
**U.S. Army Corps of Engineers, Savannah District
Formerly Used Defense Sites Program**

Final PROPOSED PLAN

**Former Turner Air Force Base, Waste Disposal Sites 1
through 6, Albany, Georgia DERP-FUDS # I04GA039701**



July 2021

THE U.S. ARMY CORPS OF ENGINEERS ANNOUNCES PROPOSED PLAN

This Proposed Plan is presented by the U.S. Army Corps of Engineers (USACE), Savannah District, to facilitate public review and comment on the remedy selection for six former Turner Air Force Base (FTAFOB) Waste Disposal Sites (WDSs) located one mile east of Albany, Georgia, in Dougherty County (Figures 1 and 2). These sites are part of the Defense Environmental Response Program (DERP) Formerly Used Defense Sites (FUDS) program.

The USACE is the lead agency for investigating, reporting, making remedial decisions, and taking remedial actions for the FTAFOB WDSs.

This Proposed Plan highlights key information contained in the Remedial Investigation (RI) and Feasibility Study (FS) Reports for the six WDSs located within FTAFOB (WDSs 1, 2, 3, 4, 5, and 6) including background information, the Preferred Alternative, and reasons for the preference, with other remedial options considered.

The USACE is issuing this Proposed Plan as part of its public participation responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §117(a) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) §300.430(f)(2). This Proposed Plan is part of the Administrative Record file as given in the box to the right.

PUBLIC INVOLVEMENT

The USACE requests comments from the public on this Proposed Plan. Public comments will be accepted during a 30-day public review and comment period from Aug 1, 2021, through Aug 31, 2021. A public meeting will be scheduled to explain this Proposed Plan. The USACE, in coordination with the Georgia Environmental Protection Division (GAEPD), may modify the Preferred Alternative or select other response actions than those presented in this Plan based on new information or public comments submitted during the 30-day public comment period.

PUBLIC COMMENT PERIOD:

August 1, 2021, through August 31, 2021

The USACE will accept written comments on the Proposed Plan during the public comment period (see contact information at the end of this notice).

ADMINISTRATIVE RECORD:

For more information on the site, see the Administrative Record at the:

Dougherty County Public Library 300 Pine Avenue
Albany, Georgia 31701
229-420-3200

