



DECISION DOCUMENT  
Landfill Area 1 and Suspected Waste Area 2  
Ramey Air Force Base Formerly Used Defense Site  
Property Number I02PR0879  
Aguadilla, Puerto Rico

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U.S. Army Corps of Engineers Jacksonville District  
701 San Marco Boulevard  
Jacksonville, Florida 32207

August 2018

## EXECUTIVE SUMMARY

The United States Army Corps of Engineers (Corps) is presenting this Decision Document to describe the Department of Defense selected alternative for the Landfill Area 1 and Suspected Waste Area 2 project within the Ramey Air Force Base, Formerly Used Defense Site Project Number I02PR0879\_02 in Aguadilla, Puerto Rico.

The Secretary of Defense designated the Army as the Executive Agent for Formerly Used Defense Sites, regardless of which Department of Defense component previously owned or used the property. The Secretary of the Army further delegated the program management and execution responsibility for Formerly Used Defense Sites to the Corps. The Corps is the lead agency for investigating, reporting, evaluating remedial actions, and implementing remedial actions at the former Ramey Air Force Base.

The Corps conducted a remedial investigation at Landfill Area 1 and Suspected Waste Area 2 to determine if there were environmental impacts associated with the military's use of these two areas. The remedial investigation found evidence of a landfill at Area 1, but there is no evidence of a military landfill at Suspected Waste Area 2. The results of the soil and groundwater sampling indicate there is no unacceptable risk associated with the military's activities at Landfill Area 1. Therefore, no action is necessary at Landfill Area 1 or Suspected Waste Area 2 to protect human health and the environment.

A No Action determination was selected in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S. Code § 9601 *et seq.*, as amended by the Superfund Amendments and Reauthorization Act of 1986, and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 Code of Federal Regulations Part 300 *et seq.*, as amended.

The Commonwealth's regulatory agency, the Puerto Rico Environmental Quality Board provided agreement with the No Action alternative in a letter dated September 19, 2018.

Based on the results of the Remedial Investigation, the selected alternative is protective of human health and the environment and satisfies the statutory requirements of the Comprehensive Environmental Response, Compensation, and Liability Act.

The estimated cost for this decision is \$0.

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## Part 1: Declaration

### 1. Site Name and Location

Site Name: Former Ramey Air Force Base

Formerly Used Defense Site Property Number: I02PR0879

The Puerto Rico Ports Authority owns the land and operates the Rafael Hernández Airport where Landfill Area 1 and Suspected Waste Area 2 are located. The approximate 5.4-acre Landfill Area 1 is in an undeveloped area within the airport property, south of the runway. It consists of the former burial area adjacent to a sinkhole, two flight line drainage ditches, and a small hill. The second area within the airport property identified as Suspected Waste Area 2 comprises 11 acres west of Landfill Area 1. The Ports Authority leases these areas for grazing cattle and growing crops.

### 2. Statement of Basis and Purpose

This Decision Document presents the Selected Remedy for the Landfill Area 1 and Suspected Waste Area 2 within the Ramey Air Force Base Formerly Used Defense Site in Aguadilla, Puerto Rico. The selected remedy was chosen in accordance with the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S. Code § 9601 *et seq.*, as amended by the Superfund Amendments and Reauthorization Act of 1986, and the National Oil and Hazardous Substances Pollution Contingency Plan. The Corps based this decision on the Administrative Record file for this site

The Commonwealth's regulatory agency, the Puerto Rico Environmental Quality Board, did not comment on the Proposed Plan during the public comment period. However, in a letter dated September 19, 2018, they provided their agreement with the No Action alternative.

#### Description of Selected Remedy

The Corps conducted a remedial investigation at Landfill Area 1 and Suspected Waste Area 2 to determine if there were environmental impacts associated with the military's use of these two areas. The investigation found evidence of a landfill at Area 1, but the Suspected Waste Area 2 shows no indication of military use. The risk assessments concluded there is no unacceptable risk to human health or the environment associated with the military's activities at Landfill Area 1. As the lead agency, the Corps determined that no action is necessary to protect human health or the environment. A No Action determination is the appropriate selected alternative for Landfill Area 1 and Suspected Waste Area 2.

