DOE/EA-1711

FINAL
ENVIRONMENTAL ASSESSMENT

FOR

SAFT AMERICA, INC. ELECTRIC DRIVE VEHICLE BATTERY AND COMPONENT MANUFACTURING INITIATIVE APPLICATION, JACKSONVILLE, FL

U.S. Department of Energy
National Energy Technology Laboratory

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COVER SHEET

RESPONSIBLE AGENCY: U.S. Department of Energy (DOE)

TITLE: *Final Environmental Assessment for Saft America, Inc. Electric Drive Vehicle Battery and Component Manufacturing Initiative Application, Jacksonville, FL*

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Abstract: DOE prepared this EA to evaluate the potential environmental consequences of providing an *American Recovery and Reinvestment Act of 2009* (Recovery Act; Public Law 111-5, 123 Stat. 115) grant to Saft America, Inc., Jacksonville Plant to construct and operate a high-volume manufacturing plant to build advanced lithium-ion cells and batteries for military hybrid vehicles, aviation, smart grid support, broadband backup power, and energy storage for renewable energy. DOE's Proposed Action is to provide $95.5 million in financial assistance in a cost-sharing arrangement with the project proponent, Saft America Inc., Jacksonville Plant. The total cost of the proposed project is estimated at $191 million. Saft America's facility would be built at the Cecil Commerce Center, Jacksonville, Duval County, Florida. This EA evaluates 14 resource areas and identifies no significant adverse impacts for the proposed project. Beneficial impacts to the nation's air quality and transportation could be realized from implementation of the proposed project. In addition, minor beneficial socioeconomic impacts would occur from increased employment opportunities and spending in the local economy.

Availability: A Notice of Availability was placed in the *Florida Times Union* on December 13, 14, and 15, 2009. This EA was made available for public review from December 13, 2009 through January 12, 2010 at the following public library:

Jacksonville Public Library
303 N. Laura Street
Jacksonville, FL 32202
(904) 630-2665

This EA can be accessed from DOE's National Energy Technology Laboratory web site at http://www.netl.doe.gov/publications/others/nepa/ea.html.

ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
CFR	*Code of Federal Regulations*
DOE	U.S. Department of Energy (also called the Department)
EA	environmental assessment
EPA	U.S. Environmental Protection Agency
ISO	International Organization for Standardization
LEED	Leadership in Energy and Environmental Design
LiPF6	lithium hexafluorophosphate
NAAQS	National Ambient Air Quality Standards
NEPA	*National Environmental Policy Act*, as amended
NMP	N-methylpyrrolidone
RCRA	*Resource Conservation and Recovery Act*
ROI	region of influence
Saft	Saft America, Inc.
Stat.	*United States Statute at Large*
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service

Note: Numbers in this EA generally have been rounded to two or three significant figures. Therefore, some total values might not equal the actual sums of the values.

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SUMMARY

The U.S. Department of Energy proposes to provide partial funding to Saft America, Inc., Jacksonville Plant to construct and operate a high-volume manufacturing plant to build advanced lithium-ion cells and batteries for military hybrid vehicles, aviation, smart grid support, broadband backup power, and energy storage for renewable energy. The U.S. Department of Energy would provide $95.5 million in financial assistance in a cost-sharing arrangement with the project proponent, Saft America Inc., Jacksonville Plant. The total cost of the proposed project is estimated at $191 million. The new approximately 235,000-square-foot facility would be built on about 13 acres in the Cecil Commerce Center in Jacksonville, Florida. Saft America, Inc. would employ approximately 100 workers when the facility opens and a total of 279 workers over the next 6 years. The facility would contribute to President Obama's commitment to accelerate the development of United States manufacturing capacity for batteries and electric drive components as well as the deployment of electric drive vehicles, helping to establish American leadership in creating the next generation of advanced vehicles.

The Cecil Commerce Center is part of a former Naval Air Station, which was closed during Base Realignment and Closure activities in the 1990s. The Naval Air Station Cecil Field has been redeveloped and the immediate surrounding area is planned for manufacturing, industrial, commercial, warehousing, and aviation development. The Jacksonville Economic Development Commission serves as the master developer and operator for the 8,300-acre Cecil Commerce Center which is zoned for industrial and commercial uses. Saft America, Inc. plans to implement this proposed project as soon as successful negotiation of contracts with the U.S. Department of Energy, the State of Florida, and the City of Jacksonville are complete. The facility would be ready to produce cells and batteries at a high volume by 2012.

