

U.S. Army Corps of Engineers, Jacksonville  
District Formerly Used Defense Site Program

## PROPOSED PLAN for the LANDFILL AREA 2 SITE

Former Lee Field Naval Air Station, Green Cove Springs, Florida  
Formerly Used Defense Site Project No. I04FL0085\_04



January 2016

## INTRODUCTION

The U.S. Army Corps of Engineers (Corps) is the lead agency for the **Formerly Used Defense Site Program**. The Corps will select the final remedy for the site after reviewing and considering all information submitted during the 30-day public comment period and the public meeting. The Corps may modify the **No Further Action** determination or select another response action based on new information or public comments. Therefore, the public is encouraged to review and comment on this **Proposed Plan**.

**Figure 1: Former Lee Field and Landfill Area 2 Location**



### IMPORTANT DATES AND LOCATIONS

#### PUBLIC COMMENT PERIOD:

**January 28, 2016 – February 29, 2016**

The Corps will accept written comments on the Proposed Plan during the public comment period. Please send written comments to:

U.S. Army Corps of Engineers  
Jacksonville District  
Attention: Diana Martuscelli  
701 San Marco Boulevard  
Jacksonville, FL 32207-8175

#### PUBLIC MEETING:

The Corps will host a public meeting on **January 28, 2016** at the Green Cove Springs Police Department Community Room, 1001 Idlewild Avenue, Green Cove Springs, FL, 32043 to explain the Proposed Plan and the Basis for Action. The Corps will accept verbal and written comments at the meeting.

**For more information**, project documents are available for review at the reference desk of the Clay County Public Library located at 403 Ferris Street in Green Cove Springs.

This Proposed Plan contains terms (**in bold letters**) used for environmental remediation and the overall Formerly Used Defense Site Program. These items are described in the Glossary found at the end of the document.

This Proposed Plan identifies a No Further Action determination for Landfill Area 2, a Formerly Used Defense Site located at the former Lee Field Naval Air Station (the former Lee Field) in Green Cove Springs Florida (Figure 1). The No Further Action determination is based on the results of the **Remedial Investigation**, which concluded that the site poses no unacceptable risks to people and the environment from the military's use of the site.

The Corps is sharing this Proposed Plan as part of its public participation responsibilities under Section 117(a) of 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** (40 Code of Federal Regulations, Part 300, 1993).

This Proposed Plan summarizes information that can be found in greater detail in the Remedial Investigation reports and other related documents contained in the **Administrative Record** available at the Clay County Public Library, 403 Ferris Street, Green Cove Springs, Florida, 32043. The Corps encourages the public to review these documents to gain a more comprehensive understanding of the site and the investigation activities that have been conducted at Landfill Area 2.

## PUBLIC INVOLVEMENT PROCESS

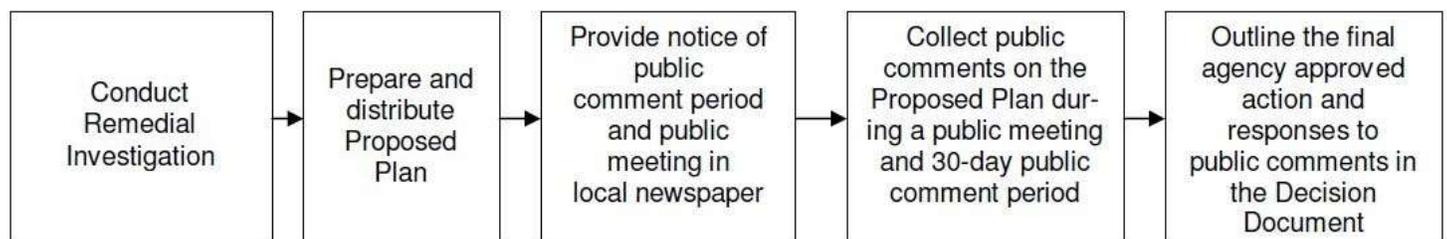
Local community members and other interested parties are encouraged to review the Proposed Plan and submit comments. Public comments are considered before any action is selected and approved. The Corps is the executing agent for the Formerly Used Defense Sites Program and is responsible for environmental restoration of properties that were formerly owned, leased or otherwise possessed by the United States and under the jurisdiction of the Secretary of Defense. Within this program, the Corps conducts environmental response activities at Formerly Used Defense Sites on behalf of the Department of Defense, including investigating, reporting, making remedial decisions, and conducting remedial actions. The Florida Department of Environmental Protection, which is the lead regulatory agency for this project, reviewed the *Final Supplemental Remedial Investigation Report, Landfill Area 2, Former Lee Field Naval Air Station Green Cove Springs, Florida* (Shaw and TerranearPMC, 2012) and agrees with the Corps' findings and conclusions.