Figure 1 Location of FTAFB

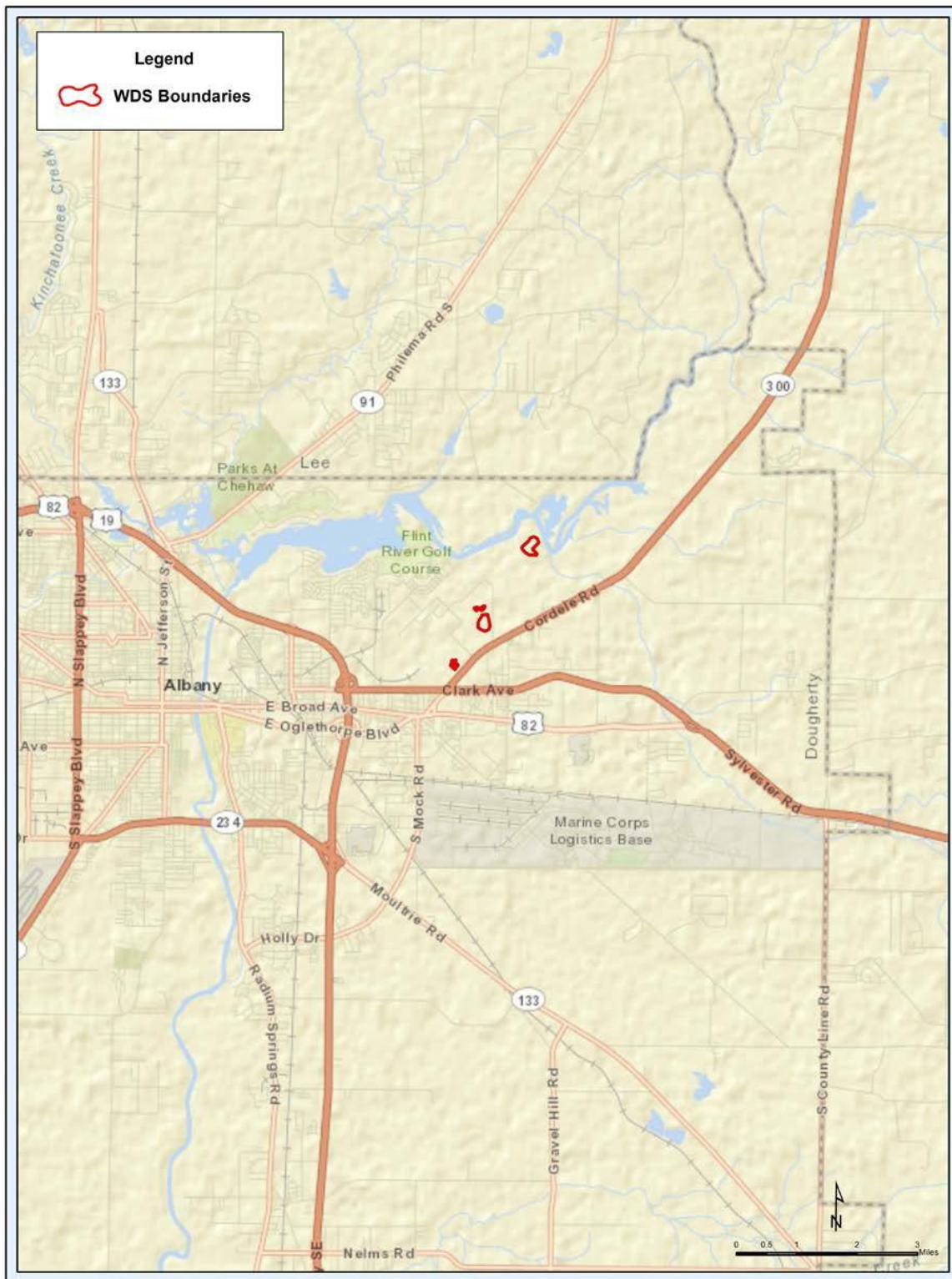
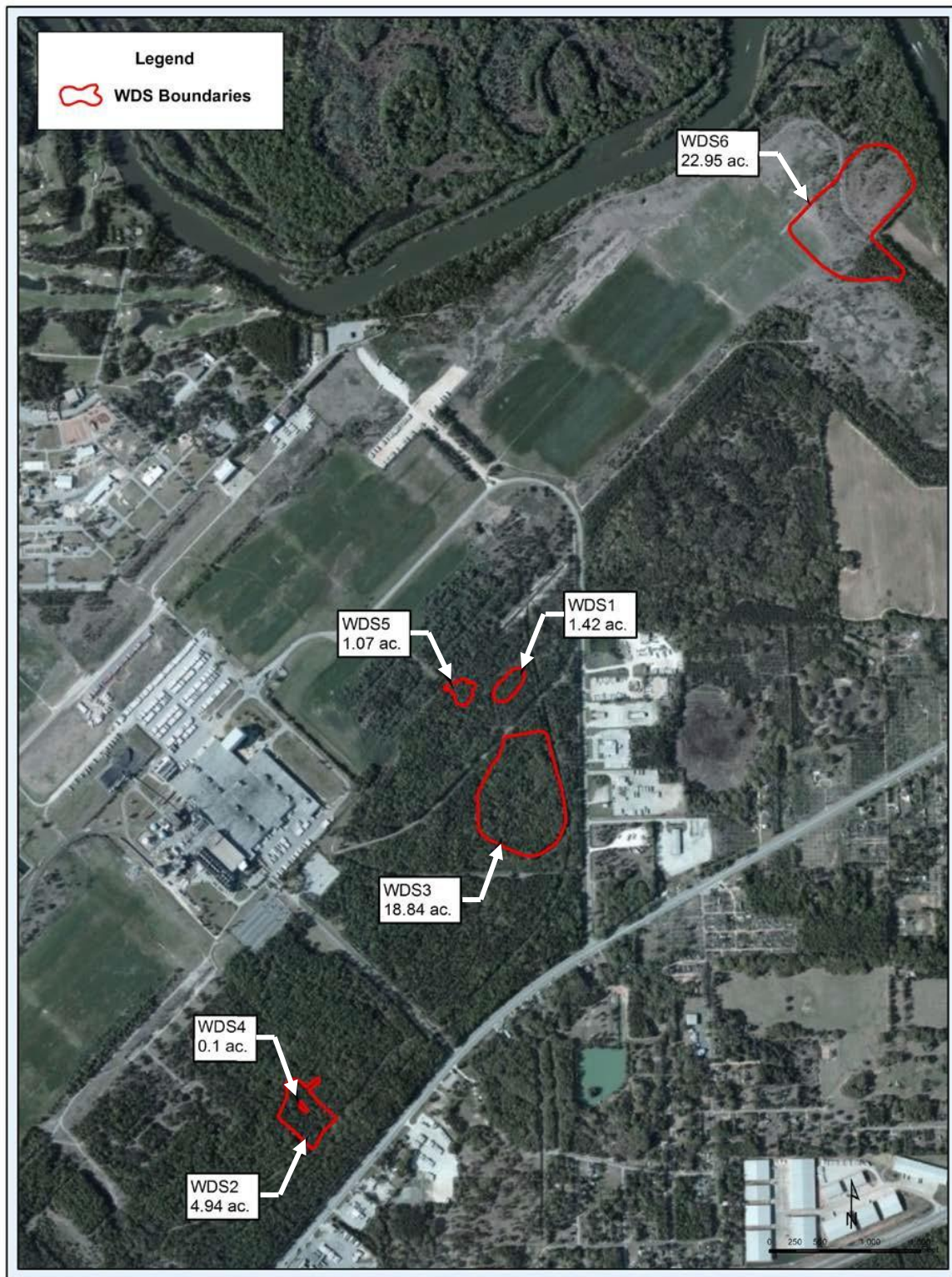


