

***FINAL
ENVIRONMENTAL ASSESSMENT
FOR
BULK FUEL STORAGE FACILITY
CAPE CANAVERAL AIR FORCE STATION,
FLORIDA***



Contract No. FA2521-05-D-0004

Prepared For:

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Cape Canaveral Air Force Station, Florida**

Prepared By:

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FINDING OF NO SIGNIFICANT IMPACT (FONSI) FOR PROPOSED BULK FUEL STORAGE FACILITY AT CAPE CANAVERAL AFS, FLORIDA

Currently, Department of Defense (DoD) aviation refueling requirements at Cape Canaveral Air Force Station (CCAFS) are supported directly from Patrick Air Force Base (PAFB). The annual average Air Force (AF) JP-8 requirement at CCAFS is 600,000 gallons, but there is no fixed, permanent JP-8 storage at CCAFS. The United States Air Force (USAF) proposes to eliminate the need for transport of fuels from PAFB, an approximate distance of 21 to 32 miles depending on Force Protection conditions. The Proposed Action would enhance fueling services for AF, Navy, and National Aeronautic and Space Administration (NASA) activities at CCAFS and achieve several goals:

- 1) Consolidate and streamline fuel services for the affected agencies.
- 2) Remove the liability of transporting fuel along an environmentally sensitive and highly populated route between CCAFS and PAFB.
- 3) Move fuel operations away from buildings at Fuel Storage Area (FSA) #4, as the location is required to provide secure office space.
- 4) Maintain fuel operations in compliance with federal, state, and local environmental requirements.
- 5) Reduce the government's exposure to environmental risks arising from spills or mishandling of the fuel.

Pursuant to the Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA) of 1969 (Public Law 91-190, 42 U.S. Code Sections 4321-4347), as amended, and Air Force Instruction (AFI) 32-7061, *Environmental Impact Analysis Process* (32 CFR Part 989), the USAF conducted an Environmental Assessment (EA) of the potential environmental consequences of the Proposed Action to construct a bulk fuel storage facility for 45th Space Wing (45SW) activities at CCAFS, hereby incorporated by reference. The proposed facility would have receipt and fill capability for jet fuel (JP-8), bio-diesel (DL-2), and gasoline (MUR) fuels and would provide fixed, permanent JP-8 storage for CCAFS and NASA. Accomplishing the Proposed Action would allow for the closing of two smaller fueling stations and would also include the replacement of Underground Storage Tanks (USTs) at the CCAFS fueling station(s) to Aboveground Storage Tanks (ASTs).

Six alternative sites (five locations in the CCAFS Industrial Area and one location at FSA #4) were evaluated for selection based on criteria such as minimum space requirements, proximity to populated areas/facilities, proximity to sensitive species/habitat, safety arc requirements, existing infrastructure, and previous use. All proposed locations, except the Proposed Action location, were eliminated from further analysis because they did not meet the selection criteria.

Alternative 1 (Proposed Action): The AF proposes to construct a bulk fuel storage facility east of Facility 44653 on the west side of Mercury Gemini Road on CCAFS. The Proposed Action includes recovering and transferring serviceable ASTs from the AF and NASA to create a consolidated Contractor-Owned/Contractor-Operated (COCO) Bulk Fuel Facility to support JP-8, DL-2 and MUR fueling requirements for the AF, Navy, and NASA. To achieve this objective, the AF supports leasing the subject property to a contractor. During the process the AF would remove existing USTs, at the AF retail fueling station at CCAFS, and replace them with double-walled ASTs for DL-2 and MUR to support AF and Navy activities at that location.

Alternative 2 (No Action Alternative): Under the No Action Alternative, fuel operations at CCAFS would remain unchanged and fuel would continue to be transported from PAFB and no new bulk fuel facility would be established. This alternative is not recommended.

A review of available environmental data was conducted to assess the potential impacts of the Proposed Action to the human and natural environment. No significant impacts would be expected as a result of the Proposed Action. The following resources are shown to have no or positive impacts: Air Quality, Safety and Occupational Health, and Hazardous Materials/Waste. Impacts to the remaining resources: Air Installation Compatible Use Zone/Land Use, Biological and Cultural Resources, Geology, Soils, and Water Resources, and Socioeconomics are considered to be not significant. Potential impacts and procedures that should be used to ameliorate them include:

Air Installation Compatible Use Zone/Land Use (Including Infrastructure and Transportation, Noise, and Visual/Aesthetics) – Minor short-term interruptions to traffic flow or utilities may occur during construction activities. Slight increased requirements for drinking water, wastewater, and power are anticipated. Underground communications lines have already been established to the site. Stormwater drainage and transportation improvements would be anticipated from the Proposed Action.

Temporary, short-term, construction-related noise impacts would be anticipated. No sensitive noise receptors are located near the Proposed Action site.

Minor visual/aesthetic impacts would be anticipated from the Proposed Action. Site designs would be unattractive, but the tanks are needed to meet fuel requirements, and the property is surrounded by high brush on two sides, a storage facility on the north side, and a roadway on the south.

Air Quality – Fugitive dust (particulate matter (PM₁₀)) and construction equipment emissions are anticipated from Proposed Action activities. It is expected that fugitive dust from ground-disturbing activities could be reduced by 50 percent by application of Best Available Control Technologies. Potential positive impact from elimination of current fuel transport activities. Increase in VOC emissions at CCAFS are anticipated, and the Title V Operating Permit would need to be amended.

Safety and Occupational Health - Health and safety impacts could occur due to construction and operation activities at the sites. Implementation of Site Specific Health and Safety Plans and compliance with OSHA safety regulations would minimize potential impacts. A positive impact of the Proposed Action would be the elimination of the R-11 tankers from fuel transport service across public highways through a high traffic tourist area and environmentally sensitive zone. Accidents in this area have great potential for inflicting environmental damage.

Hazardous Materials/Waste – Removal/disposal of existing USTs would be anticipated to generate hazardous wastes. All wastes would be identified, removed and disposed in accordance with all Federal, State, local, and Installation regulations and directives. No hazardous waste would be disposed of on-site. Positive impacts would be anticipated from tank upgrades and secondary containment.

Biological Resources – Temporary vegetative community impacts would be anticipated. Disturbed shrubs and sod would be replaced with native vegetation. Established policies for exterior lighting and building construction would be followed to limit the potential for impact to sensitive sea turtle species. An osprey nesting platform is located on the Proposed Action site. This platform would be removed prior to construction activities by 45 SW CES/CEV personnel. The area would be surveyed for ground nesting birds and gopher tortoises prior to construction. Any active nests would be allowed to fledge, and gopher tortoises would be relocated.

Cultural Resources – No cultural resources have been identified for the proposed site. There would be no impact to these resources and no mitigation is required.

Geology, Soils, and Water Resources – Local soil impacts from new construction activities are expected to be temporary. Implementation of best management practices during construction of the new facility would ameliorate potential negative impacts on the geology and soils (e.g., sheet flow and gully erosion.) Closure of existing fuel facilities would require removal of USTs. These USTs, along with their piping and dispenser systems would be removed in accordance with FDEP regulations.

Minor impacts to ephemeral surface water (i.e., drainage ditches) may occur. Erosion control during construction/renovation activities would be undertaken with the use of hay bales and silt fencing. Secondary containment for ASTs to be installed in the proposed facility would be required.

Existing stormwater permits would require review to determine if revisions/modifications or transference would be necessary. Review would be in coordination with the St. Johns River Water Management District (SJRWMD). Additionally, the developer would also contact the SJRWMD to coordinate Consumptive Use Permit (CUP) requirements. The existing CUP may need to be reissued or transferred to the developer. Additionally, any filling or other construction that may be necessary in the existing drainage ditches and/or alteration of the stormwater or surface water management system, would require an Environmental Resource Permit (ERP) from SJRWMD. Finally, the CCAFS National Pollutant Discharge Elimination System permit may require modification.

Socioeconomics – Minor positive impacts to short-term employment and housing would be anticipated. A small number of full-time positions may be created to manage and provide maintenance for the developed property.

Based on the finding of impacts incorporated in the EA, a Finding of No Significant Impact (FONSI) is issued contingent on accomplishment of any site or project specific permits, consultations, or mitigations before the start of any action.

This project has been deemed consistent with the Florida Coastal Management Program.

Finding of No Significant Impact

In accordance with the Council on Environmental Quality Regulations implementing the National Environmental Policy Act of 1969 (Public Law 91-190, 42 U.S.C. §§4321-4347), as amended, and 32 CFR 989, 15 Jul 1999, and amended 28 Mar 2001, an assessment of the potential environmental effects has been prepared for the proposed bulk fuel facility at CCAFS, FL. This EA shows that the Proposed Action will have no significant impact on the quality of the human or natural environments of CCAFS and is therefore incorporated into this FONSI. Based upon these findings, I have determined that the Proposed Action does not require preparation of an Environmental Impact Statement.



THOMAS J. BOUTHILLER
Colonel, USAF
Vice Commander

31 Jan 07

Date

LIST OF ACRONYMS AND ABBREVIATIONS

AEI	Air Emissions Inventory
AF	Air Force
AFI	Air Force Instruction
AST	Aboveground Storage Tank
CAA	Clean Air Act
CCAFS	Cape Canaveral Air Force Station
CEQ	Council on Environmental Quality
CES	Civil Engineering Squadron
CEV	Environmental Flight
CFR	Code of Federal Regulations
CO	carbon monoxide
COCO	Contractor-Owned/Contractor-Operated
CWA	Clean Water Act
DESC	Defense Energy Support Center
DFSP	Defense Fuel Supply Point
DL-2	Diesel Fuel
DoD	Department of Defense
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EPA	Environmental Protection Agency
ER	Eastern Range
ERP	Environmental Resources Permit
ESC	Environmental Support Contract

FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FNAI	Florida Natural Areas of Inventory
FSA	Fuel Storage Area
GOCO	Government-Owned/Contractor-Operated
HAP	Hazardous Air Pollutant
IRP	Installation Restoration Program
JP-8	Aviation Jet Fuel
KSC	Kennedy Space Center
Ldn	Day-Night Average Sound Level
MBTA	Migratory Bird Treaty Act
MUR	Unleaded Regular Gasoline
NAAQS	National Ambient Air Quality Standards
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NESHAPs	National Emissions Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NOTU	Naval Ordnance Test Unit
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	ozone
OSHA	Occupational Safety & Health Administration
PAFB	Patrick Air Force Base

Pb	lead
PM ₁₀	Particulates under 10 Microns in diameter
ROI	Region of Influence
SLF	Shuttle Landing Facility
SO ₂	sulfur dioxide
SOPs	Statement of Procedures
SPCC	Spill Prevention Control and Countermeasures
SW	Space Wing
USAF	United States Air Force
U.S.C.	U.S. Code
USDA	U.S. Department of Agriculture
USN	United States Navy
UST	Underground Storage Tank

UNITS OF MEASURE

dB	decibel(s)
mg/m ³	milligram(s) per cubic meter
ppm	part(s) per million

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1.0 INTRODUCTION

This Environmental Assessment (EA) has been prepared in accordance with the requirements of the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations, Environmental Impact Analysis Process (EIAP), as promulgated in Title 32 of the Code of Federal Regulations (CFR) Part 989, and Department of Defense (DoD) Directive 6050. The EA evaluates the potential environmental consequences associated with the construction of a bulk fuel storage facility located east of Facility 44653 on the west side of Mercury Gemini Road on Cape Canaveral Air Force Station (CCAFS), FL. The Proposed Action includes recovering and transferring serviceable Aboveground Storage Tanks (ASTs) from the AF and NASA to create the consolidated Contractor-Owned/Contractor-Operated (COCO) Bulk Fuel Facility to support JP-8, DL-2 and MUR fueling requirements for the AF, Navy, and NASA. In addition, the AF would remove existing Underground Storage Tanks (USTs), at the AF fueling station at CCAFS, and replace them with double-walled ASTs for DL-2 and MUR to support AF and Navy activities at that location. If any contamination is discovered during the removal of the USTs, it will be cleaned up appropriately in accordance with applicable regulations and procedures.