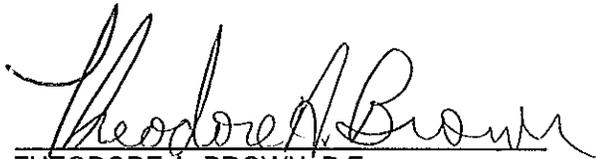
### 3. Statutory Determination

Statutory determinations to comply with the Comprehensive Environmental Response, Compensation and Liability Act §121 are unnecessary. As the lead agency, the Corps has determined that no remedial action is necessary to ensure the protection of human health and the environment. Five Year Reviews are not required.

## 5. Authorizing Signature

This Decision Document presents the No Action determination for Landfill Area 1 and Suspected Waste Area 2 at the former Ramey Air Force Base in Aguadilla, Puerto Rico. The Corps is the lead agency for the Ramey Air Force Base Formerly Used Defense Site and developed this Decision Document in accordance with the Comprehensive Environmental Response, Compensation and Liability Act, as amended by the Superfund Amendments and Reauthorization Act, and the National Oil and Hazardous Substances Pollution Contingency Plan. This Decision Document will be incorporated into the existing Administrative Record File for the former Ramey Air Force Base, which is available for public review at Inter-American University of Puerto Rico Aguadilla Campus Library and the U.S. Army Corps of Engineers' Jacksonville District office. The addition of this Decision Document completes the Administrative Record for Landfill Area 1 and Suspected Waste Area 2. The Administrative Record is protected from additional documents being added. This document, presenting the basis for the No Action determination, is approved by the undersigned, pursuant to Memorandum, CEMP-CED, 9 February 2017, subject: Interim Guidance Document (IGD) for the Formerly Used Defense Sites (FUDS) Decision Document (DD) Staffing and Approval, and to Engineer Regulation 200-3-1, *Formerly Used Defense Sites (FUDS) Program Policy*.

APPROVED:



THEODORE A. BROWN, P.E.  
Director of Regional Business

  
Date

## Part 2: Decision Summary

### 1. Site Name, Location, and Description

The former Ramey Air Force Base comprised 4,357 acres in Aguadilla, Puerto Rico. Much of the former base is privately owned. The Puerto Rico Ports Authority owns the land where Landfill Area 1 and Suspected Waste Area 2 are located which are within the Rafael Hernández Airport property. These non-contiguous areas are undeveloped and primarily used for cattle grazing.



Figure 1: Approximate Location of Former Ramey Air Force Base Landfill Area 1 and Suspected Waste Area 2

### 2. Site History and Enforcement Activities

#### 2.1 Site History

The United States (U.S.) government began acquiring property in 1939 to establish what became known as Ramey Air Force Base. Located north of Aguadilla, it grew to encompass approximately 4,357 acres. In addition to runways, hangars and related structures, it also included medical facilities, a golf course, water treatment plants and housing. Initially known as Borinquén Field, it was an important location during World War II, providing a base for reconnaissance flights to defend the U.S. against German U-boats. It also served as a refueling station and maintenance area for aircraft flying to Europe and Africa. In 1948 it was renamed Ramey Air Force Base and was operated under the Strategic Air Command. Ramey played a critical role during the Cold War for reconnaissance missions and refueling squadrons. B-52 bombers arrived at Ramey in the 1950s, and bomber crews continued to be on alert at Ramey until 1972. By 1973, the Air Force no longer needed the base and deactivated it. The Department of Defense transferred the property to other entities.

The Puerto Rico Ports Authority owns the land and operates the Rafael Hernández Airport where Landfill Area 1 and Suspected Waste Area 2 are located. The deed transferring the property to the Ports Authority specified that the property use is restricted to being an airport, and the Ports Authority is responsible for maintenance of the property.