The purposes of this Proposed Plan are to:

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

A **Decision Document** identifying the decision for the site will be prepared. The Corps' responses to public comments on this Proposed Plan will appear in the "Responsiveness Summary" section of the Decision Document. The flow chart shown in Figure 2 summarizes the various steps in the development and approval process for the Landfill Area 2 Decision Document.

**Figure 2: Landfill Area 2 Decision Document Process**



## SITE BACKGROUND

### Site History

Lee Field was initially developed by the Department of Defense in 1940 for use as a pilot training base during World War II. The installation contained extensive docking facilities with access to the St. Johns River, a railroad system, multiple aircraft runways, and supporting structures. Following the war, the facility was used as a naval station to store shallow-draft fleet ships. In 1963, the ownership of Lee Field was transferred from the Department of Defense to the City of Green Cove Springs. In 1965, the City of Green Cove Springs sold the property to J. Louis Reynolds who began developing the former Lee Field as an industrial park known as Reynolds Industrial Park. In 1981, Clay County Port, Inc. acquired the property and continued operation and development of the industrial park. Historical records indicate that the area known as Landfill Area 2 was used as a public works storage area, which was documented on several maps dating from the 1950s.

### Previous Investigations

Following the Comprehensive Environmental Response, Compensation and Liability Act process, the Corps has completed a series of studies at the site.

### Preliminary Assessment

Several investigations were conducted in the past at Landfill Area 2. The first of these preliminary studies took place in 1986 when two groundwater monitoring wells were installed by the Corps. Samples were collected from these wells the following year to determine if the military's use of the site had resulted in contamination of soil or groundwater. Although several metals were detected in the soil samples, these were thought to be naturally occurring and not related to the military's use of the site. In the groundwater samples, metals were also detected but at concentrations below the screening levels used at the time.

The wells were sampled again in 1992 and as with the previous samples the detected concentrations of metals were below screening levels. Soil samples were collected and reanalyzed to determine if the metals previously reported as contamination were caused by the military's use of the site. Results indicated that the metals concentrations were not contaminants.

### Site Investigation

In 1998, the U.S. Environmental Protection Agency oversaw a **Site Investigation** of several suspected waste disposal sites at the former Lee Field, including Landfill Area 2. Soil samples were collected and analyzed for contaminants related to the military's use of the site. Several metals were detected in the soil samples; however, their concentrations did not exceed the Florida Department of Environmental Protection screening levels used at the time.

### Remedial Investigations

A Remedial Investigation was conducted by the Corps between September 2000 and October 2002 to characterize the nature and extent of contamination related to the military's use of the site. During the Remedial Investigation process, a review of historical aerial photographs did not find any evidence that the area had been used as a military landfill. To confirm this determination, 22 test pits were dug beginning at the site boundary and continuing inward.

Although shallow debris such as steel cable and a metal container lid was found in two of the test pits, no other debris or buried waste indicating the site was used as a landfill was found.