Chapter 1.0 of this document provides background information on CCAFS and describes the purpose and need for the Proposed Action; and identifies the scope of the Proposed Action. A description of the Alternative(s) and No Action Alternative is provided in Chapter 2.0 as well as selected tabular summaries of potential regulatory requirements. Chapter 3.0 describes the existing conditions of specified environmental resources that could be affected by implementation of the Proposed Action. Chapter 4.0 addresses how those resources would be affected by implementation of the Proposed Action and are included in a tabular summary in Chapter 5.0.

1.1 Background

Cape Canaveral Air Force Station is located on the east coast of Florida, occupying the majority of the Canaveral Peninsula, approximately 20 miles north of Patrick Air Force Base (PAFB). The Canaveral Peninsula is a barrier island, 4.5 miles wide at its widest point, located approximately 155 miles south of Jacksonville, 210 miles north of Miami, and approximately 60 miles east of Orlando. CCAFS occupies approximately 15,800 acres, most of which is undeveloped coastal strand/scrub habitat. The northern boundary of CCAFS abuts the Kennedy Space Center (KSC) boundary on the barrier island. The southern boundary abuts Port Canaveral. The Banana River separates CCAFS from KSC. The Atlantic Ocean borders CCAFS along the east. The only natural areas remaining in this region are federally owned lands (*i.e.*, KSC, Canaveral National Seashore and Archie Carr National Wildlife Refuge).



The primary mission of the 45SW is to develop, maintain, operate, and manage the Eastern Range (ER), including CCAFS. The mission of CCAFS is to provide launch and tracking facilities, safety procedures, and test data to a variety of users. Major users at CCAFS include the United States Air Force (USAF), the United States Navy (USN), the National Aeronautics and Space Administration (NASA), and commercial launch companies.

Historically, PAFB has provided bulk storage at CCAFS in R-11s and C-300 in Fuel Storage Area #4 (FSA #4). FSA #4 is less than a mile from NASA's bulk fuel storage at CCAFS in FSA#1. Both fuel facilities are located on Phillips Parkway, a main access road to CCAFS.

The current DoD aviation refueling requirements at CCAFS are supported directly from PAFB. The United States Air Force (AF) does not have fixed permanent JP-8 storage at CCAFS. Average annual AF JP-8 requirement at CCAFS is 600,000 gallons. R-11 refuelers are required to travel approximately 32 miles from PAFB to CCAFS to perform refueling operations. The bulk JP-8 is in support of military aircraft that fly in to CCAFS primarily as part of NASA space launches. When Force Protection is raised above Bravo level, the R-11s transporting fuel from PAFB to CCAFS have to detour around Merritt Island and use Interstate 95 to get from PAFB to CCAFS, which extends the commuting distance.

In addition to JP-8, the AF annually consumes approximately 400,000 gallons of bulk diesel fuel (DL-2) and 20,000 gallons of bulk motor gas unleaded regular (MUR) at CCAFS. The bulk DL-2 fuel is transported from PAFB by a dedicated 6,000 gallon R-11 refueler and a C-301 truck (1,200 gallon capacity), and the MUR by a C-300 (1,200 gallon fuel truck). The bulk DL-2 is for equipment and vehicles that cannot drive to the filling station at CCAFS. A large portion of the DL-2 requirement is for generators used in support of NASA and military space launches. At CCAFS, the DL-2 is issued directly into day or operating tanks or transferred to C-300s for temporary storage and ultimate distribution to numerous generators and small storage tanks.

On a temporary basis, one 12,000 gallon JP-8 and one 10,000 gallon DL-2 Bryant tank have been placed at FSA # 4 to help alleviate the bulk fuel storage shortfall and decrease the truck movements from PAFB to CCAFS via State Highway A1A, which runs along the Atlantic Ocean. According to Air Force Space Command, these SCAT tanks will ultimately be moved to other Air Force locations for alternative fuel storage, but would be available to Defense Energy Support Center (DESC) for upgrades to the filling station or the new bulk facility.

Air Force "into vehicle" service is provided from a Government Owned, Contractor Operated (GOCO) Service Station at CCAFS. Average annual issues from this facility are MUR (408,000 gal) and DL-2 (83,000 gal). Re-supply to the



service station is by a DESC direct delivery contract. Vehicles fueled at the facility include AF, Navy and authorized contractors. The majority of vehicles serviced are standard sedan or utility truck size. Service Station storage consists of three USTs: One 15,000 gallon tank in DL-2 service and one each 10,000 and 6,000 gallon tank in MUR service. The Service Station also has an E85 (Ethanol) AST (10,000 gallons). The Service Station is located in the CCAFS industrial area and includes an area of approximately 1.45 acres

NASA's DL-2 and MUR "into vehicle" requirements are provided by COCO operation at KSC portion of CCAFS. On occasion NASA vehicles will refuel at the AF service station. Bulk DL-2 is supplied to NASA under a DESC direct delivery contract and supplemented by the Air Force. Aviation fuel (JP-8) is received by commercial tank trucks originating at either Defense Fuel Supply Point (DFSP) Jacksonville or DFSP Tampa and delivered into NASA storage at FSA #1. NASA JP-8 storage at FSA #1 consists of three 20,000-gallon horizontal, cradle mounted storage tanks. The tanks were constructed in the mid fifties. All three tanks require extensive maintenance and repair. One tank is currently out of service due to severe corrosion problems. Another tank has settled and is now draining away from the water draw off point creating a microbiological growth hazard. It is estimated the tanks will require replacement in the next three years unless major, costly maintenance and repair is performed. Even with a large expenditure of maintenance and repair funds, it is estimated that the tank life can only be extended a maximum of five years. NASA aircraft-refueling requirement is approximately 800,000 gallons annually. Refuelers travel 12 miles from FSA #1 to the Shuttle Landing Facility (SLF) on Merritt Island to perform the aircraft-refueling mission.

The NASA fuel operation is conducted as a GOCO with facility operations and maintenance and alongside aircraft refueling performed by a subcontractor of Space Gateway Support.

The State of Florida has adopted extensive regulations concerning both ASTs as well as USTs. The Storage Tank Regulation Section is part of the Bureau of Petroleum Storage Systems in the Florida Department of Environmental Protection's (FDEP) Division of Waste Management. The FDEP has also been granted authority to administer the UST program for Environmental Protection Agency (EPA). The Florida Regulations for USTs and ASTs are covered in Chapters 62-761 and 62-762 of the Florida Administrative Code (FAC), respectively. Tanks located at the existing fueling stations at CCAFS were installed in 1986. If secondary containment is not provided they will not meet current Florida Regulation 62-761 compliance, which is mandatory by December 31, 2009.



1.2 Purpose Of and Need for Action

The Proposed Action includes the construction of a bulk fuel storage facility at CCAFS. This action would eliminate the need for existing temporary surplus storage of these fuels in SCAT tanks at FSA #4 to meet the current needs of AF and NASA. It would also eliminate the need for transport of DL-2 (Bio-Diesel) and JP-8 (jet fuel) from PAFB to CCAFS in R-11 refuelers, an approximate distance of 32 miles. The proposed storage facility would be a COCO facility and would provide fuel to DoD components (AF and Navy), and NASA activities. Currently, NASA stores bulk quantities of JP-8 at FSA #1 for AF and NASA usage. The bulk facility at FSA #1 was constructed in the fifties and the tanks and containment system require costly maintenance and repairs and quality assurance requirements of JP-8 have been difficult to meet. Construction of the new bulk facility would eliminate the need for JP-8 storage at FSA #1. In addition, the USTs at the existing fuel service station in the Industrial Area at CCAFS would be removed and replaced with ASTs to provide ground fuels to AF and NASA. This facility would continue to be a GOCO facility. Replacement of the USTs at this location is required by December 31, 2009 in accordance with FDEP regulations. The proposed bulk fuel storage facility would have receipt and fill capability for JP-8, DL-2, and MUR (gasoline) fuels and would provide fixed, permanent JP-8 storage for CCAFS and NASA.

The Proposed Action would enhance fueling services for Air Force, Navy, and NASA activities at CCAFS and achieve several goals:

- 1) Consolidate and streamline fuel services for the affected agencies.
- 2) Remove the liability of transporting fuel along an environmentally sensitive and highly populated route between CCAFS and PAFB.
- 3) Move fuel operations away from building FSA #4, as the building is required to provide secure office space.
- 4) Maintain fuel operations in compliance with federal, state, and local environmental requirements.
- 5) Reduce the government's exposure to environmental risks arising from spills or mishandling of the fuel.

The Proposed Action would provide aboveground storage for 100,000 gallons of JP-8 (jet fuel), 30,000 gallons of MUR (gasoline) and 65,000 gallons of DL-2 (Bio-Diesel). There would be parking for six refueling trucks on a paved impervious surface. The site would encompass slightly less than 4 acres. The proposed 144,000 square foot facility would be located east of Facility 44653 on the west side of Mercury Gemini Road, in an existing cleared area adjacent to



the Generator Shop facilities (Figure 1-1) within the Industrial Area of CCAFS. In addition, the existing UST system at the CCAFS fueling station would be properly removed and replaced in accordance with FDEP regulations. This would include removal of existing USTs, piping, and dispenser systems and installation of new ASTs, piping, and dispenser systems at the CCAFS fueling station. Removal and/or replacement of this system is required per FDEP by December 31, 2009.



Bulk Fuel Loading Area (Proposed)

Figure 1-1: Proposed Bulk Fuel Loading Area

1.3 Scope of the Environmental Assessment

This EA evaluates the potential site-specific environmental consequences associated with constructing and operating a new bulk fuel storage facility, the closing of one smaller fueling station, and upgrading existing USTs to ASTs to meet regulatory requirements at CCAFS (Proposed Action) and the No Action Alternative. An Environmental Baseline Survey has been prepared to evaluate health and safety risks associated with the chosen site, evaluate the level of protection necessary to preserve human health and the environment, and identify potential environmental contamination liabilities associated with the Proposed Action site.

This EA was produced using available information to the maximum extent possible. All applicable environmental data necessary was collected to describe current environmental conditions. The following biophysical resources were identified for analysis: Air Installation Compatible Use Zone/Land Use (Including Infrastructure and Transportation, Noise, and Visual/Aesthetics), Air Quality, Safety and Occupational Health, Hazardous Materials/Wastes, Biological and Cultural Resources, Geology, Soil, and Water Resources, and Socioeconomics.

1.4 Agencies Involved in Environmental Analysis

The Florida State Clearinghouse reviews EAs for projects planned at CCAFS pursuant to Gubernatorial Executive Order 95-359; the Coastal Zone Management Act; 16 U.S.C. SS 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. SS 4321, 4331-4335, and 4341-4347. The Florida State Clearinghouse sends copies of the draft EAs to applicable regulatory agencies for review and submits the review comments to CCAFS so that they may be addressed in the final EA.



2.0 DESCRIPTION OF ALTERNATIVES

This Chapter describes the Proposed Action, the No Action Alternative, Alternatives eliminated from further analysis, potential sites eliminated from further analysis, and the potential environmental issues and regulatory requirements associated with the Proposed Action and No Action Alternatives.

