none of these volatile organic compounds or semivolatile organic compounds were detected above residential or industrial soil regional screening levels. In addition, no pesticides or polychlorinated biphenyls were detected in subsurface soil samples at the Former Fire Training Area. Twenty-two metals were detected in subsurface soil; however, only arsenic and cobalt exceeded background and residential soil regional screening levels. Arsenic was the only metal in subsurface soil to exceed its industrial soil regional screening level.

- Groundwater at the Former Fire Training Area was sampled from 16 monitoring wells during the 2013 groundwater monitoring event. Ten monitoring wells were sampled for volatile organic compounds in 2015. Monitoring wells not sampled for volatile organic compounds in 2015 were eliminated from the sample suite because volatile organic compounds were generally not detected in these wells during the 2013 sampling event. Pesticides and polychlorinated biphenyls were generally not detected in site monitoring wells during historical sampling events (1996 through 2005); therefore, they were eliminated as a concern for groundwater. The 2013 groundwater data for metals and semivolatile organic compounds and the 2015 groundwater data for volatile organic compounds were used to determine the nature and extent of contamination and to evaluate site risks. Nine volatile organic compounds (1,1,2-trichloroethane; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; 1,4-dichlorobenzene; benzene; ethylbenzene; m,p-xylenes; naphthalene; and vinyl chloride) were detected in groundwater at the Former Fire Training Area in 2015 at concentrations exceeding their tap water regional screening levels; however, only 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; benzene; naphthalene; and vinyl chloride either exceeded maximum contaminant levels/Tennessee water quality criteria or they did not have a maximum contaminant level/Tennessee water quality criteria available for comparison. The maximum detected concentrations of 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; benzene; and naphthalene were from monitoring well FTA-MW21, which is located approximately 360 ft northwest of the burn pit (Figure 1-7). For 1,2,4-trimethylbenzene (574 µg/L) and 1,3,5-trimethylbenzene (177 µg/L), this was the only monitoring well with exceedances of the tap water regional screening level (56 and 60 µg/L, respectively). These two constituents do not have a maximum contaminant level/Tennessee water quality criteria. In 2015, benzene was detected at a maximum concentration of 85.5 µg/L, which exceeded both the tap water regional screening level (0.46 µg/L) and maximum contaminant level/Tennessee water quality criteria (5 µg/L). In total, benzene results exceeded the tap water regional screening level in five monitoring wells (SMW-MW15, SMW-MW16, FTA-MW19, FTA-MW21, and FTA-MW22) and the maximum contaminant level/Tennessee water quality criteria in two monitoring wells (SMW-MW16 and FTA-MW21) (Figure 1-10). In 2015, naphthalene was detected at a maximum concentration of 218 µg/L, which exceeded the tap water regional screening level (0.17 µg/L). In total, naphthalene results exceeded the tap water regional screening level in four monitoring wells (SMW-MW15, SMW-MW16, FTA-MW21, and FTA-MW22) (Figure 1-10). Naphthalene does not have a maximum contaminant level/Tennessee water quality criteria. In 2015, vinyl chloride was detected in four monitoring wells (SMW-MW15, FTA-MW17, FTA-MW22, and FTA-MW26) above the tap water regional screening level (0.019 µg/L). However, only the maximum detection at FTA-MW22 (3.34 µg/L) exceeded the maximum contaminant level/Tennessee water quality criteria of 2 µg/L (Figure 1-10). No parent products of vinyl chloride were detected in groundwater samples collected in 2015. Two semivolatile organic compounds (2-methylnaphthalene and bis[2-ethylhexyl]phthalate) were detected in groundwater at the Former Fire Training Area in