During the Remedial Investigation, six groundwater monitoring wells were installed and samples of soil and groundwater were collected and analyzed for contaminants related to the military's use of the site. The results were compared to Florida Department of Environmental Protection's residential screening levels. Bis(2-ethylhexyl)phthalate, a manufactured chemical commonly added to plastics to make them flexible, was detected in the groundwater samples at concentrations greater than residential screening levels. Several metals, such as iron, aluminum, manganese, sodium and thallium were also detected at concentrations above residential screening levels. However, these metals were all determined to be naturally occurring and not related to the military's use of the site.

Soil samples collected from a shallow depth of less than one foot are called surface soil samples while samples collected from greater depths are called subsurface soil samples. The results indicated the presence of a limited number of contaminants exceeding residential screening levels in four of the surface soil samples. The only constituents in surface soils detected at concentrations exceeding residential screening levels were the chemical benzo(a)pyrene, and the metals arsenic and iron. Concentrations of bromomethane and total recoverable petroleum hydrocarbons exceeded residential screening levels in one subsurface soil sample. Benzo(a)pyrene is a byproduct of incomplete burning of organic materials, e.g. cigarettes, gasoline, and wood. Bromomethane is a chemical used in pesticides. Total recoverable petroleum hydrocarbons include oils, grease, and other petroleum based chemicals. The concentrations of arsenic and iron were determined to be naturally occurring and unrelated to the military's use of the site.

The Florida Department of Department of Environmental Protection reviewed the findings of the Remedial Investigation and based on their recommendations, additional soil samples were collected and additional groundwater monitoring wells were installed in 2005. The results indicated the presence of arsenic above residential screening levels in the soil samples. Total recoverable petroleum hydrocarbons were detected in one soil sample above residential screening levels. Several metals were found in the groundwater samples, but with the exception of a single detection of lead above the residential screening level, they were determined to be naturally occurring and unrelated to the military's use of the site.

Remedial Investigation activities at the Landfill Area 2 site concluded in 2011 with additional test pit excavations, soil sampling, and sampling of groundwater monitoring wells. The test pit excavations did not encounter any buried debris that would indicate the area had been used as a military landfill. The soil and groundwater samples were analyzed for contaminants. Arsenic and benzo(a)pyrene were present in some of the soil samples at concentrations greater than residential screening levels. However, the concentrations of arsenic were determined to be naturally occurring and unrelated to military's use of the site. No chemicals were found in the groundwater samples at concentrations above residential screening levels. Several metals in the groundwater were found at concentrations above the residential screening level; however, they were all determined to be naturally occurring and unrelated to the military's use of the site.

## Results

The teams of investigators did not find any debris indicative of a landfill within the Landfill Area 2 study area. Limited amounts of building materials and other debris were found on the surface, but buried materials consistent with a landfill were not found. A minimal number of contaminants were found in some of the soil samples above screening levels, but these were found to be either naturally occurring or unrelated to the military's use of the site. The metals found in groundwater samples were all determined to be naturally occurring and unrelated to the military's use of the site.

## Public Participation

A community meeting was held at the Clay County Port, Inc. offices on June 25, 2015 in order to discuss Remedial Investigation field efforts at the former Lee Field Naval Air Station, including Landfill Area 2. The meeting included presentations, fact sheet distribution, and an opportunity for project team members to answer questions from community members.

## SITE CHARACTERISTICS

The former Lee Field is located along the St. Johns River in Clay County, Florida, within the City of Green Cove Springs. The Landfill Area 2 site is located along the western edge of the facility.

### Land Use

The former Lee Field Naval Air Station is currently used as an industrial park. Businesses currently or formerly operating at Reynolds Industrial Park include a railroad refurbisher, truck driver training school, aircraft maintenance facility, brake testing facility, fiberglass pipe manufacturing facility, and an airstrip for small planes. Landfill Area 2 covers approximately 7.5 acres of undeveloped, relatively flat, heavily wooded land at the western edge of the industrial park. The only cleared areas are dirt access roads and the western edge of the site. There are no known plans to change the present day use of the property.

### Potential Contamination Sources and Media

The Remedial Investigation indicates that the deterioration and weathering of debris is the likely source of benzo(a)pyrene and total recoverable petroleum hydrocarbons observed in soil and groundwater samples. There is no indication of contamination resulting from the military's use of the site.