Initially, six alternative sites (five locations in the CCAFS Industrial Area and one location at FSA #4) were evaluated for selection based on criteria such as minimum space requirements, proximity to populated areas/facilities, proximity to sensitive species/habitat, safety arc requirements, existing infrastructure, and previous use before being narrowed to the Proposed Action location.

2.1 Alternative 1 – Proposed Action

A location at the eastern edge of the Industrial Area was determined to best meet the selection criteria listed above. The proposed facility would be approximately 144,000 square feet in size and is proposed to be constructed on an approximately four acre site east of Facility 44653 on the west side of Mercury Gemini Road in CCAFS's Industrial Area (Figures 2-1 and 2-2). The site is currently vacant, cleared, and undeveloped (Figure 2-3) and constitutes the Region of Influence (ROI) for the Proposed Action.

The facility would recover and transfer serviceable ASTs from the AF and NASA, creating a consolidated COCO Bulk Fuel Facility to support JP-8, DL-2 and MUR fueling requirements for the AF, Navy, and NASA.

The proposed facility would provide aboveground storage for 100,000 gallons of JP-8 fuel, 10,000 gallons of MUR (gasoline), and 20,000 gallons of DL-2 (Bio-Diesel). The JP-8 storage would be five 20,000 gallon ASTs that have horizontal, steel, single walled tanks. The DL-2 storage would be two 10,000 vaulted above ground fire protected tanks. The MUR storage would be one 10,000 vaulted, above ground fire protected tank. All tanks would have secondary containment. The paved impervious area would encompass slightly less than four acres, and would provide adequate parking for six refueling trucks. The constructed facility would be COCO.

In addition, the existing underground storage tank system at the CCAFS fueling station would be properly removed and replaced with ASTs in accordance with FDEP regulations. This action will include the removal of existing USTs, piping and dispenser systems and the installation of new ASTs and associated piping and dispenser systems at the CCAFS fueling station. The three existing USTs would be replaced with two 10,000 gallon ASTs. One of the ASTs will be available from the AF excess SCAT tank already at CCAFS currently in JP-8 service. The B20/BDI replacement is one 12,000 gallon AST which will be met



by an excess AF 12,000 gallon SCAT tank already at CCAFS currently in DL-2 service.

Under this alternative, the R-11s and C-300s will no longer have to haul fuel from PAFB to CCAFS since fuel will be available from the on-site bulk fuel storage facility, and the NASA bulk JP-8 facility at CCAFS would be closed. Finally, the GOCO fuel station at CCAFS would be upgraded to be in compliance with applicable regulations.

2.2 Alternative 2 – No Action Alternative

Selection of the No Action Alternative would require the AF to continue existing operations as they are now. Fuel would continue to be transported over many miles of public roadways to support missions at CCAFS. This would require the continued usage of inadequate facilities that would compromise environmental compliance in the near future, and impose costly and time-consuming efforts to provide adequate fuel supply to CCAFS and compliance with Florida regulations. For these reasons, the No Action Alternative is not recommended.



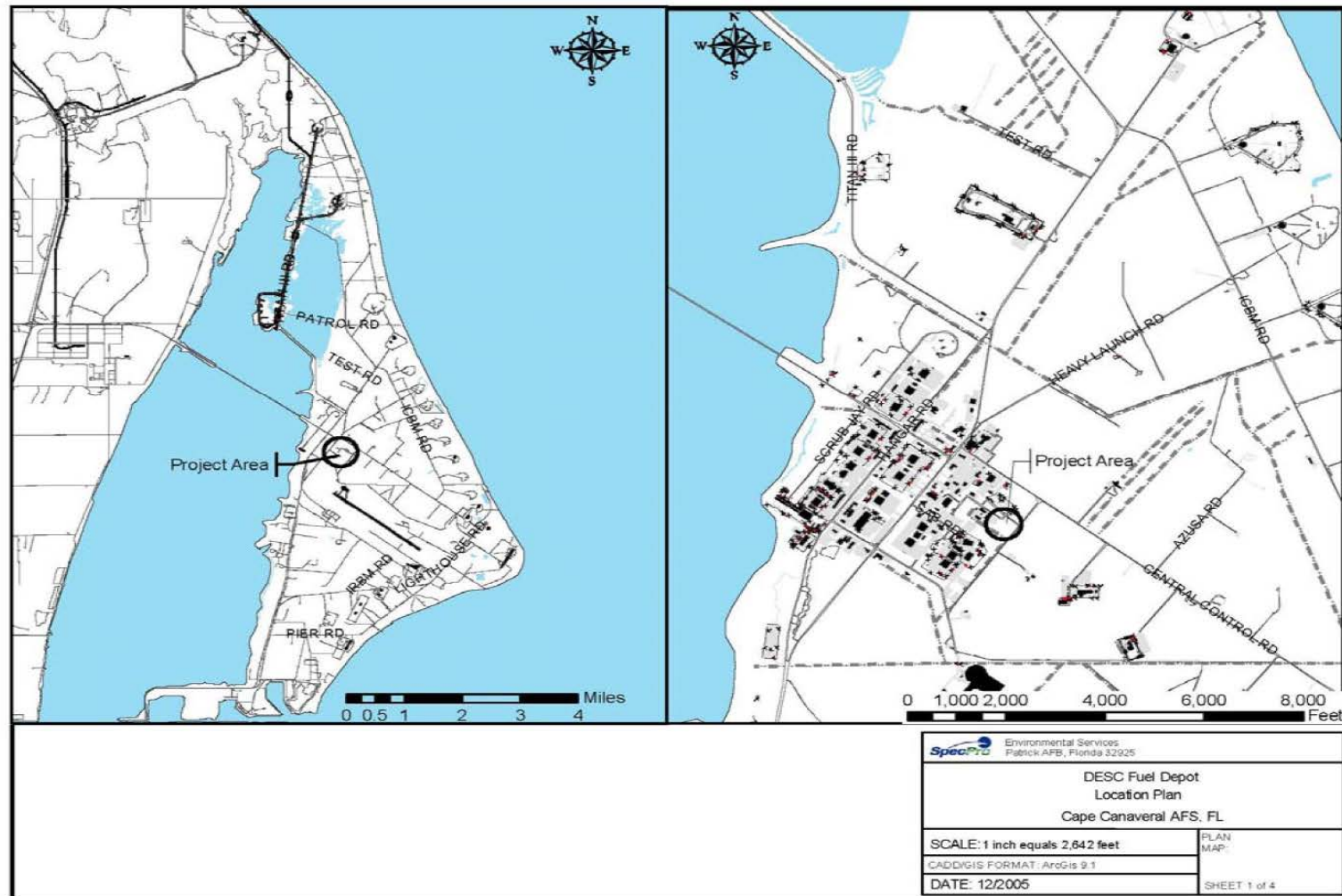


Figure 2-1: DESC Fuel Depot Location Plan



FINAL ENVIRONMENTAL ASSESSMENT
FOR BULK FUEL STORAGE FACILITY
CAPE CANAVERAL AFS, FLORIDA

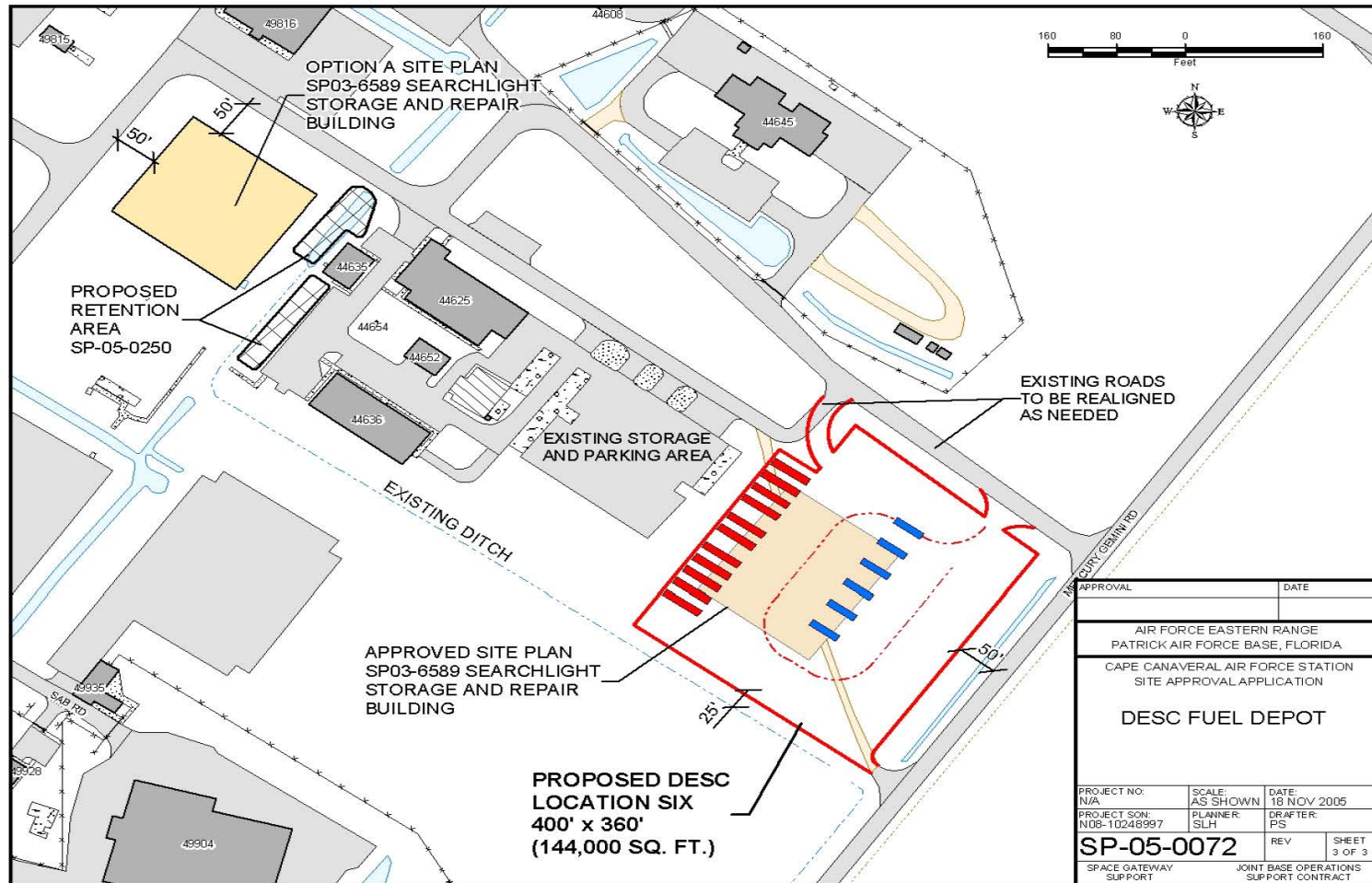


Figure 2-2: Proposed Bulk Fuel Storage Facility Site Plan





Figure 2-3: View of Proposed Action Location

2.3 Alternatives Eliminated from Further Analysis

2.3.1 Contractor-Owned Contractor-Operated Facility Without NASA Fuel Storage

Under this alternative, NASA would continue to provide for their own storage requirements for JP-8. In addition, the AF would construct a COCO bulk fuel storage facility that meets the fueling requirements at CCAFS, and the GOCO fuel station at CCAFS would be upgraded to meet compliance standards. NASA would obtain bulk DL-2 via a DESC delivery contract.

Elimination of the NASA fuel storage requirement would significantly reduce the JP-8 requirements at CCAFS from 1.4 million gallons per year to 600,000 gallons, and the corresponding storage requirements from 100,000 gallons to 80,000 gallons.