2013 at concentrations exceeding their tap water regional screening levels. In 2013, the maximum detection of 2-methylnaphthalene in groundwater was from monitoring well FTA-MW21, where it was detected at a concentration of 90.5 µg/L. While the maximum detection exceeded the tap water regional screening level of 36 µg/L, this is the only location for this constituent where the tap water regional screening level was exceeded. Well FTA-MW21 corresponds to the well with the highest benzene concentration. During the 2011 groundwater sampling event, 2-methylnaphthalene was not detected above screening criteria in any of the site wells. In 2013, bis(2-ethylhexyl)phthalate was detected above the tap water regional screening level (5.6 µg/L) and the maximum contaminant level (6 µg/L) in three monitoring wells—6.35 µg/L at SWM-MW15, 6.55 µg/L at FTA-MW17, and 36.8 µg/L at FTA-MW22. During the 2011 groundwater sampling event, bis(2-ethylhexyl)phthalate was not detected above screening criteria in any of the site wells. Lack of detection in multiple wells or sampling events suggests that the occurrence of the contaminant might be a sampling or laboratory artifact. Two metals (arsenic and lead) were detected in groundwater at concentrations greater than tap water regional screening levels. The maximum detection of arsenic in groundwater was from monitoring well FTA-MW22, where arsenic was detected at a concentration of 0.00583 mg/L, which exceeded the tap water regional screening level of 0.000052 mg/L; however, this detection was less than the maximum contaminant level/Tennessee water quality criteria (0.01 mg/L). The maximum detection of lead in groundwater was 0.0343 mg/L, which exceeded the tap water regional screening level and maximum contaminant level/Tennessee water quality criteria of 0.015 mg/L; however, this was the only monitoring well (SMW-MW15) with an exceedance of groundwater criteria. Two metals (arsenic and lead) were detected in groundwater at concentrations greater than tap water regional screening levels. The maximum detection of arsenic in groundwater was from monitoring well FTA-MW22, where arsenic was detected at a concentration of 0.00583 mg/L, which exceeded the tap water regional screening level of 0.000052 mg/L; however, this detection was less than the maximum contaminant level/Tennessee water quality criteria (0.01 mg/L). The maximum detection of lead in groundwater was 0.0343 mg/L, which exceeded the tap water regional screening level and maximum contaminant level/Tennessee water quality criteria of 0.015 mg/L; however, this was the only monitoring well (SMW-MW15) with an exceedance of groundwater criteria.

In 2011 and 2013, one monitoring well (SMW-MW15) had an approximately 0.125- to 0.5-in. layer of free product. In addition, free product was encountered in monitoring well FTA-MW21 during groundwater sampling in 2013, and sampling activities were discontinued. Approximately 0.39 ft of free product were measured in monitoring well FTA-MW21 after removal of sampling equipment. During the February 2015 gauging event and the November/December 2015 groundwater sampling event, no measurable free product was observed in any of the Former Fire Training Area monitoring wells.

Limited contaminants were detected in the soil at the Former Fire Training Area. Detections of volatile organic compounds in groundwater have decreased at the Former Fire Training Area over time, and the footprint of the plume also has decreased. Volatile organic compounds, semivolatile organic compounds, and metals were detected in the groundwater at concentrations greater than screening criteria. The risk assessment identified no chemicals of concern in the surface soil, subsurface soil, or groundwater for the current and deed-restricted future land use of the area for public airport purposes.

Site Characteristics

Airport Landfill (AOC 1)—The Airport Landfill is located along the northern perimeter of the Smyrna Airport property and occupies approximately 13.6 acres. The Airport Landfill is overgrown with underbrush, grass, weeds, and trees. Portions of the landfill are densely vegetated. Based on the Supplemental Remedial Investigation conducted during 2004 and 2005

(SAIC 2006), the landfill cover materials are at least 3 ft thick around the perimeter of the landfill, are thinning to 1.5 ft thick in the center of the landfill, and consist of homogeneous lean clays with high clay content. However, it was determined that cover materials in a portion of the site were less than 3 ft thick. During the 2010 field reconnaissance of the landfill, approximately 7 acres in the northeastern portion of the landfill were found to have evidence of trench subsidence (SAIC 2010). The trenches with observed subsidence were orientated north-south and were approximately 10 to 15 ft wide. Trough depths ranged from 1 to 3 ft.

Debris associated either with landfill operations or dumping after closure of the former Sewart Air Force Base was observed during the 2010 field reconnaissance (SAIC 2010). Seven partially buried drums were observed at four locations throughout the landfill. In addition, one drum was observed lying on the ground surface with general trash and automotive trash, such as quart-sized oil containers, joint compound containers, and paint cans. Multiple piles of concrete rubble also were observed in the southern portion of the landfill. According to the Airport Authority, in 1996, 63 ft of pavement were removed from both sides of the runway and replaced with topsoil to improve the overall appearance of the airfield and reduce foreign object damage. The size and shape of the concrete rubble observed on the landfill are consistent with this demolition activity. The concrete rubble consists of large, 5- to 10-ft-long, irregularly shaped slab sections that measure from 4 to 8 in. thick. General construction-related debris piles containing items such as, but not limited to, galvanized fence posts, paint cans, lumber, concrete blocks, brick, sheet metal, and general trash were also observed. These debris piles are all located on top of existing grade, which is evidence of dumping activities following closure of the former Sewart Air Force Base.