Figure 2 Waste Disposal Sites at Former Turner Air Force Base



Therefore, the public is encouraged to review and comment on all the alternatives presented in this Proposed Plan.

USACE responses to public comments on this Proposed Plan will be contained in the “Responsiveness Summary” section of the Decision Document.

USACE is the lead agency for the FUDS program, which is responsible for environmental restoration of properties that were formerly owned by, leased to, or otherwise possessed by the United States and under the jurisdiction of the Secretary of Defense, such as Turner Air Force Base. While FTAFB is being remediated in accordance with CERCLA, FTAFB is also included on the State of Georgia Hazardous Site Response Act (HSRA) list, administered by the GAEPD.

PROJECT SITE BACKGROUND

FTAFB was constructed in 1941 by the U.S. Army Air Corps and operated as a flight school, Air Force training facility, strategic air base, and naval air station before closing in 1974. From 1976 through 1978, the Albany-Dougherty Payroll Development Authority (ADPDA) purchased much of the FTAFB.

While FTAFB was an active military facility, various activities were conducted including fuel storage and handling, degreasing and painting, refuse incineration, photograph development, general refuse generation and tetraethyl lead blending. Contaminants identified at FTAFB that may have resulted from these activities include municipal solid waste, petroleum compounds, chlorinated hydrocarbons, heavy metals, and pesticides. The wastes generated from these activities may have been disposed at the WDSs.

Investigative work began at FTAFB in 1987. USACE conducted a Confirmation Study at WDS1 and WDS2 in 1987. Following this, a Phase I RI was performed in 1990-1991 at portions of WDS1, WDS2, and WDS3 followed by a Phase II RI in 1995 at WDS1 and WDS2 and a Phase I RI at WDS3 through WDS6. An additional Phase II RI was conducted for all the WDSs in 1999. The final RI was performed in 2012-2013 to complete the investigations at WDS1 through WDS6 at FTAFB. WDS1, WDS2/4, WDS3, and WDS5 have indications of trenching or waste disposal and debris at the

surface. WDS6 has been shown not to be a disposal area.

PROJECT SITE CHARACTERISTICS

FTAFB covers approximately 2,500 acres bound to the north by the Flint River, to the west by Turner Field Road, to the south by Georgia Highway 300, and to the east by McCollum Drive. The sites are heavily vegetated with pine and hardwood trees and limited undergrowth.

The ADPDA holds title to approximately 1,750 acres of the FTAFB, including the six WDSs. The portion of the ADPDA-owned land that includes the WDSs is leased under a 99-year agreement to an industrial tenant and zoned M-2 (Heavy Industrial). No change in land use is expected in the foreseeable future. No construction activity is planned at or near the sites. The entire perimeter of the industrial facility is enclosed with a 9-ft high security fence and patrolled 24 hours per day by on-site security.