The approximate 5.4-acre Landfill Area 1 is in an undeveloped area within the airport property, south of the runway. It consists of the former burial area adjacent to a sinkhole, two flight line drainage ditches, and a small hill. The second area within the airport property identified as Suspected Waste Area 2 comprises 11 acres west of Landfill Area 1. The Ports Authority leases out both areas for grazing cattle and growing crops.

## **2.2. Previous Investigations**

Inventory Project Report (1993): The Inventory Project Report evaluated the site and determined its eligibility for the Formerly Used Defense Sites program. The Corps identified two areas that the military may have used as landfills and labeled them as Landfill Area 1 and Suspected Waste Area 2.

Site Investigation (2001): The Corps initiated a Site Investigation in 1996 to determine if there were any impacts to the soil or groundwater associated with the former military landfill and if further investigation of the area was warranted.

Installation-Wide Background Soil Study (2004): The Corps conducted an analysis of the soil across the former Ramey Air Force Base to identify what compounds appeared in the soil away from the landfill area. This approach allowed the Corps to assess background for that area as a means of comparison to the samples collected from the landfill area.

## **2.3 Comprehensive Environmental Response, Compensation and Liability Act Enforcement Activities**

There have been no Comprehensive Environmental Response, Compensation and Liability Act-related enforcement activities at this project site.

## **3. Community Participation**

In accordance with the Comprehensive Environmental Response, Compensation and Liability Act and Department of Defense and U.S. Army regulations, the Corps kept the local community involved throughout the environmental investigation process of Landfill Area 1 and Suspected Waste Area 2. The Corps facilitated community involvement through public notices and meetings, which allowed members of the community to provide comments during the site characterization and alternative selection process.

The Corp prepared a Community Relations Plan for the former Ramey Air Force Base project at the beginning of the Remedial Investigation and revised it periodically including after preparing the Proposed Plan. It will be revised again after the Decision Document is signed.

Prior to the Remedial Investigation fieldwork, the Information Repository was established at the Corps' Jacksonville District Office and at the Inter-American

University of Puerto Rico Aguadilla Campus Library. The Administrative Record file currently contains the Community Relations Plan, Site Investigation, Installation-Wide Background Soil Study, Remedial Investigation Work Plan, Remedial Investigation Report, and Proposed Plan.

Representatives from the Puerto Rico Environmental Quality Board participated in the environmental investigation process through Technical Project Planning meetings, and reviewing and commenting on project plans and reports. Prior to finalizing the Proposed Plan, the Corps contacted the property owner to discuss the current and reasonably anticipated future land use.

The Corps ran a notice in a local newspaper of general circulation at the beginning of the Remedial Investigation (March 1, 2016) to announce the Remedial Investigation, solicit interest in a restoration advisory board, and notify the public of the availability of the administrative record file and the location of the information repository. On February 22, 2018, the Corps placed another notice in a local newspaper of general circulation to announce the Proposed Plan public meeting and public comment period.

The Corps placed the Remedial Investigation Report and Proposed Plan for Landfill Area 1 and Suspected Waste Area 2 in the Inter-American University of Puerto Rico Aguadilla Campus Library on February 22, 2018. The Corps hosted a public meeting March 6, 2018, at the Courtyard hotel in Aguadilla to present the Remedial Investigation results and recommendations and to solicit public comment. Representatives from the Puerto Rico Environmental Quality Board and the Puerto Rico Ports Authority were present for the meeting, but no members of the public attended. The public comment period for the Proposed Plan was held from March 6, 2018 to April 13, 2018. The Corps did not receive any comments during the comment period.

#### **4. Scope and Role of Response Action**

Based on the findings of the Remedial Investigation, no Department of Defense action is necessary to protect public health or the environment, and a No Action determination response is appropriate for Landfill Area 1 and Suspected Waste Area 2. The Puerto Rico Environmental Quality Board did not comment on the Proposed Plan during the public comment period. While no Department of Defense action is necessary, the property owner, the Puerto Rico Ports Authority, is responsible for maintaining the area to prevent further erosion that would expose the buried debris.