Sewage Treatment Plant Landfill (AOC 2) and Skeet Range Munitions Response Site (MRS03)—The Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site are located in the northeastern part of former Sewart Air Force Base, adjacent to the Stewart Creek arm of the J. Percy Priest Reservoir, and occupy approximately 28.9 acres. Most of the ground surface of the Skeet Range Munitions Response Site is located under the waste and cover of the Sewage Treatment Plant Landfill.

The terrain at the Sewage Treatment Plant Landfill is uneven with remnant, elongated ridges and trenches, resulting from past landfill operations. Geophysical survey results from the Remedial Investigation indicated there were probably 12 burial trenches at the Sewage Treatment Plant Landfill. Some of the potential burial trenches extend up to and possibly into Stewart Creek (SAIC 2009). The site is overgrown with trees, weeds, and brush. The vegetation is very dense in some areas. In 2000, the Corps, Nashville District completed a bank stabilization project at the Sewage Treatment Plant Landfill to cover exposed waste materials along the shoreline of Stewart Creek adjacent to the Sewage Treatment Plant Landfill and to provide erosion control. The project consisted of shaping the shoreline/creek bank during low reservoir levels, where approximately 1 ft of clay cover material was placed along the bank and over the exposed waste material. A geotextile was placed on top of the clay cover as a filter layer and a 1-ft-thick layer of 6- to 10-in. stone riprap was placed on top of the geotextile for erosion control.

Based on the Supplemental Remedial Investigation conducted during 2004 and 2005 (SAIC 2006), the landfill cover materials are less than 3 ft thick over most of the landfill; however, at a few locations along the western side of the landfill, the cover is greater than 3 ft. Cover materials vary from sandy lean clays to clayey sands, with clay content between 44 and 64% and relatively high sand content. Cover materials typically exhibited coefficients of permeability between 1×10^{-5} and 1×10^{-7} cm/sec (SAIC 2006). During the 2010 Site Inspection (Parsons 2010), three small areas were noted where trash cans and construction debris were observed at the ground surface. In addition, two drums also were observed at the ground surface.

Former Fire Training Area (AOC 3)—The Former Fire Training Area occupies approximately 1.5 acres and is located on a knoll northeast of the northernmost runway. The perimeter of the site is heavily vegetated with trees and brush. During a 1992 investigation, material (mostly building rubble) was observed in the Former Fire Training Area. The material from this dumping was reported to have been removed and the AOC was graded. The basin where the firefighter training occurred was covered with a layer of gravel and crushed asphalt (SAIC 2009). In 2010, no visible evidence of the former fire training pit was observed, and the area was graded (leveled) based upon visible evidence of bermed soil located along the edge of the field (Shaw 2012). Construction debris (e.g., concrete rubble, metal scrap, metal pipes, rubber, concrete culverts, steel manhole covers, and a concrete pad) was found near the site. In addition, an asphalt pile, approximately 70 ft long by 20 ft wide by 10 ft high, was observed in the northwestern section of the site (Shaw 2012).

Land Use

The majority of the former Sewart Air Force Base is now the Smyrna Airport and is managed by the Smyrna/Rutherford County Airport Authority. The former Sewart Air Force Base administrative area located east of the airfield has been converted to an industrial area, and a portion of it is leased to the Tennessee Army National Guard. In addition, the Smyrna/Rutherford County Airport Authority is currently developing approximately 400 acres west of the airfield into the Smyrna Airport Business Park.

Airport Landfill (AOC 1)—The Airport Landfill property is owned by the Smyrna/Rutherford County Airport Authority. Future land use in the eastern half of the Airport Landfill property was proposed as future industrial development (non-aviation related) in the Smyrna/Rutherford County Airport Master Plan (PBS&J 2006). To date, the Smyrna/Rutherford County Airport Master Plan does not specify any future land use plans for the Airport Landfill property. No future land use is designated for the western half of the Airport Landfill property because it lies within the future non-precision approach zone to the runway. In addition, it is not anticipated that the eastern half of the Airport Landfill property will be developed because the Smyrna/Rutherford County Airport Authority would like to keep the established trees in this area as a buffer.

Sewage Treatment Plant Landfill (AOC 2) and Skeet Range Munitions Response Site (MRS03)—The Corps, Nashville District owns the Sewage Treatment Plant Landfill property for flood control. The 2007 *J. Percy Priest Reservoir Master Plan Update* (USACE 2007) and the *J. Percy Priest Reservoir Master Plan Supplement* (USACE 2016) are the documents that govern the Corps, Nashville District management of property where the Sewage Treatment Plant Landfill is located. The Corps leases the property to the Tennessee Army National Guard for military training purposes (Department of the Army 1970). The 1971 deed for the Sewage Treatment Plant Landfill property indicates the land is subject to a flowage easement designated as Flowage Easement Area Parcel B-1 and has the following restriction: "No new structure for human habitation shall be constructed or maintained on the said lands, nor shall any other new structure be constructed thereon except as may be approved in writing by the District Engineer, Corps of Engineers, Nashville District."