Under this alternative, the AF 12,000 gallon and 10,000 gallon Bryant tanks currently used at FSA #4 would be made available for storage requirements.



This alternative is not considered viable because their current JP-8 fuel facility at FSA #1 is in need of costly repairs and maintenance. This facility presents potential safety hazards, compliance issues, and potential hazardous materials/hazardous waste problems, and has therefore been eliminated from further analysis.

2.4 Locations Eliminated from Further Analysis

Six sites were initially identified as potential locations for the Bulk Fuel Storage Facility (Figure 2-4). The following criteria were used to evaluate each site:

- Outside of existing QD arcs.
- Loading system could be bottom loading capable for JP-8 and DL-2.
- Facility would be capable of supporting vehicles with overall dimensions varying approximately 20ft long, 4 ft to 8ft wide and 10ft high.
- Facility lay out shall allow easy access, exit and traffic control.
- Driving surface shall be capable of supporting fuel tankers and refuelers.
- Facility shall be capable of un-interrupted fuel support during Surge Operations with storage capacity of 100,000 gallons of JP-8, and 20,000 gallons of DL-2.
- Sufficient number of storage tanks to ensure fuel quality and settling time for JP-8 and DL-2.
- Adequate energy efficient lighting for 24/7 fuel operations.
- JP-8 facilities shall have filters to meet aviation fuel quality.
- Facility shall adhere to CCAFS exterior architecture plans.
- Facility shall have adequate redundancy to ensure fuel operations during the required hours.
- Adequate auxiliary power source to enable site to be operational 24/7 during power outages and emergency situations.
- Fixed system to provide a means of immediate notification to Base Fire Dept of any emergency 24/7 IAW Fire Protection Code.
- All tanks and other fuel facilities shall meet API standards, National Fire Protection Association Codes, National Electrical Code and all local, state, and federal laws and regulations applicable to fuel facilities of the type utilized.
- Fuel storage tanks shall be ASTs.

All but the Proposed Action location were eliminated because they did not meet these criteria. Furthermore, many of the proposed locations were vegetative areas that included Florida scrub jay habitat. The Florida scrub jay is Federally threatened species. Also, many of the eliminated locations are close to densely populated areas, which would present additional safety hazards from fire and explosion hazards associated with bulk fuel facilities. Two of the sites had existing buildings located on the property that would have to be demolished prior



to construction of the bulk fuel storage facility. For these reasons, the five additional sites were eliminated from further consideration.

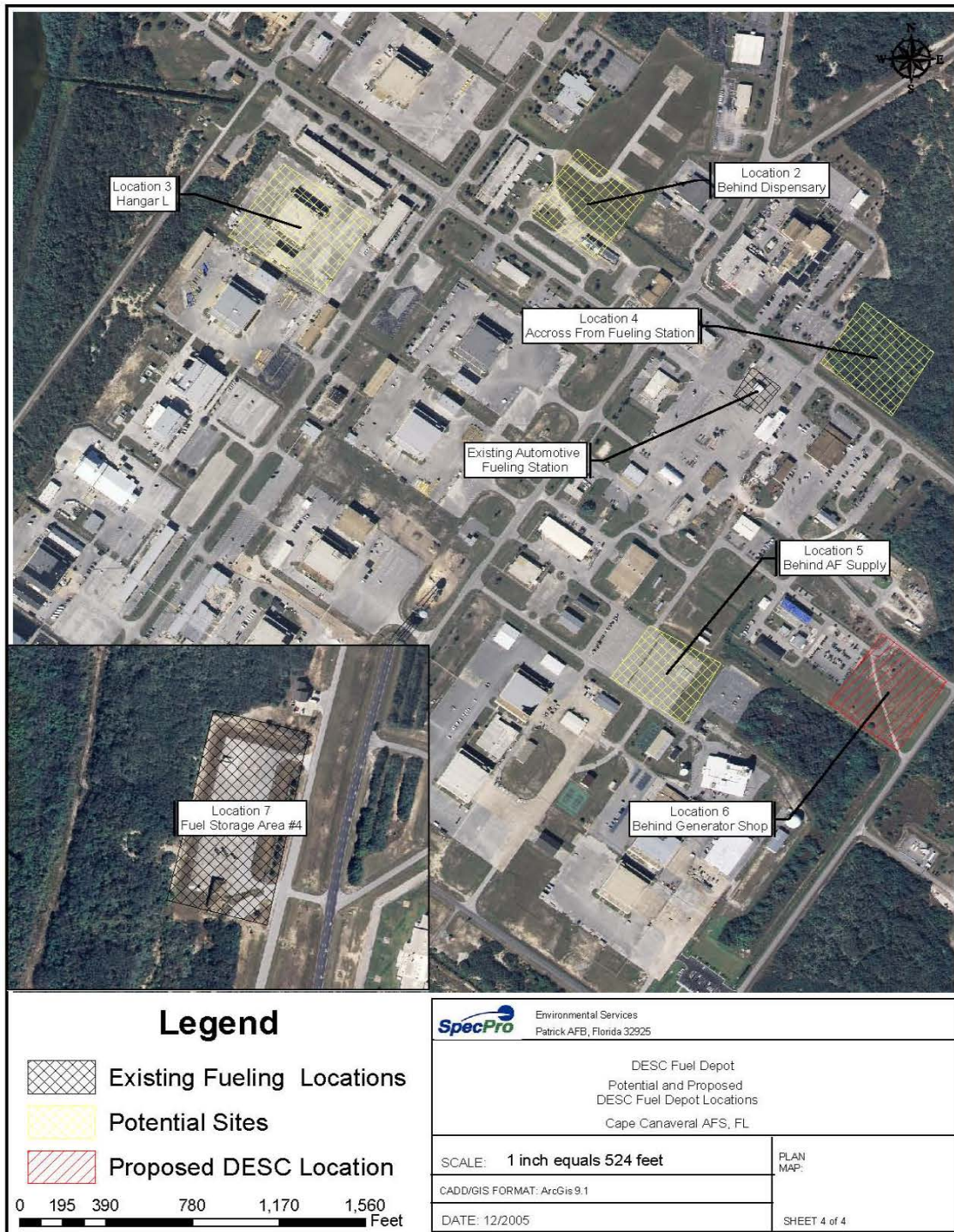


Figure 2-4: Potential DESC Fuel Depot Locations



2.5 Potential Environmental Issues

Potential non-significant impacts from the implementation of the Proposed Action have been identified for air quality, biological resources, hazardous materials/waste, and safety and occupational health. A detailed analysis of the impacts to these resources resulting from the Proposed Action is discussed in Chapter 4.0.

2.5.1 Air Quality

Construction activities associated with the Proposed Action could affect air quality through emissions of exhaust from machinery used in land preparation, and the suspension of dust particles (i.e., particulate matter (PM)) during project activities. Impacts to air quality from the proposed construction of the facility would be mitigable with dust control measures and proper emission controls on mechanical equipment. There will be an increase in VOC emissions from the operation of the bulk fuel storage facility. Tanks exceeding 25,000 gallons will be required to be permitted, and the CCAFS Title V Operating Permit must be revised accordingly.

2.5.2 Biological Resources

No appreciable vegetation exists on the Proposed Action site. The improved/semi-improved grounds consist of level cleared land covered by turf grasses and native weeds with small sandy patches interspersed. Mowed grass is predominant within the boundary of the site. Although no high quality natural communities are located within the boundary of the site; the site is located in potential gopher tortoise habitat (a state listed species of special concern) and an osprey nesting platform is located on the site. Ospreys are protected under the Migratory Bird Treaty Act. Federally listed sea turtle species nest on the nearby beaches, and include the loggerhead, green and leatherback. Exterior lighting must comply with 45 SW Instruction 32-7001, *Exterior Lighting Management*, to reduce the amount of exterior lighting visible from the beach during the sea turtle nesting season and to reduce sea turtle hatchling mortality caused by disorientation.

2.5.3 Health and Safety

Common safety hazards associated with heavy equipment operation and construction activities would exist. Additional hazards such as fire and explosion would also exist during the operation of the facility. All appropriate regulations, including Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926, *Safety and Health Regulations for Construction*, would be followed during project activities to mitigate potential impacts. Notable positive impacts to safety and health (both human and environmental) would be anticipated from the



Proposed Action by eliminating the transfer of fuel along public roads from PAFB to CCAFS.

2.5.4 Hazardous Materials/Waste

The Proposed Action may require or generate small quantities of hazardous materials or wastes. All waste generated by the construction contractor must be managed in accordance with all Federal, State, local, and Installation regulations and directives. All requirements identified in Appendix F of OPLAN 19-14 must be met. The contractor will assume all liability for improper waste disposal. The responsibility for off-site disposal of solid non-hazardous waste also lies with the contractor. Management of hazardous waste must be completed in accordance with 40 CFR 260-279 (O-Plan 19-14). All AF hazardous waste is to remain on the Installation and will be shipped off-site by the AF under their EPA identification number.

The contractor chosen to own and operate the bulk fuel facility would also be required to develop an appropriate Spill Prevention Control and Countermeasures (SPCC) Plan to be implemented at the facility. Potential impacts from hazardous materials and/or waste would be mitigable with implementation of the above measures. Positive impacts enhancing environmental protection would be anticipated from tank upgrades and secondary containment.

2.6 Issues Eliminated from Detailed Analysis

Potential environmental impacts were initially investigated for the following areas of environmental consideration: Air Installation Compatible Use Zone/Land Use (Including Infrastructure and Transportation, Noise, and Visual/Aesthetics), Cultural Resources, Geology, Soils, and Water Resources, and Socioeconomics. No impacts or less than significant impacts were identified for each of these areas and no further analysis was deemed necessary for these particular areas of consideration. The following is a summary of the anticipated impacts for these categories.

2.6.1 Air Installation Compatible Use Zone/Land Use (Including Infrastructure and Transportation, Noise, and Visual/Aesthetics)

Land Use

The Air Force, as a federal landowner, is obligated to act responsibly and effectively in the use of natural resources under their control. The Proposed Action is compatible with the mission of the 45SW and various federal and state acts that require protection of human health and the environment and no impacts would be anticipated.



Noise

Low to moderate levels of noise would be generated by heavy equipment, vehicles and other construction equipment during operations. The decibel (dB) is the accepted standard unit for measuring the level of noise and is generally adjusted to the “A-weighted” logarithmic scale (dBA) to better correspond to the normal human response to different frequencies. Several metrics have been developed for multiple-noise event analysis. The one most commonly used is the LDN (Day - Night Average Sound Level) metric. This is the dBA level averaged over a 24-hour period, with an additional ten-dBA penalty added for noise events occurring between 10 p.m. and 7 a.m. (because noise at night is judged to be more annoying than noise during the day). The threshold noise level for compatible land uses is an LDN of 65 dBA. Areas outside (less than) the 65 dBA LDN contour are compatible with residential and other noise-sensitive land uses. Vehicles associated with the Proposed Action typically have a dBA between 65 and 100, at a distance of 50 feet (USEPA, 1971). No impacts would be anticipated since all work activities of the Proposed Action would be confined to daylight hours to avoid nuisance noise in the evenings.

The use of personal hearing protection devices during the operation of equipment would preclude impacts to personnel. Noise abatement devices on equipment and vehicles further minimize the potential for adverse effects from noise to personnel and wildlife. It is anticipated that the moderate level of noise generated from construction activities would act as a warning mechanism for wildlife within the construction site, and should help minimize impacts to animals inhabiting land affected by the Proposed Action.

Infrastructure and Transportation

Minor short-term interruptions to traffic flow or utilities may occur during construction activities. Slight increased requirements for drinking water, wastewater, and power are anticipated. Communications lines have already been established to the site. Stormwater drainage and ingress/egress road improvements would be anticipated from the Proposed Action.