During the 2012-2013 RI, a subsurface investigation and media sampling was performed to determine the nature and extent of contamination at the WDSs. Although contaminants of concern (COCs) were initially identified at WDS3 and WDS2/4 in the RI, further evaluation of the information indicates no unacceptable risks for current or reasonably anticipated future use are present. The determination of no unacceptable risks was established with additional analytical data showing lowered concentrations of the COCs, together with the absence of an exposure pathway for soil and groundwater.

WDS1 – Former Landfill: WDS1 is a 1.4-acre area near the central portion of FTAFB used for disposal of unknown wastes for an unknown duration; there are clear indications of land disturbance in a 1948 aerial photograph. The site is generally flat except for an irregularly shaped mound approximately 200 by 300 feet, and 8 feet high at the north end. There is also a 3-ft deep trench south of the mound. A trash layer was encountered at approximately 3 feet below ground surface (bgs) inside the trenched area. Metallic debris was observed scattered at some areas of the site.

Various naturally occurring metals were detected in sediment, soil, surface water and groundwater at WDS1. Limited volatile organic compounds (VOCs) and pesticides were detected in site media but well below screening

criteria. Isolated semi-volatile organic compounds (SVOCs) were detected above screening criteria in sediment and soil. However, no COCs were identified in soil, groundwater, sediment, or surface water based on the risk assessment that considered unrestricted residential use.

WDS2/4 – Former Landfill/Small Trench:

WDS2 and WDS4 are combined as a single site since WDS4 is fully contained within WDS2. WDS4 consists of a trench 10 feet by 80 feet and 4 feet deep and an adjacent mound believed to have come from the trench. WDS2 is an approximately 5-acre site near the southeastern boundary of FTAFB used for disposal of unknown wastes for an unknown duration. The site has several depressions interpreted to be burial trenches or excavations. Trash was encountered at 1 to 3 feet bgs and metal debris protrudes from the surface. Historical aerial photographs indicate land disturbance as early as 1969.

Limited VOCs, SVOCs and pesticides were detected in site media, but were not identified as COCs in the risk assessment. Metals that are native to the environment were also detected in sediment, soil, and groundwater at WDS2. One COC, 1,1-dichloroethene (1,1-DCE), was identified in groundwater because it was slightly above drinking water screening criterion. Although 1,1-DCE was identified as a COC in the risk assessment, no unacceptable exposures were identified for soil or groundwater, this contaminant is not considered to present a risk, by a lack of exposure pathways and the fact the exceedance amount is very slight.

WDS3 – Sanitary Landfill Surrounding the Tetraethyl Lead Disposal Area: WDS3 is an 18.8-acre sanitary landfill located at the eastern boundary of FTAFB that includes a reported tetraethyl lead disposal area believed to be less than 1 acre. WDS3 is relatively flat with multiple 3-ft deep surface depressions interpreted to be burial trenches across the site, and metal debris protruding from the surface. A review of historical aerial photographs indicates landfill activities as early as 1948.

Lead was identified above screening criteria in subsurface soil at a concentration representing risk above acceptable levels in 1995; subsequent samples collected in the vicinity showed lead concentrations below

screening levels. Lead and arsenic were identified as groundwater COCs in a single well at WDS3 in 1995, but 2018 testing had levels below limits of detection. Chromium (conservatively assumed to be in the hexavalent form) was detected in groundwater at a concentration above screening levels in 2012, but below screening levels during sampling conducted in 2018. The previously identified COCs are no longer considered to present an unacceptable exposure risk at the site.

WDS5 – Mound: WDS5 is a 1.1-acre area located near the eastern boundary of FTAFB. The site contains a 300 by 300-ft irregularly shaped mound that is 12 feet high. Railroad ties, metal cables, and concrete debris are protruding from the mound in some areas. Land disturbance activities are visible on a 1964 aerial photograph.

Isolated SVOCs were identified in soil above screening criteria. However, no COCs were identified in any media at WDS5. As background concentrations for these compounds were not established, these detections were not demonstrated clearly to be site related.