Former Fire Training Area (AOC 3)—Based on the Smyrna/Rutherford County Airport Master Plan (PBS&J 2006), the Former Fire Training Area property is zoned for aviation land use and is the planned location of an aircraft/cargo apron with two aircraft hangars.

Contamination Sources and Media

The potential sources of contamination at the Airport Landfill (AOC 1) and Sewage Treatment Plant Landfill (AOC 2) are the materials disposed of in the landfills. The potentially contaminated

media are soil and groundwater at both landfills. In addition, potentially contaminated media for the Sewage Treatment Plant Landfill include surface water, seep water, and sediment.

The potential source of contamination at the Former Fire Training Area is petroleum compounds and solvents associated with the fire training activities. The potentially contaminated media are soil and groundwater.

Scope and Role of Response Action

The overall objective of the investigation at the Airport Landfill (AOC 1), Sewage Treatment Plant Landfill (AOC 2), and Former Fire Training Area (AOC 3) was to determine if anything from the military's use of the sites is affecting the environment. If so, the Corps would develop a remedial strategy to eliminate risk to people and the environment. There is no evidence that contamination is harmful to people under the current land use or anticipated future land use (as designated and restricted in the property deeds) or the environment, so no remedial response action is necessary.

Summary of Site Risks

The risk to human health and the environment was assessed in the historical investigations and risk assessments conducted over a period of 20 years. The risk was re-evaluated using current screening criteria, toxicity values, and exposure recommendations. The re-evaluation utilized the maximum detections concentration of all chemicals detected in each potential exposure medium (i.e., soil, groundwater, surface water, sediment, and seep water) and compared it to the June 2017 regional screening levels. In addition, a sum-of-ratios evaluation was conducted to identify potential cumulative risk. Chemicals that significantly contribute to the human health risk, along with a comparison to naturally occurring background concentrations and other weight-of-evidence considerations, were identified as chemicals of concern.

Airport Landfill (AOC 1)—No chemicals of concern were identified for industrial land use. Polychlorinated biphenyl-1254 and lead were identified as chemicals of concern in surface soil for residential land use. Metals in soil contributing to hazard indices greater than 1 and present primarily at background levels were not identified as chemicals of concern. Although bis(2-ethylhexyl)phthalate (a semivolatile organic compound) was detected in groundwater above the screening levels, it was not identified as a chemical of concern because it is considered a laboratory artifact. Residential land use is not a realistic future use of the site, and the land is restricted to use as an airport; therefore, the residential chemicals of concern do not warrant action. In the ecological risk assessment, no ecological chemicals of concern were identified in surface soil at the Airport Landfill. No ecological chemicals of concern were identified in the subsurface soil because there is little or no exposure to the subsurface soil.

Sewage Treatment Plant Landfill (AOC 2) and Skeet Range Munitions Response Site (MRS03)—No chemicals of concern were identified for industrial land use. In addition, no chemicals of concern were identified for residential land use. Similar to the Airport Landfill residential risk results, metals in soil contributing to hazard indices greater than 1 were present primarily at background levels, and bis(2-ethylhexyl)phthalate detected in groundwater above the screening level was not identified as a chemical of concern because it is considered a laboratory artifact. In groundwater, arsenic, dieldrin, and two semivolatile organic compounds contributed to a total risk of 2×10^{-4}; however, the majority of the risk is due to naturally occurring arsenic. Therefore, No Action is warranted at the Sewage Treatment Plant Landfill and Skeet Range Munitions Response Site. In the ecological risk assessment, no final ecological chemicals of concern were identified in soil, surface water, and sediment.

Former Fire Training Area (AOC 3)—No chemicals of concern were identified for industrial land use. For residential land use, no chemicals of concern were identified in surface or subsurface soil. Benzene, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and vinyl chloride were identified as chemicals of concern in groundwater for residential land use. The volatile organic compound 1,2,4-trimethylbenzene was identified as a vapor intrusion chemical of concern for future residential land use. Residential land use is not a realistic future use of the site, and the land is restricted to use as an airport; therefore, the residential chemicals of concern do not warrant action. Although the area is currently unimproved and unused, it is the planned location for two future aircraft hangers. An ecological risk assessment was not conducted for the Former Fire Training Area because this area was covered with clean fill; therefore, there were no complete exposure pathways. Future land use of the Former Fire Training Area includes paving the entire site for an airport hangar and apron, which would obviate any partially complete ecological pathways.