In compliance with the *National Environmental Policy Act* [42 United States Code (U.S.C.) Section 4321 et seq.] and the U.S. Department of Energy's *National Environmental Policy Act* implementing regulations [10 *Code of Federal Regulations* (CFR) Part 1021] and procedures, this environmental assessment examines the potential environmental impacts of the U.S. Department of Energy's Proposed Action, Saft America, Inc.'s proposed project, and the No-Action Alternative. The EA's purpose is to inform decision makers and the public of the likely environmental consequences of the proposed project and alternatives.

The U.S. Department of Energy analyzed impacts to air quality; water resources; socioeconomics; occupational health and safety; utilities, energy, and materials; waste; and transportation. Vehicular and construction equipment exhaust would be a source of pollutant emissions, but would have a negligible impact on air quality. Likewise, the facility would not be a major source of air pollution as defined in Chapter 62-210, Florida Administrative Code and would result in only a negligible impact on air quality. High-volume output of lithium-ion batteries resulting from operations of the facility is expected to result in millions of tons less carbon dioxide generated across the nation; and thus, a significant beneficial impact to air quality could be realized.

Minor long-term beneficial socioeconomic impacts would occur from increased employment opportunities and spending in the local economy. Long-term benefits to the nation's transportation industry would also occur from high-volume output of lithium-ion batteries by savings of fuel oil and greater use of plug-in hybrid electric vehicles. No adverse impacts to water resources; occupational health and safety; utilities, energy, and materials; waste, or transportation would occur.

The U.S. Department of Energy also considered impacts to land use, noise, aesthetics and visual resources, geology and soils, biological resources, and cultural resources, and environmental justice. The proposed project is not expected to have any measurable effects on these resources. The project site is part of the Cecil Commerce Center, an industrial park that has been pre-approved by all state and local zoning and land use regulatory agencies for light and heavy industrial, office, and commercial applications. Temporary noise and visual impacts could occur during construction, however the facility would not present noise hazards or annoyances to the public and the facility would be designed in accordance with the established Cecil Commerce Center Design Guidelines to protect visual resources. Prior assessments for biological and cultural resources indicate that the proposed facility would not affect federally listed species or archaeological sites. This environmental assessment did not identify any significant adverse impacts. Therefore, minority or low-income groups would not experience disproportionate adverse impacts from this action.

Under the No-Action Alternative, the U.S. Department of Energy would not provide funding to Saft America, Inc., Jacksonville Plant and the proposed facility would not be built. No impacts to the existing environment would occur. In addition, the beneficial impacts discussed above would not be realized.

1. INTRODUCTION

Saft America, Inc. (Saft) proposes to construct and operate a high-volume manufacturing plant to build advanced lithium-ion cells and batteries for military hybrid vehicles, aviation, smart grid support, broadband backup power, and energy storage for renewable energy. In order to facilitate this project, the U.S. Department of Energy (DOE or the Department) is considering providing Saft with a grant under Funding Opportunity Announcement DE-FOA 0000026 entitled *Recovery Act – Electric Drive Vehicle Battery and Component Manufacturing Initiative.* DOE will make its decision after evaluating the potential environmental impacts and other aspects of Saft's proposed project.

As part of the *American Recovery and Reinvestment Act of 2009* (Recovery Act; Public Law 111-5, 123 Stat. 115), as amended, the DOE's National Energy Technology Laboratory, on behalf of the Office of Energy Efficiency and Renewable Energy's Vehicle Technologies Program, will provide up to $2 billion in federal funding to competitively selected recipients for the construction (including increase in production capacity of current plants), of U.S. manufacturing plants that produce batteries and electric drive components. The funding of these projects, known as the Electric Drive Vehicle Battery and Component Manufacturing Initiative, requires compliance with the *National Environmental Policy Act* of 1969, as amended [NEPA; 42 United States Code (U.S.C.) 4321 et seq.], Council on Environmental Quality regulations [40 *Code of Federal Regulations* (CFR) Parts 1500 to 1508], and DOE NEPA implementing regulations (10 CFR Part 1021). Therefore, DOE prepared this *Environmental Assessment for Saft America, Inc. Electric Drive Vehicle Battery and Component Manufacturing Initiative Application, Jacksonville, FL* (EA) to evaluate the potential environmental consequences of providing grants under the initiative. In compliance with these laws and regulations, this EA examines the potential environmental consequences of DOE's Proposed Action (that is, providing a financial assistance grant), Saft America, Inc.'s proposed project, and the No-Action Alternative (under which it is assumed that, as a consequence of DOE's denial of financial assistance, Saft America, Inc. would not proceed with the project). The EA's purpose is to inform DOE and the public of the potential environmental consequences of the proposed project and alternatives.