WDS6 – Mound: WDS6 is a 23-acre mound rising 20 to 30 feet above the surrounding grade located at the north end of FTAFB near the Flint River. The mound is bisected by a paved road. Recent probes into the mound and examination of soil cores by professional geologists, historical topographic maps and aerial photographs indicate that a natural low-lying mound was covered with fill soil during construction of the runways in 1958, and that the mound is not a waste disposal area. No sampling was conducted at this site.

SCOPE AND ROLE OF RESPONSE ACTION

This Proposed Plan presents the Preferred Alternative for six WDSs at FTAFB. WDS1, WDS2/4, WDS3, WDS5, and WDS6 are being addressed collectively because of their similarity. These sites were suspected of being waste disposal sites/landfills.

SUMMARY OF PROJECT SITE RISKS

Human health and ecological risk assessments evaluated potential risks to humans and ecological receptors potentially exposed to site - related contaminants present in soil, sediment,

surface water, and groundwater based on current and reasonably anticipated future uses of the WDSs. Media sampling and a risk assessment were not conducted for WDS6 because it was determined that waste materials were not disposed at the site.

The Human Health Risk Assessment (HHRA) focused on those populations likely to be exposed to potentially contaminated site media currently and/or in the future.

- Site Worker – A site worker (current and future) could be exposed to soil during work-related activities. Current site workers could be exposed to surface soil (i.e., 0 to 2 feet bgs). Future site workers could be exposed to surface and subsurface soil (i.e., 0 to 10 feet bgs) assuming the site is developed.
- Trespasser – A site trespasser could be exposed to surface soil while trespassing. This type of exposure is assumed to occur to adolescent aged individuals (7-16 years).
- Construction Worker – It is possible that future construction activities could expose workers to soil up to a depth of 10 feet bgs.
- Hypothetical Future Residents – The HHRA conservatively assumed that the WDSs could be used for residential development in the future. Although this scenario is considered unlikely, it was evaluated to estimate the upper-bound of the potential risks. The future residents could be exposed to surface soil, subsurface soil, and site groundwater.

None of the exposure scenarios evaluated resulted in unacceptable levels of risk at WDS1 and WDS5. Thus, no COCs were identified for WDS1 and WDS5. As there is no risk from contaminated media at WDS1 and WDS5, there is no remedial action required under CERCLA.

At WDS2/4, neither soil nor groundwater exposure resulted in unacceptable levels of risk for receptors. However, 1,1-DCE, which was not identified as a groundwater COPC in the HHRA, was identified as a groundwater COC because the maximum groundwater concentration (7.2 µg/L,) slightly exceeded the drinking water MCL of 7 µg/L. This result was a very slight exceedance,

additionally, a 2012 sample for this location had concentrations below the MCL of 7 ug/L. No unacceptable risks were determined and no remedial action is required under CERCLA for 1,1-DCE at WDS2.

The 2013 HHRA identified lead as a COC for subsurface soil. This was based on a maximum lead concentration of 6,900 mg/kg from a sample taken in 1991. The HHRA determined that the average soil lead concentration of 340 mg/kg would not pose unacceptable blood lead levels. Subsequent testing of the same depth interval at the same area did not detect lead at those levels. The maximum level in a 1999 offset boring detected lead at a concentration of 3.28 mg/kg. Samples taken in 2018 for the same depth interval at the same area detected lead in concentrations of 3.8 mg/kg, 6.8 mg/kg, and 4.2 mg/kg. All of the concentrations are well below the federal screening level for residential soil of 400 mg/kg. Therefore, lead is no longer considered a COC for subsurface soil and there is no unacceptable risk posed from subsurface soil.

The 2013 HHRA identified arsenic and lead as COCs in groundwater for WDS3 due to arsenic detected at 10.2 µg/L (federal MCL is 10.0 µg/L) and lead detected at 61.3 µg/L (federal MCL is 15 µg/L) in one well that is located up-gradient from WDS3. This led to a determination that there was unacceptable risk for a hypothetical future resident. The same well was sampled again five years later in 2018 and resulted in lead not being detected at the limit of detection, and assigned a result of less than 0.98 µg/L. At that time arsenic was also not detected at the limit of detection, and assigned a result of less than 1.5 µg/L. In light of the 2018 sampling event results, it can be determined there is no unacceptable risk for either the current land use or for a hypothetical future resident.