The AF supports the recycling of Construction and Demolition materials to the largest extent possible. However, if the building contractor is directed to dispose of construction and demolition and/or asbestos containing materials in the CCAFS landfill, all requirements specified in the CCAFS Landfill Operations Plan must be met including the completion of the “Landfill Disposal Verification Form.” For off-site disposal activities, all materials must be secured to prevent safety hazards during transport.



Aesthetics

Minor visual/aesthetic impacts would be anticipated from the Proposed Action. Site designs would be unattractive, but the tanks are needed to meet fuel requirements, and the property is surrounded by high brush on two sides, and a storage facility on the north side.

2.6.2 Cultural Resources

Cultural resources can be generally divided into two broad categories: archaeological sites (either historic or prehistoric), and historic buildings or structures. Federal and Air Force regulations require that the 45SW take into consideration the impact of its activities on cultural resources which have been determined to be or are considered eligible for listing on the National Register of Historic Places (NRHP). Specifically, the National Historic Preservation Act (NHPA) regulates actions at properties listed or eligible for listing on the NRHP.

Numerous studies and excavations have been conducted at CCAFS to gather data and refine the boundaries of the archaeological sites at CCAFS. The most recent archaeological investigation was completed during the summer of 1999. No cultural resources have been identified for the ROI of the Proposed Action, and therefore no impact is anticipated.

2.6.3 Geology, Soils, and Water Resources

Soils at the subject site are mapped (Figure 2-5) as Palm Beach Sand by the U.S. Department of Agriculture's (USDA) Soil Conservation Service. These soils are composed of a mixture of fine and coarse grained sand and muck to a depth of 80 inches. These soils are deep, well drained to excessively drained with high infiltration rates.

Prior to and during construction, erosion and sediment control measures such as siltation fences (Best Management Practices) are required to retain sediment on-site and to prevent violations of state water quality standards. Additionally, erosion and sediment control measures must be initiated as soon as practicable in disturbed portions of the site where construction activities have permanently ceased or are temporary on hold for at least seven days.

An Environmental Resources Permit (ERP) will be required. An ERP serves as multi-purpose permit that covers alteration of uplands, Florida Coastal Zone Management and water quality certification requirements (if a Clean Water Act (CWA) Section 404 permit is required for dredge and fill activities). The ERP Program is implemented jointly by U.S. Army Corps of Engineers, FDEP and local water districts.



An FDEP Construction General Permit must also be sought from the construction contractor because the Proposed Action construction activities will disturb more than one acre. A Notice of Intent for Storm Water Discharges Associated with Construction Activity under a National Pollutant Discharge Elimination System General Permit must also be submitted to FDEP through the 45 CES/CEV office. When all construction activities have been completed, a Notice of Termination must be submitted to FDEP through the CEV office.

The design of secondary containment for tanks (i.e., berms vs. double walled tanks), has not been finalized. If secondary containment berms are constructed, further analysis would be required to determine how the surface water/stormwater flow is affected.

CCAFS is within the Florida Middle East Coast Basin and situated on a barrier island that separates the Banana River from the Atlantic Ocean. This basin contains three major bodies of water: the Banana River to the immediate west, Mosquito Lagoon to the north, and the Indian River to the west, separated from the Banana River by Merritt Island. All three water bodies are estuarine lagoons, with circulation provided mainly by wind-induced currents.

No impact to water resources would be anticipated from the Proposed Action. The surficial water table is generally two to eight feet below land surface depending on ground elevation and recent rainfall history. The surficial aquifer on CCAFS is considered non-potable because of high chloride levels due to saltwater intrusion from adjacent marine/estuarine surface waters. However, the National Pollutant Discharge Elimination System (NPDES) stormwater permit may need to be modified once the design of the secondary containment for the tanks and the impervious areas are finalized.

2.6.4 Socioeconomics

Slight positive impacts would be expected to local socioeconomic conditions due to an increase in work associated with facility construction and operation activities and local purchases of construction materials. However, this impact would be negligible.



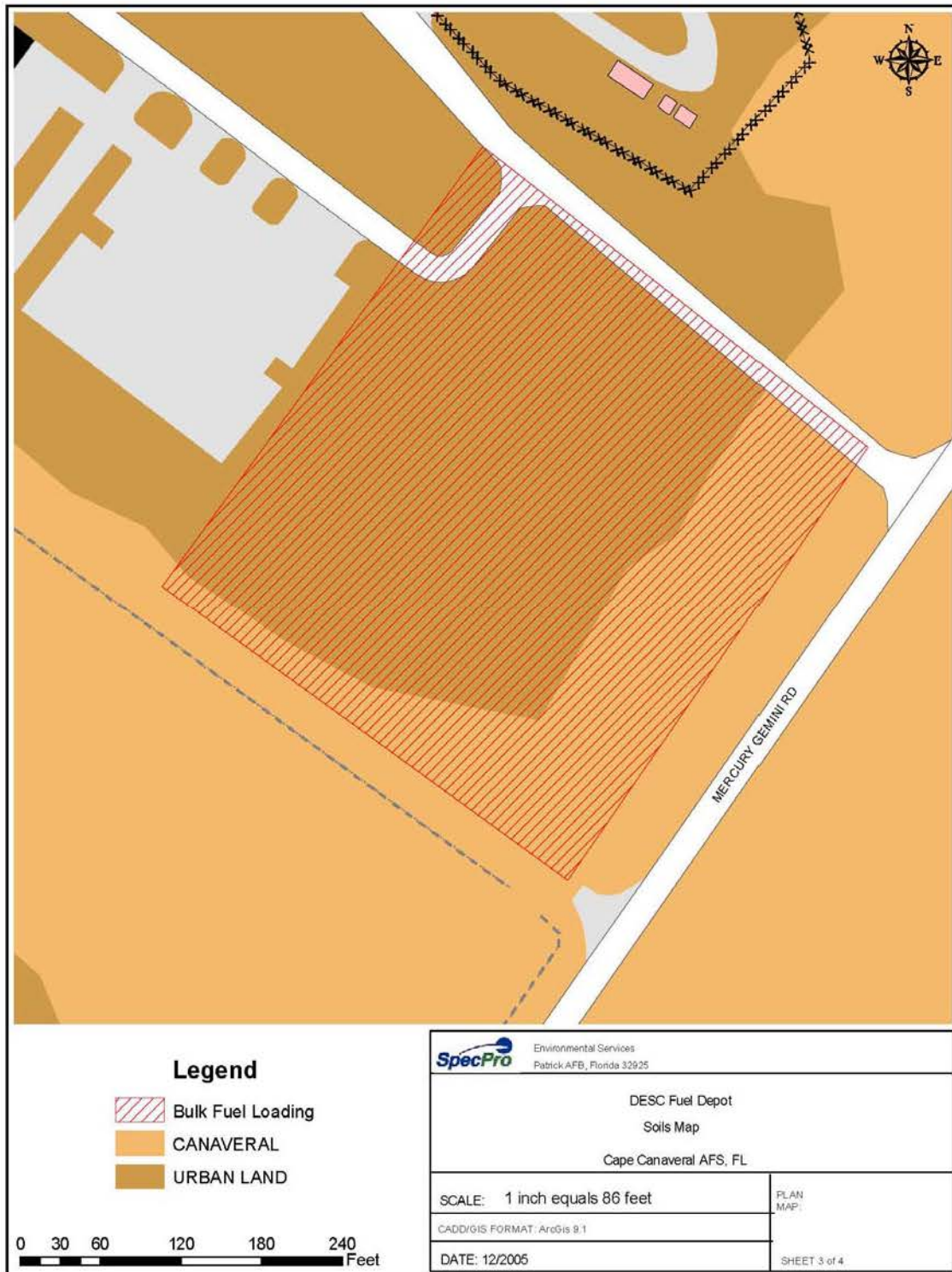


Figure 2-5: Proposed Action Area Soils Map



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3.0 AFFECTED ENVIRONMENT

In compliance with NEPA and CEQ guidelines, this chapter describes the existing environment at the Proposed Action site for the Proposed Action on CCAFS. This information serves as a baseline from which to identify and evaluate potential environmental changes resulting from implementation of the Proposed Action. These resources include the following areas: air quality; biological resources; hazardous materials and waste; and health and safety.

3.1 Air Quality

The Clean Air Act (CAA) was first enacted in 1970 (amended in 1990) to limit the emission of pollutants into the atmosphere to protect human health and the environment from the effects of airborne pollution. The CAA authorizes the EPA to achieve this objective by setting air quality standards and regulating the emission of pollutants. EPA has established emission standards for mobile (e.g., vehicles) and stationary (e.g., storage tanks) sources for pollutant emissions. These controls are implemented in Florida through the EPA and the FDEP.

EPA has established National Ambient Air Quality Standards (NAAQS) for six pollutants (Table 3-1). Regulation of these six pollutants affords the public some protection from toxic air pollutants. The primary responsibility for compliance with these standards rests with FDEP, who must submit a State Implementation Plan (SIP) to achieve and maintain the NAAQS. Pursuant to the SIP, new or modified stationary sources of air emission must undergo pre-construction review to determine whether the facility will interfere with attainment or maintenance of NAAQS. In addition, in areas that do not attain NAAQS, the SIP must contain regulatory strategies to control emissions from existing stationary sources. The Proposed Action areas are located in Brevard and Martin Counties, which are in attainment with the NAAQS.

The CAA also requires EPA to adopt National Emissions Standards for Hazardous Air Pollutants (NESHAPS) that may adversely affect public health or the environment. Much like the NAAQS, NESHAPS compliance is regulated through Statement of Procedures (SOPs) and federal and state-specific guidelines. The Federal Implementation Plan restricts the amount of Hazardous Air Pollutants (HAP) emissions and this varies from state to state.

All 45th Space Wing (45 SW) properties are located in areas that are in attainment for all criteria air pollutants. CCAFS operates a number of air emission sources (boilers, paint spray booths, etc.) that are either permitted or exempt from permit requirements. CCAFS operates under a Title V permit.



Table 3-1: National Ambient Air Quality Standards

Pollutants	Averaging Period	Primary Ambient Air Quality Standards	Secondary Standard
Sulfur Dioxide	3-hour Average 24-hour Average Annual Arithmetic Mean	--- 0.14 ppm (365 µg/m ³) 0.03 ppm (80 µg/m ³)	0.5 ppm (1300 µg/m ³) --- ---
Particulates < 2.5 µm (PM 2.5)	24-hour Average* Annual Arithmetic Mean*	65 µg/m ³ 15 µg/m ³	65 µg/m ³ 15 µg/m ³
Particulates < 10 µm (PM 10)	24-hour Average Annual Arithmetic Mean	150 µg/m ³ 50 µg/m ³	150 µg/m ³ 50 µg/m ³
Carbon Monoxide	1-hour Average 8-hour Average	35 ppm (40 mg/m ³) 9 ppm (10 mg/ m ³)	--- ---
Ozone	1 hour 8 hour*	0.12 ppm (235 µg/m ³) 0.08 ppm (157 µg/m ³)	0.12 ppm (235 µg/m ³) 0.08 ppm (157 µg/m ³)
Nitrogen Dioxide	Annual Arithmetic Mean	0.053 ppm (100 µg/m ³)	0.53 ppm (100 µg/m ³)
Lead	Quarterly Average	1.5 µg/m ³	1.5 µg/m ³

3.2 Biological Resources

The USAF is committed to the long-term management of all natural areas on its installations, as directed by Air Force Instruction (AFI) 32-7064, *Integrated Natural Resources Management*. Long-term management objectives are identified in the 45SW's 2001 Integrated Natural Resources Management Plan (INRMP) with specific land management objectives identified in the Scrub Jay and Sea Turtle Management Plans located in the appendices of the INRMP. The following information was derived from several sources; however, the majority of the detailed information included has been extracted from the 2001 INRMP.