#### **5. Site Characteristics**

Landfill Area 1 is a 5.4-acre undeveloped area south of an aircraft apron used to store inoperable aircraft. Suspected Waste Area 2 is an 11-acre undeveloped area within airport property used for cattle grazing.

##### **5.1 Site Overview**

The project sites are grassy with heavy vegetation in some areas. The airport does not use the Landfill Area 1 land, and the nearby sinkhole, unstable nature of the terrain, and the waste materials in the landfill render the site unsuitable for future development. Future site use will likely continue to be cattle grazing, although recreational use is plausible. Therefore, potential human receptors could include airport employees (soil),

farmers (soil), and recreational users (soil). Ecological receptors are also present within the project areas, but no threatened and endangered species are known or suspected to be present at Landfill Area 1 or Suspected Waste Area 2.

## **5.2 Summary of Site Contamination**

The Corps completed the Remedial Investigation in 2017 to determine what compounds attributable to the Department of Defense may be present within Landfill Area 1 and Suspected Waste Area 2. Fieldwork included collecting soil and water samples and digging test pits in the two suspect areas to determine if the Air Force used them as landfills. The investigation also included analyzing photographs from 1961 through 2011 to see how the land was utilized or changed over the years.

The Corps collected 160 samples from the soil, sediment and groundwater, and analyzed them for metals, pesticides, petroleum products, and related materials. The team compared the laboratory results to the Puerto Rico Environmental Quality Board and the United States Environment Protection Agency's standards, and conducted a risk assessment to analyze the potential risk to human health and the environment.

While the analysis detected compounds in the soil within the landfill and in the soil around the landfill, the metals concentrations were at or below the levels detected in background samples. The risk assessments concluded there are no unacceptable risks to human health or the environment attributable to the military associated with Landfill Area 1 or Suspected Waste Area 2.

## **6. Current and Potential Future Site and Resource Uses**

### **6.1 Land Uses**

The Puerto Rico Ports Authority owns the land comprising the project sites. While within airport property, the project locations are undeveloped and utilized primarily for agriculture. The Ports Authority indicated future land use would remain unchanged. The deed transferring the property to the Ports Authority specified that the property use is restricted to being an airport, and the Ports Authority is responsible for maintenance of the property.

### **6.2 Groundwater and Surface Water Use**

There are no surface water bodies or known water wells (drinking, irrigation. etc.) within the boundaries of the project site.

## **7. Summary of Site Risks**

A Baseline Human Health Risk Assessment and a Screening-Level Ecological Risk Assessment were performed as part of the Remedial Investigation to evaluate potential human health risks and ecological risks attributable to the Department of Defense associated with exposure to Landfill Area 1 and Suspected Waste Area 2. The Risk Assessments considered the most conservative approach. These assessments concluded that, based on the scenarios evaluated, there is no unacceptable risk to human health or the environment attributable to the Department of Defense's use of Landfill Area 1 and Suspected Waste Area 2.

## **8. Documentation of Significant Changes**

The Proposed Plan was released for public comment on March 6, 2018. The Proposed Plan identified a No Action determination for Landfill Area 1 and Suspected Waste Area 2. Since no one commented on the Proposed Plan during the public comment period, the Proposed Plan was not changed.

### **Part 3: Responsiveness Summary**

This Responsiveness Summary summarizes all comments for the Proposed Plan received during the comment period from the public and regulator regarding the preferred alternative and general concerns related to the site.

#### **1. Stakeholder Issues and Lead Agency Responses**

The public comment period began on March 6, 2018, and ended April 13, 2018. The Corps hosted a public meeting on March 6, 2018, but no one from the public attended.

##### **1.1 Puerto Rico Environmental Quality Board Comments**

The Puerto Rico Environmental Quality Board did not provide comments at the public meeting nor during the public comment period, which concluded April 13, 2018. However, in a letter dated September 19, 2018, they provided their agreement with the No Action alternative.

##### **1.2 Public Comments**

The Corps did not receive any comments on the Proposed Plan or Preferred Alternative during the public comment period.

#### **2. Technical and Legal Issues**

There are no technical or legal issues.