In addition to human receptors, ecological receptors (e.g., birds, reptiles, mammals, and plants) live in areas throughout the site. None of the communities evaluated in any of the areas of concern indicated that an ecologically significant risk was likely. Thus, no ecological risk-based COCs were identified for WDS1, WDS2/4, WDS3, or WDS5.

Despite the uncontrolled nature of waste disposal at each WDS, there was minimal contamination identified at each WDS during the 2012-2013 RI. However, large quantities of low-threat level solid waste are present in each WDS, along with minimal subsurface soil and

groundwater contamination that is slightly above restoration criteria. It has been more than 30 years since waste was disposed and the WDSs were closed. There is no detectable methane being generated from the WDSs, likely due to the age of the disposed wastes, any anaerobic decomposition of organic waste has reached completion. The sites are fenced, secured, and heavily vegetated with mature trees. The current industrial tenant conducts periodic tree harvesting and allows seasonal deer hunting. These activities do not represent complete exposure pathways and there is no risk associated with them.

In brief, identified contamination of soil and groundwater at the Site has been characterized and found to be below applicable screening levels, its location is well understood and there are no uncontrolled pathways for human exposure.

STATEMENT FOR 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 six WDSs located within FTAFB (WDSs 1, 2, 3, 4, 5, and 6) 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 six WDSs located within FTAFB (WDSs 1, 2, 3, 4, 5, and 6). 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

USACE is providing this information and soliciting public input on the investigation and remediation of the WDSs at FTAFB.

Announcements were placed in the Albany Herald newspaper and project information can be found in the Administrative Record file. The dates for the public comment period, location, and time of the public meeting and the locations of the Administrative Record files are provided on the front page of this Proposed Plan. Public comments will be considered before any action is selected and approved. Representatives from the USACE will be present at the meeting to explain the Proposed Plan, listen to any concerns, answer questions, and accept public comments.

Written comments will be accepted throughout a 30-day public comment period from August 1, 2021 through August 31, 2021.

Comments and requests for further information on the site should be directed to:

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or

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GLOSSARY OF TERMS

Administrative Record (AR) – A compilation of all documents relied upon to select a remedial action pertaining to the investigation and remediation of the project site.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – Congress enacted CERCLA (42 USC § 9620 et seq.), commonly known as Superfund, on 11 December 1980. This law addresses the funding for, and remediation of abandoned or uncontrolled hazardous waste sites. This law also establishes criteria for the creation of key documents such as the RI, FS, PP, and DD.

Decision Document (DD) – A report documenting the final action, approved by the lead and regulatory agencies.

Feasibility Study (FS) – The study evaluates possible remedies using the information generated from the Remedial Investigation. The FS becomes the basis for selection of a remedy.

Formerly Used Defense Sites (FUDS) – Locations that were owned by, leased to, or otherwise used by the Department of Defense.

Land Use Controls (LUCs) – Describe any

physical, legal, or administrative mechanism that restricts the use of, or limits access to, real property to prevent or reduce risks to human health and the environment.

Monitored Natural Attenuation – The reliance on natural processes, which may include a variety of physical, chemical, or biological processes that, under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of contaminants in soil or ground water.

National Oil and Hazardous Substances Pollution Plan (NCP) – More commonly called the National Contingency Plan, the NCP is the Federal government's blueprint for responding to both hazardous substance releases.

Proposed Plan (PP) – The plan that identifies the preferred remedial alternative for a site and is made available to the public for comment.

Remedial Investigation (RI) – An investigation to determine the nature and extent of contamination, assess human health and environmental risks posed by the contaminants, and provide a basis for the development of response action alternatives.

ACRONYMS

ADPDA	Albany-Dougherty Payroll Development Authority
ARAR	Applicable or Relevant and Appropriate Requirement
bgs	below ground surface
COC	Contaminant of Concern
DCE	dichloroethene
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
DPT	direct-push technology
FTAFB	Former Turner Air Force Base
GAE//PD	Georgia Environmental Protection Division
HHRA	Human Health Risk Assessment
HSRA	Hazardous Site Response Act
LUC	Land Use Controls
MCL	Maximum Contaminant Level
MNA	Monitored Natural Attenuation
RAO	Remedial Action Objective
RSL	Regional Screening Level
TBC	To Be Considered
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
WDS	Waste Disposal Site
ZVI	zero-valent iron