Natural habitats near the subject property (two miles or less) include coastal dunes and beaches, coastal strand, xeric hammock and interdunal swale marsh. These habitats support five threatened and two endangered federally-listed species. Two cabbage palm trees (*Sabal palmetto*) are established on the subject site. The area to the west of the Proposed Action site is industrialized and consists of the CCAFS Industrial Area. No wetlands are located at the site.



3.2.1 Threatened, Endangered and Sensitive Species

As indicated previously, CCAFS contains habitat utilized by several Federal- and State-listed species, as well as others species that are considered sensitive. Although no listed species currently occupy the ROI, the site does contain potential habitat for gopher tortoises, a State-listed Species of Special Concern (Figure 3-1). The threatened species include the loggerhead (*Caretta caretta*) sea turtle, Florida scrub-jay (*Aphelocoma coerulescens*), southeastern beach mouse (*Peromyscus polionotus niveiventris*), Eastern indigo snake (*Drymarchon corais couperi*), and American alligator (*Alligator mississippiensis*). The endangered species include the green (*Chelonia mydas*) and leatherback (*Dermochelys coriacea*) sea turtles.

There is suitable gopher tortoise (*Gopherus polyphemus*) habitat near the subject site. The gopher tortoise is a State-listed Species of Special concern and has been observed within the ruderal grassy areas of the Proposed Action area and is common in the adjacent coastal strand/dune.

Federally listed sea turtle species that nest on the nearby beaches include the loggerhead, green and leatherback. While sea turtles spend much of their lives in the ocean, females come ashore each year to nest. Research has shown that females will avoid highly illuminated beaches and postpone nesting. Artificial lights have also resulted in hatchling mortality as disoriented hatchlings move toward these light sources rather than the ocean. In 1988, in compliance with Section 7 of the Endangered Species Act, the U.S. Air Force developed Light Management Plans (LMPs) for various areas and facilities on CCAFS to protect sea turtles. A Biological Opinion issued by the USFWS on 9 April 1990, and updated on 2 May 2000, requires that all new facilities develop a LMP. In addition, the AF created 45th Space Wing Instruction (SWI) 32-7001, *Exterior Lighting Management*, which implements the Biological Opinion and explains management responsibilities necessary for the 45 SW to remain in compliance with the Biological Opinion.

3.2.2 Wildlife

The Proposed Action area provides typical habitat for ground-nesting birds such as the killdeer (*Charadrius vociferous*) and nighthawk (*Chordeiles minor*). These birds nest on open ground including grass as well as on gravel. They may use a slight depression in the ground to hold the eggs, but they don't line it at all, or line it only with a few stones. Since there is no structure to stand out from its surroundings, the nest often blends into the background. Furthermore, the eggs themselves often look like stones. The nesting-time is generally June and July.



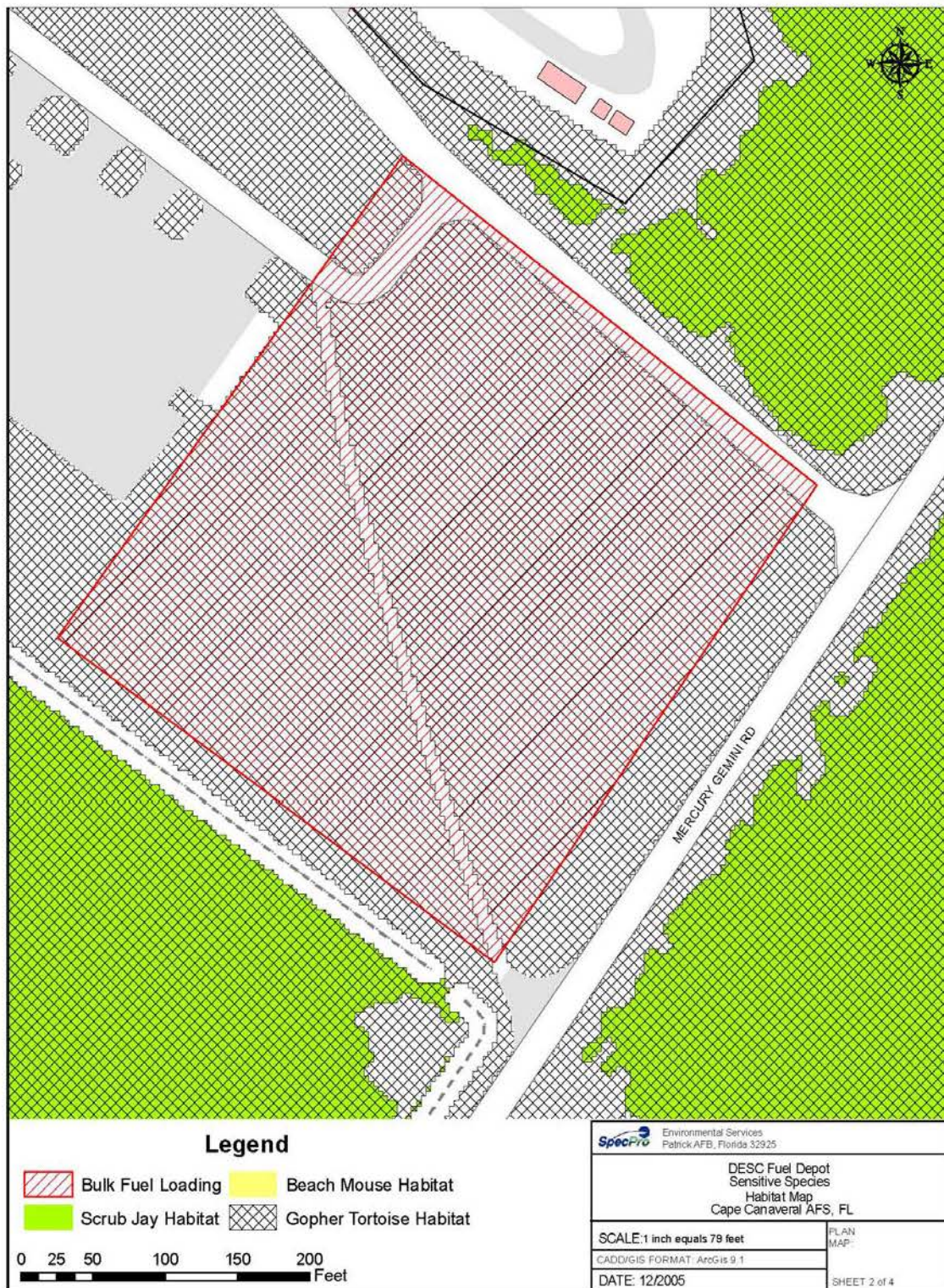


Figure 3-1: Sensitive Species Habitat Map



3.2.3 Migratory Birds

CCAFS is home to numerous birds listed on the FWS migratory bird list, all of which are protected at the federal level by the Migratory Bird Treaty Act (MBTA). All but a few bird species (e.g., pigeons, European starlings, etc.) found on CCAFS are on this list. The MBTA makes it illegal to “pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import,” etc., migratory birds, parts of their bodies, or their eggs or nests. EO 13186, signed in 2001, requires federal agencies to protect migratory birds and their habitats.

CCAFS supports a large population of ospreys. They are large birds, with a wingspan of 4.5-6 feet. They are dark brown above, white below, and have a white head with a prominent black eye stripe. Ospreys are most often found near water, usually nesting near the top of large trees. They have historically nested on bore-sight towers, utility poles, antennas, and gantries throughout CCAFS. The osprey is federally protected by the MBTA, which makes it illegal to destroy a nest without the proper permits. Permits to remove active nests are denied unless the problem posed by the nest is deemed severe and is well documented. Normally, only inactive nests may be destroyed. There is an osprey nesting platform located on the subject site that would require relocation.

3.3 Hazardous Materials and Hazardous Waste

The Installation Restoration Program (IRP) at CCAFS began in 1984 with a Phase I study. Problem areas were identified and record searches were conducted to determine the extent of necessary restoration actions. Since that time, 109 potential sites have been identified for investigation; however there is no soil contamination at the Proposed Action site.

All projects must be designed to limit AF environmental liability. The Pollution Prevention Act of 1990, 42 USC §13101(b), established a national policy to prevent or reduce pollution at the source. Pollution prevention methods should be applied to all potential pollution generation activities. Project design engineers must consider the environmental implications of all projects during the design phase, develop designs that minimize or eliminate environmental liability, and perform a pollution prevention environmental analysis for the project early in the design phase. The analysis should focus on potential pollution that may result from the Proposed Action and must make recommendations that promote pollution prevention measures whenever feasible. Where pollution cannot be prevented, the environmental analysis must make recommendations that promote recycling, energy recovery, treatment, and environmentally safe waste disposal practices. All Proposed Action activities must comply with AFI 32-7086, *Hazard Materials Management*.



3.4 Health and Safety

The discussion of human health and safety includes both workers and the general public. Safety issues include injuries or deaths, which are usually the result of one-time accidents. Injuries include impacts on a human resulting from an exposure to toxic concentrations, radiant heat, or overpressures from accidental releases or explosions (such as flying debris), or accidents resulting from working in confined spaces, and that require medical treatment or hospitalization. Health issues result from activities where people may be impacted over a long period of time rather than immediately.

Various safety hazards associated with heavy equipment operation, transportation of the fuels, and operation of the fuel facilities would exist. All appropriate regulations, including OSHA regulation 29 CFR 1926, Safety and Health Regulations for Construction would be followed during project activities, along with AF and 45SW-specific guidance such as AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program* that summarizes AF requirements for the protection of health and safety.

A specific non-quantifiable risk is incurred by driving refueling vehicles 32 miles one way over busy public highways along a secondary road, A1A, between PAFB and CCAFS. Highway A1A is a beach road with many tourists/pedestrians crossing it to access the beach and Atlantic Ocean. The Atlantic Ocean borders one side of the road, and the Indian River is on the other side. The transfer route is environmentally sensitive and heavily populated. Although refueling vehicles are capable of being driven at highway speeds, they were not designed for this purpose and normally operate at low speeds on aircraft parking ramps. Two R-11 accidents have occurred since 2002 on Highway A1A.

In addition, the exposure of the refuelers on Highway A1A are both a safety threat and a target for potential terrorist attack.



4.0 ENVIRONMENTAL CONSEQUENCES

This chapter describes the potential environmental impacts associated with the activities under the Proposed Action and the No-Action Alternative. The affected environment components are described to provide a context for understanding potential impacts. Components of the affected environment that are of greater concern are described in greater detail.

Eleven broad environmental components were initially considered to provide a context for understanding the potential effects of the Proposed Action and as a basis for assessing the significance of potential impacts. The areas of environmental consideration were air quality, biological resources; cultural resources; hazardous materials and waste; health and safety; infrastructure and transportation; land use; noise; geology, soils and water resources; and socioeconomics. Following a preliminary analysis, it was determined that no impacts or less than significant impacts would be anticipated to Installation compatible use zone/land use; geology, soils, and water resources, cultural resources, and socioeconomics. These environmental areas are not discussed in this Chapter. A brief overview of the anticipated environmental consequences to these resource areas as a result of the Proposed Action is presented in Section 2.6.