## SCOPE AND ROLE OF THE RESPONSE ACTION

The overall remedial strategy for the former Lee Field Naval Air Station is to eliminate unacceptable risks to people and the environment due to the military's past use of the site. There is no evidence that military waste was disposed of at Landfill Area 2 or that it was utilized as a military dump or landfill. Based on the findings of the Remedial Investigations, it is unlikely that contaminants found in site media are related to the military's use of the site.

## SUMMARY OF SITE RISKS

The human health and ecological risk assessments, based on the results of 51 soil samples and 19 groundwater samples, concluded no unacceptable risks to people and the environment from the military's use of the site.

## REMEDIAL ACTION OBJECTIVES

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

## SUMMARY OF REMEDIAL ALTERNATIVES

Development or evaluation of other alternatives was not conducted since the investigation results concluded no unacceptable risk to people or the environment. This means no further action is being recommended for the site,

## EVALUATION OF ALTERNATIVES

There are no unacceptable risks to people or the environment at this site. For this reason, no further action is being recommended for the site. Development or evaluation of other alternatives was not required.

## PREFERRED ALTERNATIVE

There is no Preferred Alternative for Landfill Area 2, and instead No Further Action is being recommended. This recommendation is being made because the Remedial Investigations did not reveal the presence of contamination that would pose an unacceptable risk to people and the environment. Therefore, it satisfies the statutory requirements of the Comprehensive Environmental Response, Compensation, and Liability Act, Section 121(b). The Florida Department of Environment and Protection has reviewed the Remedial Investigation reports and concurs with this recommendation.

## COMMUNITY PARTICIPATION

The Corps is soliciting public comments on this Proposed Plan. The Corps will consider the comments received and will make the final decision concerning the project site. This decision will be presented in a Decision Document. The Corps' responses to public comments will be contained in a **Responsiveness Summary** section of the Decision Document.

The Remedial Investigation reports provide a comprehensive description of the site history, the details of the Remedial Investigations, and the associated risk assessments and their conclusions. These reports and other project documents are available at the reference desk of the Clay County Public Library located at 403 Ferris Street in Green Cove Springs.

Comments on this Proposed Plan will be accepted at a public meeting scheduled for January 28, 2016, at the Green Cove Springs Police Department Community Room, 1001 Idlewild Avenue, Green Cove Springs, FL 32043.

Representatives from the Corps will be present at this meeting to explain this Proposed Plan, listen to concerns, answer questions and accept public comments. Comments may also be submitted by calling (toll free) 866.279.4880, emailing [FUDS.Florida@USACE.army.mil](mailto:FUDS.Florida@USACE.army.mil) or mailing them to U.S. Army Corps of Engineers, Attention: Diana Martuscelli, 701 San Marco Boulevard, Jacksonville, FL 32207. Comments received by 5:00 p.m. on February 29, 2016 will be considered in reaching the final decision. The No Further Action determination can be changed in response to public comments or if new information becomes available.

**CONTACT INFORMATION**

Telephone: 866-279-4880

E-mail: [Florida.FUDS@USACE.army.mil](mailto:Florida.FUDS@USACE.army.mil)

Diana Martuscelli

Project Manager

U.S. Army Corps of Engineers, Jacksonville District

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Jacksonville, FL 32207-8175

**ADMINISTRATIVE RECORD**

Copies of all project documents are available at the Clay County Public Library.

Clay County Public Library

403 Ferris Street

Green Cove Springs, FL 32043

Telephone (904) 284-6315

## REFERENCES

Black and Veatch Special Projects Corporation (Black & Veatch), 2000, ***Final Expanded Site Inspection Report, Reynolds Industrial Park, Green Cove Springs, Clay County, Florida***, June.

Code of Federal Regulations. ***Protection of the Environment. Remedial Investigation/Feasibility Study and Selection of Remedy. Hazardous Substance Response***. [40 CFR 300.430(e)(2)]. December 2005.