This chapter explains the background, purpose and need, and the scope of the DOE's Proposed Action. Chapter 2 describes the alternatives, including DOE's Proposed Action, Saft America's proposed project, and the No-Action Alternative. Conditions considered the "environmental baseline" are described in Chapter 3. Chapter 3 details the affected environment and potential consequences of the proposed project and of the No-Action Alternative. Chapter 4 describes cumulative impacts, Chapter 5 provides conclusions, and Chapter 6 identifies references cited in this EA. Appendix A contains the distribution list and Appendix B contains consultation information.

1.1 National Environmental Policy Act and Related Procedures

In accordance with its NEPA implementing regulations, DOE must evaluate the potential environmental impacts of its Proposed Action that may have a significant impact on human health and the environment, including decisions on whether to provide financial assistance to states and private entities. In compliance with these regulations and DOE's procedures, this EA:

- Examines the potential environmental impacts of the Proposed Action and the No-Action Alternative;
- Identifies unavoidable adverse environmental impacts of the Proposed Action;
- Describes the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity; and
- Characterizes any irreversible and irretrievable commitments of resources that would be involved should DOE decide to implement its Proposed Action.

These requirements must be met before DOE decides whether to proceed with any proposed action that could cause adverse impacts to human health or the environment. This EA fulfills DOE's obligations under NEPA and provides DOE with the information needed to make an informed decision about helping to finance Saft, Inc.'s proposed project.

This EA evaluates the potential individual and cumulative impacts of the Saft America, Inc., Jacksonville Plant proposed project. No other action alternatives are analyzed. For purposes of comparison, this EA also evaluates the impacts that would occur if DOE did not provide funding to support the construction and operation of a high-volume manufacturing plant to build advanced lithium-ion cells and batteries for military hybrid vehicles, aviation, smart grid support, broadband backup power, and energy storage for renewable energy (the No-Action Alternative), under which DOE assumes that Saft America, Inc., would not proceed with the project. This assumption may be incorrect—that is, Saft America, Inc. might proceed without federal assistance. However this assumption allows DOE to compare the impacts of an alternative in which expansion occurs with one in which it does not.

1.2 Background

DOE's National Energy Technology Laboratory manages the research and development portfolio of the Vehicle Technologies Program for the Office of Energy Efficiency and Renewable Energy. A key objective of the Vehicle Technologies Program is accelerating the development and production of electric-drive vehicle systems in order to substantially reduce the United States' consumption of petroleum. Other goals of the Program include development of production-ready batteries, power electronics, and electric machines that can be produced in volume economically so as to increase the use of electric drive vehicles.

Congress appropriated significant funding for the Vehicle Technologies Program in the Recovery Act in order to stimulate the economy and reduce unemployment in addition to furthering the existing objectives of the Vehicle Technologies Program. DOE solicited applications for this funding by issuing a competitive funding opportunity announcement (DE-FOA-0000026) entitled *Recovery Act – Electric Drive Vehicle Battery and Component Manufacturing Initiative*, on March 19, 2009. The announcement invited applications in seven areas of interest:

- Area of Interest 1 – Projects that would build or increase production capacity and validate production capability of advanced automotive battery manufacturing plants in the United States.

- Area of Interest 2 – Projects that would build or increase production capacity and validate production capability of anode and cathode active materials, components (such as separator, packaging material, electrolytes and salts), and processing equipment in domestic manufacturing plants.

- Area of Interest 3 – Projects that combine aspects of Areas of Interest 1 and 2.

- Area of Interest 4 – Projects that would build or increase production capacity and validate capability of domestic recycling or refurbishment plants for lithium-ion batteries.

- Area of Interest 5 – Projects that would build or increase production capacity and validate production capability of advanced automotive electric drive components in domestic manufacturing plants.

- Area of Interest 6 – Projects that would build or increase production capacity and validate production capability of electric drive subcomponent suppliers in domestic manufacturing plants.

- Area of Interest 7 – Projects that combine aspects of Areas of Interest 5 and 6.

The application period closed on May 19, 2009, and DOE received 119 proposals across the seven areas of interest. DOE selected 30 projects based on the evaluation criteria set forth in the funding opportunity announcement. DOE gave special consideration to projects that promoted the objectives of the Recovery Act—job preservation or creation, and economic recovery—in an expeditious manner.

This project in Jacksonville, Florida, was one of the 30 projects DOE selected for funding. DOE's Proposed Action under this funding opportunity is to provide $95.5 million in financial assistance in a cost-sharing arrangement with the project proponent, Saft America Inc., Jacksonville Plant (Saft). The total cost of the proposed project is estimated at $191 million.