Federal, state, and local environmental laws and regulations were reviewed to assist in determining established thresholds for assessing environmental impacts (if any) in fulfillment of NEPA requirements. Proposed activities were evaluated to determine their potential to result in significant environmental consequences using an approach based on the interpretation of significance outlined in the CEQ regulations for implementing the procedural provisions of the NEPA (40 CFR 1500-1508) and 32 CFR 989, *The Environmental Impact Analysis Process*.

Guidelines established by the CEQ (40 CFR 1508.27) specify that significance should be determined in relationship to both context and intensity (severity). The assessment of potential impacts and the determination of their significance are based on the requirements in 40 CFR 1508.27. Three levels of impact are utilized:

- No Impact - No impact is predicted
- Not Significant Impact - An impact is predicted, but the impact does not meet the intensity/context significance criteria for the specific resource
- Significant Impact - An impact is predicted that meets the intensity/context significance criteria for the specific resource



Factors contributing to the intensity or severity of the impact include the following:

- The degree to which the action affects public health or safety;
- Unique characteristics of the geographic area such as proximity to cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas;
- The degree to which effects of the action on the quality of the human environment are likely to be highly uncertain or controversial;
- The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration
- Whether the action is related to other actions with individually insignificant, but cumulatively significant, impacts;
- The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing on the NRHP, or may cause loss or destruction of significant scientific or cultural resources;
- The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the ESA; and
- Whether the action threatens to violate a federal, state, or local law or requirements imposed for environmental protection.

Thresholds for determining impact significance are based on the applicable compliance standard. When feasible, these criteria correspond to federal- or state-recognized criteria, and are determined using the associated standardized methods. In the absence of a compliance standard, the thresholds are based upon a federal- or state-recommended guidance or follow professional standards/best professional judgment.

4.1 Air Quality

4.1.1 Proposed Action

Facility construction activities could affect air quality through emissions from heavy construction machinery and vehicles and the suspension of dust particles (i.e., particulate matter (PM)) during project activities. The bulk of air pollutants generated would be PM and carbon monoxide (CO). Nitrogen oxides (NOx) and



sulfur oxides (SO_x) would also be produced but in relatively small quantities compared to other pollutants.

Minor increases in these pollutants from construction activities would not be sufficient to cause any change in the NAAQS attainment status. Fugitive dust from construction activities could be reduced by 50 percent by application of Best Available Control Technologies such as watering the site.

Although CCAFS is in NAAQS attainment status, CCAFS is currently designated as a major source of air pollution with an active Title V Air Operating Permit. The current CCAFS Title V Air Operating Permit would need to be amended because of the measurable increase in potential emissions associated with the operation of the bulk tank storage facility. The actual emissions that result from these activities are dependent on actual fuel through put, and would be calculated prior to operations commencing. (Personal communication, P. Sanabani) CCAFS quantifies air emissions from all activities and enters the data annually into an Air Emissions Inventory (AEI), in accordance with AFI 32-7040.

The threshold level for fuel storage tanks to be considered insignificant and therefore exempt from permit requirements at CCAFS is 25,000 gallons. Those tanks with capacity exceeding 25,000 gallons will require applicable permits. All activities that are likely to alter the emissions of an air source must be coordinated through the Environmental Support Contractor at CCAFS. FDEP requires that air permits are in place prior to the initiation of construction.

No significant impacts are anticipated to air quality from implementation of the Proposed Action.

4.1.2 No Action Alternative

Under the No Action Alternative, no significant impact would be anticipated since there would be no change to the existing air emissions.

4.2 Biological Resources

4.2.1 Proposed Action

No appreciable vegetation exists on the Proposed Action site. The proposed location is a previously disturbed area that is currently mowed and maintained. No impacts are anticipated to vegetation.

Noise rather than the sight of machines appears to cause disturbance to wildlife. The combination of increased noise levels and human activity would likely cause temporary displacement of some animals that forage, feed, nest, or have dens within a 15-meter radius (or greater for more sensitive species) of noise sources.



Direct mortality of slow-moving or nesting animals could occur because of project actions (e.g., excavation of burrows or removal of nests during clearing), although highly unlikely.

In order to avoid attracting wildlife to the work site, the contractor would keep the construction area, including storage areas, free from accumulation of waste materials and rubbish at all times. All waste materials would be hauled off at the end of each workday and disposed. Upon completion of the work, the contractor would leave the work site in a clean and neat condition, satisfactory to the Contracting Officer.

To reduce impact to ground nesting birds, the Proposed Action area would be surveyed prior to construction. Any nests located in the ROI would be permitted to fledge prior to ground disturbance.

The Proposed Action area would also be surveyed for any gopher tortoises. Any tortoises found would be safely relocated out of the area by 45 CES/CEV personnel.

To reduce adverse impact to threatened and endangered sea turtles from artificial lighting operated on CCAFS, all exterior lighting proposed for this project must be in accordance with the 45SW Instruction 32-7001, *Exterior Lighting Management* (1 April 03).

An osprey nesting platform is located in the Proposed Action area. The osprey (*Pandion haliaetus*) is a species protected by the Migratory Bird Treaty Act. There is no nest on the platform at the present time; however, the pole and platform would require relocation (location to be determined by 45 CES/CEV). It is anticipated that the platform would be relocated prior to the nesting season to avoid construction of a nest. If an inactive nest is on the platform at the time of relocation, the platform and the nest would be moved to a nearby location so that the ospreys could utilize it during the nesting season. If an active nest is constructed before relocation, there would be restrictions and the birds would have to be allowed to fledge; then the nest could be removed and the platform moved to a nearby location.

No significant impacts are anticipated to biological resources.

4.2.2 No Action Alternative

Under the No Action Alternative, no significant impact would be anticipated since there would be no change to the existing ROI.



4.3 Hazardous Materials and Hazardous Waste

4.3.1 Proposed Action

Hazardous materials typically associated with construction activities, such as lubricants and fuels, would be used during the Proposed Action. Any hazardous waste would be identified, removed, and disposed of in accordance with current regulations. Although not anticipated, any additional hazardous materials/waste generated due to the implementation of the Proposed Action would be identified and removed in accordance with existing regulations.

The USTs at the fueling stations are regulated systems and proper notification must be made to FDEP prior to being placed out-of-service in accordance with FAC 62-761. All notifications must be coordinated with the Environmental Support Contract (ESC) Office or with CEV. All inspection records for fuel storage tanks should be turned-over to the AF.

The size and planned contents of each storage tank must be submitted to the 45 SW Storage Tank Program Manager. However, the contractor is responsible for registering the storage tank system at the bulk fuel facility with FDEP on Form 62-761.900 (2). All regulated tanks must be inspected by FDEP before filling with fuel. Records on contents, either loaded into each tank or dispensed from each tank, must be kept by the Fuels Management and Bulk Storage Operations group in accordance with AFI 23-201 and AFI 23-110. This information is a requisite for calculating total air emissions from AF storage tanks (i.e, through put and loading or unloading emissions).

The contractor will be responsible for sampling all wastes to determine whether they are hazardous or non-hazardous. Results of laboratory analyses must be provided to the Contracting Officer. All containers utilized for the management of wastes must be new and meet the Department of Transportation's performance-oriented packaging requirements. All containers must be labeled to accurately reflect the contents. Management of hazardous waste must be completed in accordance with 40 CFR 260-279.

The contractor chosen to own and operate the proposed bulk fuel facility would be required to develop a SPCC Plan for the facility to protect local groundwater resources. Secondary containment is required for all fuel storage tanks, and must be constructed in accordance with FAC 62-761 and 62-762 and AFI 32-7044. Operators of all storage tank system must also comply with the 45 SW *Full Spectrum Threat Response Plan 10-2, Volume 2*.

The soil at the Proposed Action site has not been identified as contaminated; however, if soil contamination is discovered, the appropriate contract monitor and 45 CES/CEV should be contacted to determine the course of action.



4.3.2 No Action Alternative

No significant impacts to hazardous materials and waste would occur from the No Action Alternative since no changes would occur.

4.4 Health and Safety

Health and safety impacts could occur due to construction activities at the sites. Implementation of Site Specific Health and Safety Plans and compliance with OSHA safety regulations would minimize potential impacts.

4.4.1 Proposed Action

The Proposed Action is anticipated to reduce the health and safety risks to 45 SW personnel. Fuel trucks hauling the DL-2 and JP-8 will be designed for over the road traffic and will utilize different roads thereby avoiding the populated Highway A1A. Also, the location of the CCAFS bulk fuel storage facility will help reduce the vulnerability of military targets such as the refuelers since they will no longer be outside the Installation perimeter.

In addition, contracting the fuel storage and issue functions will reduce exposure of the government personnel to environmental, safety and health risks. The contractor will assume responsibility for any spills and any resulting clean-up operations when those spills are caused by the contractor's actions or facilities.

All contractor personnel will be appropriately trained and thoroughly knowledgeable of the principle hazards that may be encountered at the fuel facilities. Personnel will be educated how to prevent or reduce these hazards in accordance with applicable federal, state and local laws and regulations. The contractor will provide a Safety Plan that outlines specific safety procedures including confined space entry, disaster preparedness, fire prevention and protection, hazardous waste operations, emergency response, safety and health standards, and fuel handling operations.

Fuel fire and explosion hazards are an inherent danger with fuel storage facilities. The proper storage and use of flammable liquids can significantly reduce the possibility of accidental fires and injury to personnel. To minimize risk to life and property, the requirements of NFPA 30 & 321, OAR 473-004-0720 and OSHA Standard 1910.106 should be implemented.

No significant impacts from the Proposed Action activities are anticipated for hazardous materials/hazardous waste.

4.4.2 No Action Alternative

No significant impacts to health and safety would occur from the No Action Alternative since no changes would occur; however, continued use of public



roadways for fuel transfer from PAFB to CCAFS would increase the odds of future environmental damage.

4.5 Cumulative Impacts

A “cumulative impact” is an impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time. For the bulk fuel storage construction site, there are no past, present, or foreseeable projects that cause cumulative impacts in these areas. The following proposed projects identified by SGS Master Planning were considered in the cumulative impacts analysis for the bulk fuel storage facility on CCAFS:

Project 1 – Construction of a new Eastern Processing Facility (EPF) to support processing of National Reconnaissance Office (NRO) payloads. Construction started in 2006. This facility is will be located on the corner of Samuel C. Phillips Parkway and Lighthouse Road, and will result in the removal of approximately 45 acres of oak scrub vegetation with no opportunity for restoration.

Project 2 – Construction of a new substation to provide an adequate and reliable supply of electricity for the EPF. Construction is planned for the year 2007. This facility is proposed on the west side of Samuel C. Phillips Parkway within the vicinity of the EPF and will result in the removal of 2-3 acres of oak scrub.

Project 3 – Construction of a new Satellite Operations Support Facility to support technical operations. Construction is planned for the year 2006. The project consists of constructing a new two-story, 25,500 ft building to house approximately 180 USAF and DoD contractor personnel who will perform time-critical data collection/reduction, anomaly resolution, computer simulation, technical data processing, quality control functions, logistic accounting, aerospace engineering, safety engineering, and security management of these multiple programs. The facility is proposed just southwest of Facility 55893 at Area 59 within the close proximity of the Satellite Processing Area on CCAFS. The proposed action also includes dismantling and removal of one modular building located southeast of the proposed action area. The proposed location would occupy the northwest corner of an existing parking lot and would require the removal of approximately 0.5 acres of scrub habitat.

Project 4 – Construction a new Administrative Campus Area to consolidate Navy and Air Force personnel into a central location. A construction date has not yet been set. The project consists of four administrative buildings with



associated parking lots, a pavilion and retention areas. The facility will be located 100' south of Pier Road at Facility 74100 and northwest of Facility 1125. The entire campus area will result in the loss of approximately 50 acres of overgrown oak scrub with no opportunity for restoration.