REMEDIAL ACTION OBJECTIVE

Since no remedial action is required, there is no remedial action objective.

EVALUATION OF ALTERNATIVES

There are no unacceptable risks to people or the environment attributable to the U.S. Department of Defense associated with the Airport Landfill (AOC 1), Sewage Treatment Plant Landfill (AOC 2), and Former Fire Training Area (AOC 3) under the current and reasonably anticipated future land use. For this reason, the only recommended alternative is No Action. Development or evaluation of other alternatives is not required.

PREFERRED ALTERNATIVE

No Action is the **Preferred Alternative** for the Airport Landfill (AOC 1), Sewage Treatment Plant Landfill (AOC 2), and Former Fire Training Area (AOC 3). It is appropriate because there are no unacceptable risks to people or the environment attributable to the U.S. Department of Defense under the current and reasonably anticipated future land use. Therefore, it satisfies the statutory requirements of the Comprehensive Environmental Response, Compensation, and Liability Act, Section 121(b).

COMMUNITY PARTICIPATION

The Corps is requesting public comments on this Proposed Plan. Comments will be accepted at a public meeting as well as throughout the public comment period. Representatives from the Corps will be present to explain the Proposed Plan, listen to concerns, answer questions, and accept public comments. At the conclusion of the comment period, the comments received on this Proposed Plan will be summarized and responses provided in the Responsiveness Summary section of the Decision Document. The Decision Document will present the final selected remedy at the sites.

In accordance with the National Oil and Hazardous Substances Pollution Contingency Plan, an Administrative Record file has been established for the former Sewart Air Force Base. The Administrative Record can be accessed from any computer using the following link: http://ww3.sam.usace.army.mil/FUDS_HTRW_ADMIN_RECORDS/

GLOSSARY OF TERMS

Administrative Record: This is a collection of documents, including historical studies, reports, and plans, generated for a site during the Remedial Investigation. Information in the Administrative Record is used to support decision regarding a site and is available for public review.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986. 40 CFR 300 This federal law was passed in 1980 and is commonly referred to as “Superfund.” It provides for liability, compensation, assessment, remediation, and emergency response in connection with cleanup of inactive sites that endanger public health and safety or the environment.

Decision Document: The documentation of remedial response decisions at Formerly Used Defense Sites. Concurrence on the Decision Document by the U.S. Environmental Protection Agency or the state regulatory agency is sought, and the Army approves the document. It provides the response action selected for a site (including No Action), the basis for selecting the response action, public comments, responses to comments, and estimated cost for the response action.

Formerly Used Defense Site (FUDS): Facility or site which was under the jurisdiction of the Secretary of Defense and owned by, leased to, or otherwise possessed by the United States at the time of actions leading to contamination by hazardous substances, for which the Secretary of Defense shall carry out all response actions with respect to releases of hazardous substance from that facility or site. 10 USC 2701.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP): The plan revised pursuant to 42 USC 9605 and found at 40 CFR 300 that sets out the plan for hazardous substance remediation under CERCLA. 40 CFR 300 These CERCLA regulations, often simply referred to as the National Contingency Plan, provide the federal government the authority to respond to the problems of abandoned or uncontrolled hazardous waste disposal sites, as well as to certain incidents involving hazardous wastes (e.g., spills).

No Action: A determination based upon an evaluation of the historical use of the site, or of area(s) of concern at that site, as applicable, that there are no discharged contaminants present at the site, or at any other site to which a discharge originating at the site has migrated, or that any discharged contaminants present at the site or that have migrated from the site have been remediated in accordance with applicable remediation regulations.

Proposed Plan: A document that summarizes for the public the preferred decision for a site and presents the rationale for the preference.

Preferred Alternative: The alternative that the lead agency believes will fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors.

Remedial Investigation: A process undertaken by the lead agency to determine the nature and extent of the problem presented by the release. The Remedial Investigation emphasizes data collection and site characterization, and is generally performed concurrently and in an interactive fashion with the Feasibility Study. The Remedial Investigation includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for remedial action and to support the evaluation of remedial alternatives. 40 CFR 300

Responsiveness Summary: A document that presents written responses to the formal comments received during the public comment period and is appended to the Decision Document.

Surface and Subsurface Soil: Soil samples collected from a shallow depth of less than 1 ft are called surface soil samples, while samples collected from greater depths are called subsurface soil samples.

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