1.3 Purpose and Need

The overall purpose and need for DOE's Proposed Action under the Vehicle Technologies Program is to accelerate the development and production of various electric-drive vehicle systems by building or increasing domestic manufacturing capacity for advanced automotive batteries, their components, recycling facilities, and electric-drive vehicle components, in addition to stimulating the United States' economy. This work will enable market introduction of various electric vehicle technologies by lowering the cost of battery packs, batteries, and electric propulsion systems for electric-drive vehicles through high-volume manufacturing. DOE intends to further this purpose and satisfy this need by providing financial assistance under cost-sharing arrangements to this and the other 29 projects selected under this funding opportunity announcement.

This and the other selected projects are needed to reduce the United States' petroleum consumption by investing in alternative vehicle technologies. Successful commercialization of electric-drive vehicles would support the DOE's Energy Strategic Goal of "protecting our national and economic security by promoting a diverse supply and delivery of reliable, affordable, and environmentally sound energy." This proposed project will also meaningfully assist in the nation's economic recovery by creating manufacturing jobs in the United States in accordance with the objectives of the Recovery Act.

1.4 Considerations Not Carried Forward for Analysis

The following resource areas or issues are commonly discussed in EAs for actions proposed by DOE. However, in an effort to streamline the NEPA process and enable timely expenditure of Recovery Act funds for fuel-efficiency projects, DOE did not analyze in detail resource areas that it did not anticipate would be impacted by the proposed project. For the reasons discussed below, the proposed project is not expected to have any measurable effects on certain resources, and descriptions and analyses of these resources are not carried forward into Chapter 3.

- Land use. The project site lies within the Cecil Commerce Center, an 8,300-acre industrial park that has been pre-approved by all state and local zoning and land use regulatory agencies for light and heavy industrial, office, and commercial applications.

- Noise. Only temporary construction noise would occur within an industrial park and the industrial processes performed at the facility would not present noise hazards or annoyances for the public (that is, would not add to ambient noise levels).

- Aesthetics and Visual Resources. Saft would be required to design the facility in accordance with the Cecil Commerce Center Design Guidelines. These guidelines ensure the development will result in a visually pleasing and enhanced environment for the Cecil Commerce Center. The Cecil Commerce Center Architectural Review Board would ensure the guidelines are followed appropriately.

- Geology and Soils. The Jacksonville Economic Development Commission has deemed the soils suitable for construction. There should be no actions that would result in impacts to geology or that would be unduly affected by geological instabilities.

- Biological Resources. Through previous agency consultation for the development of the Cecil Commerce Center, the only listed species determined to occur or have the potential to occur at this location is the eastern endigo snake (*Drymarchon corais couperi*). In addition, the U.S. Fish and Wildlife Service has determined that development of the Cecil Commerce Center may affect but not adversely affect the eastern indigo snake, and prepared a Biological Opinion in May 2002 and issued an incidental take permit to the Jacksonville Economic Development Commission and Jacksonville Port Authority. Thus, DOE has concluded that the Saft facility, located within the Cecil Commerce Center, would have no adverse effect on federally listed species. The Biological Opinion and Incidental Take Permit are included in Appendix B.

- Cultural Resources. A cultural resource assessment for Naval Air Station Cecil Field was conducted in 1995. The archaeological sensitivity assessment of the station indicated 15 areas with higher than average potential to contain archaeological sites. These areas do not overlap with the proposed project site. No structures were found eligible for inclusion on the National Register of Historic Places. In addition, the State Historic Preservation Officer reviewed the referenced project and determined that the proposed project would have no effect. A letter from the State Historic Preservation Officer to this effect is contained in Appendix B.

- Environmental Justice. Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, directs federal agencies to address environmental and human health conditions in minority and low-income communities. The evaluation of impacts to environmental justice is dependent on demonstrating that significant, adverse impacts from the proposed project are not disproportionately borne by any low-income or minority groups in the affected community. As illustrated in this EA, no significant, adverse impacts would occur to any members of the community; therefore, there is no reason to further evaluate environmental justice impacts in this EA.