While the potential environmental impacts of these three projects have not been fully analyzed, a preliminary evaluation of these projects suggests that potential cumulative adverse impacts would occur for biological resources. Project 1 would result in the permanent loss of up to 45 acres of scrub jay habitat, Project 2 up to three acres of habitat, Project 3 up to 0.5 acres of habitat and Project 4 50 acres of potential scrub jay habitat.

A preliminary evaluation of these projects suggests that potential cumulative adverse impacts would occur for biological resources. Projects 1-3 would result in the permanent loss of up to 53 acres of suitable scrub jay habitat. Project 4 would result in the loss of 50 acres of potential (currently overgrown) scrub jay habitat. However, the Proposed Action is not anticipated to have any impacts to biological resources; therefore, would not contribute any cumulative impacts that may be incurred from the implementation of these projects.

4.6 Energy Requirements and Conservation Potential

Energy requirements to support the Proposed Action would not be significantly greater than that utilized by the AF and contractors to carry out current activities. Existing energy sources are considered adequate to meet the requirements of the Proposed Action.

4.7 Natural or Depletable Resource Requirements and Conservation Potential

Diesel and unleaded fuels and engine oil would be required to power project equipment. Although the operation of bulk fuel storage facility would utilize natural/depletable resources, the requirements for these products are not new.

4.8 Irreversible or Irretrievable Commitment of Resources

Although the Proposed Action would result in some irreversible and irretrievable commitment of resources such as fuel and labor, this commitment of resources is not significantly different from that necessary to support current mission activities taking place on 45SW-managed lands.

4.9 Adverse Environmental Effects that Cannot be Avoided

Adverse environmental effects that cannot be avoided include temporary, intermittent emissions of fugitive dust and exhaust products; temporary



displacement of wildlife during construction due to noise and project activities; loss of habitat for T&E species and SSC; and sediment runoff into waterbodies. However, through implementation of the impact minimization measures described within this document, these effects are considered a less than significant level.

4.10 Relationship Between Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity

The Proposed Action would eliminate the availability of small parcels of land. The Proposed Action would be undertaken in accordance with the CCAFS General Plan (AF, 2002) that serves as a management tool to aid in making operational support decisions by incorporating the concept of comprehensive planning.

4.11 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Environmental Justice analysis need be applied only to adverse environmental impacts (AF, 1997). Based on preliminary guidance provided by the Federal Interagency Working Group on Environmental Justice, adverse may be defined as "having a deleterious effect on human health or the environment that is significant, unacceptable, or above generally accepted norms." Adverse human health effects include bodily impairment, infirmity, illness, or death. Adverse environmental effects may include ecological, cultural, human health, economic, or social impacts when interrelated to impacts on the natural or physical environment. The Proposed Action areas are not located adjacent to minority populations or low-income population centers, and indirect impacts to such communities located in the surrounding areas were not identified during the analysis of the Proposed Action; therefore, the Proposed Action would not result in disproportionately high or adverse human health or environmental effects on minority or low-income populations.



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5.0 CONCLUSION

The AF proposes to enhance fueling services for AF, Navy, and NASA activities at CCAFS by recovering and transferring serviceable ASTs from the AF and NASA to create a consolidated Contractor-Owned/Contractor-Operated (COCO) Bulk Fuel Facility to support JP-8, DL-2 and MUR fueling requirements. During the process the AF would remove existing USTs, at the AF fueling station at CCAFS, and replace them with ASTs for DL-2 and MUR to support AF and Navy activities at that location. No significant environmental impacts were identified that would require the completion of an Environmental Impact Statement. However, some less than significant and beneficial impacts were identified and are summarized below in Table 5-1, along with measures to minimize any impacts and applicable regulatory guidance.

Table 5-1: Environmental Assessment Summary Matrix

Resource Category	Potential/Known Impact(s)	Minimization Measure(s) and Applicable Guidance
Air Quality	Short term impacts to air quality from particulate matter, CO, SO ₂ and NO _x	Periodically water construction site and restrict vehicle speeds for dust control.
Air Quality	VOC emissions from operations	Amend Title V Operating Permit as required
Biological Resources	Direct impacts to native plant communities, T&E animals, and SSC	Survey and identify T&E animals and SSC and native habitats prior to activities. Stake off all areas of avoidance.
Biological Resources	Impacts to Sea Turtles	Adherence to 45 SW Instruction 32-7001, <i>Exterior Lighting Management</i> and development of a Light Management Plan for the Bulk Fuel facility.
Biological Resources	Impacts to Gopher Tortoises	Proposed Action area would be surveyed prior to construction for gopher tortoises. Any tortoises in the ROI would be safely relocated out of the area by 45 CES/CEV personnel.
Biological Resources	Potential disturbance of birds protected by the MBTA and ESA	Where possible, avoid work during nesting season in areas where nests are found. Osprey nesting platform would be relocated prior to nesting season. For all other birds including ground nesting birds, young would be allowed to fledge prior to construction.
Cultural Resources	Degradation of unknown/undiscovered archeological resources	Cease project activities if human remains are unearthed and notify archeologist if artifacts are found.
Hazardous Materials/Waste	Close-out of USTs and installation of ASTs	Adherence to FAC 62-761 and 62-762 & coordination with 45 SW Storage Tank Program Manager
Hazardous Materials/Waste	Potential hazardous materials/waste spills	Development of a SPCC to protect environmental resources
Health and Safety	Health and Safety issues during construction and operation of facilities	Adherence to OSHA regulation 29 CFR 1926, Safety and Health Regulations for Construction; develop a Site Safety Plan; implementation of NFPA 30 & 321, OAR 473-004-0720 and OSHA Standard 1910.106
Infrastructure and Transportation	Potential damage to underground utilities from heavy equipment	Obtain dig permit prior to ground disturbance.
Noise	Short-term noise impacts to workers and surrounding personnel	Use administrative or engineering controls and PPE where necessary.



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7.0 List of Preparers

Larry W. Blackwell
Director, Environmental Services
M.A., Human Relations, Louisiana Tech University, 1988
BFA, Advertising, Louisiana Tech University, 1971

Crystal M. Bailey
Staff Environmental Scientist
SpecPro, Inc.
B.S., Environmental Agriscience, Tennessee Technological University, 2003

Susan Pearsall
Senior Environmental Scientist
M.S., Biology, University of Alabama in Huntsville, 1999
B.S., Zoology, Auburn University, 1993

Kyle A. Russell
Staff Environmental Scientist
SpecPro, Inc.
B.S., Environmental Agriscience, Tennessee Technological University, 2004

Jeffery H. Scott, Ph.D.
Consulting Biologist
Ph.D., Aquatic Ecology/Limnology, Auburn University, 1990
M.S., Biology, Jacksonville State University, 1982
B.S., Biology, Jacksonville State University, 1977



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AGENCY CONSULTATIONS



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45th CES/CEVP

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P. 2



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Colleen M. Castille
Secretary

September 26, 2006

Ms. Angy L. Chambers
Department of the Air Force
45 CES/CEVP
1224 Jupiter Street, MS 9125
Patrick AFB, FL 32925-3343

RE: Department of the Air Force – Draft Environmental Assessment for Proposed Bulk Fuel Storage Facility at Cape Canaveral Air Force Station – Brevard County, Florida.

SAI # FL200608012650C

Dear Ms. Chambers:

The Florida State Clearinghouse, pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has coordinated a review of the referenced Draft Environmental Assessment (DEA).

The St. Johns River Water Management District (SJRWMD) states that an environmental resource permit (ERP) will be required for the proposed activities. Issues that should be considered in the design and permitting of the facility include water quality, resources, and wildlife. The applicant will be required to demonstrate during the permit application review process that any direct and secondary impacts to wetlands and wildlife have been avoided or minimized. Unavoidable impacts will require mitigation in accordance with the Unified Mitigation Assessment Method found in Chapter 62-345, *Florida Administrative Code*, and compliance with the environmental review criteria in Chapter 12 of the SJRWMD Applicant's Handbook. SJRWMD advises that all required ERP permits must be issued prior to any clearing or other construction activities within a project area. Please contact Ms. Susan Moor, Supervising Regulatory Scientist, in the Palm Bay Service Center at (321) 676-6626 or smoor@sjrwmd.com for further information and assistance.

Based on the information contained in the DEA and the enclosed state agency comments, the state has determined that, at this stage, the proposed federal activities are consistent with the Florida Coastal Management Program (FCMP). The agency must, however, address the issues identified by our reviewing agencies prior to project implementation. The state's continued concurrence with the project will be based, in part, on the adequate resolution

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FINAL ENVIRONMENTAL ASSESSMENT
FOR BULK FUEL STORAGE FACILITY
CAPE CANAVERAL AFS, FLORIDA

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45th CES/CEVP

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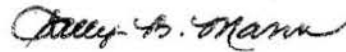
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Ms. Angy Chambers
September 26, 2006
Page 2 of 2

of issues identified during this and subsequent reviews. The state's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting stage.

Thank you for the opportunity to review the proposed project. Should you have any questions regarding this letter, please contact Ms. Suzanne E. Ray at (850) 245-2172.

Sincerely,



Sally B. Mann, Director
Office of Intergovernmental Programs

SBM/ser
Enclosures

cc: Geoff Sample, SJRWMD



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Florida

Department of Environmental Protection

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Project Information	
Project:	FL200608012650C
Comments Due:	09/04/2006
Letter Due:	09/30/2006
Description:	DEPARTMENT OF THE AIR FORCE - DRAFT ENVIRONMENTAL ASSESSMENT FOR PROPOSED BULK FUEL STORAGE FACILITY AT CAPE CANAVERAL AIR FORCE STATION - BREVARD COUNTY, FLORIDA.
Keywords:	USAF - PROPOSED BULK FUEL STORAGE FACILITY AT CAPE CANAVERAL AFS - BREVARD CO.
CFDA #:	12.200
Agency Comments:	
E. CENTRAL FL RPC - EAST CENTRAL FLORIDA REGIONAL PLANNING COUNCIL	
The proposed project, as presented for review and when considered in its entirety, is consistent with the adopted Goals, Policies and Objectives of the East Central Florida Regional Planning Council.	
BREVARD -	
COMMUNITY AFFAIRS - FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS	
STATE - FLORIDA DEPARTMENT OF STATE	
No Comments Received	
ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	
The Department notes that it has a Title V (EPA Major Source) renewal application for the Cape Canaveral Air Force Station, which includes a new 28,000 gallon storage tank. Title V permits have to be renewed every five years.	
ST. JOHNS RIVER WMD - ST. JOHNS RIVER WATER MANAGEMENT DISTRICT	
SJRWMD staff notes that fuel is currently supplied to Cape Canaveral Air Force Station by Patrick Air Force Base. The proposed facility would reduce liability and environmental risks arising from the transportation of fuels 21 to 32 miles. An environmental resource permit (ERP) will be required for the proposed activities. Issues that should be considered in the design and permitting of the facility include water quality, resources, and wildlife. The applicant will be required to demonstrate during the permit application review process that any direct and secondary impacts to wetlands and wildlife have been avoided or minimized. Unavoidable impacts will require mitigation in accordance with the Unified Mitigation Assessment Method found in Chapter 62-345, Florida Administrative Code, and compliance with the environmental review criteria in Chapter 12 of the SJRWMD Applicant's Handbook. Please also note that all required ERP permits must be issued prior to any clearing or other construction activities within a project area. Please contact Ms. Susan Moor, Supervising Regulatory Scientist, in the Palm Bay Service Center at (321) 676-6626 or smoor@sjrwmd.com for further information and assistance.	

For more information please contact the Clearinghouse Office at:

3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

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