Dames & Moore, 1992, ***Preliminary Contamination Evaluation Report, Former U.S. Naval Air Station, Lee Field, Green Cove Springs, Florida, December***.

Environmental Science and Engineering, 1988, ***Final Engineering Report for Confirmation Study at Former U.S. Naval Station, Lee Field, Green Cove Springs, Florida***, March.

Florida Department of Environmental Protection (FDEP), 2014, ***Letter Re: Former Landfill Area 2, Former Lee Field Naval Air Station, Site ID#: COM\_325649; Project ID# 341242, Clay County – Waste Cleanup***, August

Shaw Environmental & Infrastructure, Inc. (Shaw) and TerranearPMC, LLC (Terranear), 2012, ***Final Supplemental Remedial Investigation Report Landfill Area 2 Former Lee Field Naval Air Station Green Cove Springs, Florida***

Shaw Environmental & Infrastructure, Inc. (Shaw), 2005a, ***Final Supplemental Remedial Investigation and First Semiannual Groundwater Monitoring Report, Landfill Areas 1, 2, and 3, Former Lee Field Naval Air Station, Green Cove Springs, Florida***, August.

Shaw Environmental & Infrastructure, Inc. (Shaw), 2005b, ***Final Second Semiannual Groundwater Monitoring Report, Landfill Areas 1, 2, and 3, Former Lee Field Naval Air Station, Green Cove Springs, Florida***, December.

Shaw Environmental & Infrastructure, Inc. (Shaw), 2004a, ***Final Remedial Investigation Report, Landfill Area 2, Former Lee Field Naval Air Station, Green Cove Springs, Florida***, April.

Shaw Environmental & Infrastructure, Inc. (Shaw), 2004b, ***Final Installation-Wide Background Chemical Data Study Report, Former Lee Field Naval Air Station, Green Cove Springs, Florida, Revision 1***, February.

Southern Chemists Laboratories, 1993, ***Letter Report Accompanying Chemical Analyses of Water, Soil, and Sludge Samples***, Southern Chemists Laboratories, Jacksonville, Florida.

U.S. Army Corps of Engineers (USACE), 2004. ***U.S. Army Corps of Engineers Engineer Regulation 200-3-1, Formerly Used Defense Site Program Policy***, May.

U.S. Army Corps of Engineers (USACE), 1986, ***Contamination Evaluation of Former U.S. Naval Station, Lee Field, Green Cove Springs, Florida***, September.

U.S. Environmental Protection Agency (EPA), 1999, ***A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents***, (EPA 540-R-98-031), July.

## 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 decisions regarding a site and is available for public review.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):** 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 the 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 Further Action), the basis for selecting that response action, public comments, responses to comments, and the estimated cost of the response action.

**Formerly Used Defense Sites (FUDS):** A FUDS is a property that was under the jurisdiction of the Secretary of Defense and owned by, leased by, or otherwise possessed by the United States prior to 17 October 1986. USACE is responsible for managing the program to investigate and, if necessary, remediate these sites.

**National Oil and Hazardous Substances Pollution Contingency Plan:** 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 Further 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.

**Preliminary Assessment:** a limited-scope investigation undertaken to determine if a site requires further investigation or assessment for possible emergency response actions.

**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 Remedial Investigation is the process, under CERCLA, taken to determine the nature and extent of the problem, if any, presented by a potential release. The Remedial Investigation emphasizes data collection and site characterization. In cases where the Remedial Investigation does not require a response action and a No Further Action response is well supported, no Feasibility Study is required. The next phase of the CERCLA process is the Proposed Plan.

**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.

**Site Investigation:** an investigation undertaken to determine what hazardous substances are present at a site and if they are being released to the environment.

**Superfund Amendments and Reauthorization Act:** Congress enacted the Superfund Amendments and Reauthorization Act to modify CERCLA in 1986 and reauthorized it in 1990 to provide additional funding for the Superfund program.