1.5 Consultations and Public Comment Response Process

1.5.1 CONSULTATIONS

Previous consultations with the responsible U.S. Fish and Wildlife Service (USFWS) field office and with the State Historic Preservation Officer have occurred in the planning and development stages of the Cecil Commerce Center. The USFWS determined that development of the Cecil Commerce Center could affect but not adversely affect the eastern indigo snake. USFWS subsequently prepared a Biological Opinion in May 2002 and issued an Incidental Take Permit

to the Jacksonville Economic Development Commission and Jacksonville Port Authority for development of the Cecil Commerce Center. The permittees are the City of Jacksonville and the Jacksonville Airport Authority, and both of whom are responsible for ensuring the permit requirements are fulfilled. Thus, DOE concluded that the proposed Saft facility, located within the Cecil Commerce Center, would have no adverse effect on federally listed species. The Biological Opinion and Incidental Take Permit are included in Appendix B of this EA. The State Historic Preservation Officer reviewed the referenced project and determined that the proposed project would have no effect on historic properties. A letter from the State Historic Preservation Officer dated October 26, 2009, to this effect is included in Appendix B of this EA.

1.5.2 COMMENT-RESPONSE PROCESS

DOE issued the Draft EA for comment on December 13, 2009, and advertised its release in the Jacksonville *Florida Times Union* on December 13, 14, and 15, 2009. In addition, the Department sent copies for public review to the Jacksonville Public Library and to the agencies listed in Appendix A of this EA. The Department established a 30-day public comment period that began December 13, 2009, and ended January 12, 2010. The Department announced that it would accept comments by U.S. mail, email, or facsimile. DOE received comments from five federal and state agencies; their comments are included in Appendix B of this EA. No comments from the general public were received. Comments and DOE's responses, if required, are summarized below.

Florida State Clearinghouse
Florida Department of Environmental Protection
Lauren P. Milligan, Environmental Manager

Comment: Based on the information contained in the Draft EA and issuance of Environmental Resource Permit No. 4-031-70452-8 by the St. Johns River Water Management District, the State has determined that the proposed project is consistent with the Florida Coastal Management Program. The State's final concurrence of the project's consistency with the Florida Coastal Management Program was determined during the environmental resource permitting stage in accordance with Section 373.428, *Florida Statutes*.

Florida Department of State, Division of Historical Resources
Laura Krammerer, Deputy State Historic Preservation Officer

Comment: Cultural and historical resources have been adequately addressed in this document, and we maintain our concurrence that the proposed undertaking will have no effect on historic properties.

Jacksonville District, Army Corps of Engineers, Regulatory Division
Jeffrey Collins, Chief, Jacksonville Permits Section

Comment: Resources within our purview would not be affected. Therefore the Corps has no objection with the work proposed.

U.S. Environmental Protection Agency, Region 4
Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

Comment: Demographics data/Environmental Justice (EJ):

1. Section 2.1: Based on the maps included in the Draft EA, it is unclear how far the residents are from the proposed project site. A map should be provided that shows the locations of residential areas.

2. Section 3.3.1.1: The Draft EA indicates that the project is in an enterprise zone, and there is high unemployment within the proposed project area. However, demographics information regarding race does not appear to be included in the document. A race and ethnicity assessment of the surrounding area should be provided and associated with the unemployment information to clarify EJ impacts.

Comment: Supporting data:

1. Section 3.1: A wind rose assessment including maps should be provided, showing prevailing wind direction for the area.

2. Section 3.2: Rainfall amounts should be provided relative to run-off potential and groundwater infiltration.

3. Section 3.2.1.1: References regarding the low gradient, including a topographical map, should be provided.

4. Section 3.2.1.3: A pictorial result of the Terracon 2009 and ERS 2009 wetland assessment should be provided. Otherwise, wetland areas should be delineated via maps. Construction details should be provided regarding potential wetland impacts, if any impacts are anticipated.

5. Section 3.3.2.1: Documentation of the local terrestrial and aquatic ecological structures associated with the area should be evaluated. This should include a list of endangered species potentially associated with the area.

Response: Supporting data have been added. A figure has been added showing the locations of the residential areas and text has been revised to state distance to nearest residences (over 1 mile).

Demographic information for minority populations in Florida, Duval County, Jacksonville, and an up to 10-mile radius around Cecil Commerce Center has been added. Additional unemployment information has been added to Section 3.3.1.1 to include a radius of up to 10 miles from the Cecil Commerce Center. However, the evaluation of impacts to environmental justice is dependent on demonstrating that significant, adverse impacts from the proposed project are not disproportionately borne by any low-income or minority groups in the affected community. As illustrated in this EA, no significant, adverse impacts would occur to any members of the community; therefore, there is no reason to further evaluate environmental justice impacts in this EA.

Figures showing a wind rose, topography, and delineated wetlands have been added. As stated in this EA, no impacts to wetlands are expected, as no wetlands occur within the proposed project site. Discussion of surface water emanating from rainfall has been included, and more details regarding surface water management have been added.

As stated in Section 1.4 of this EA, through previous agency consultation for the development of the Cecil Commerce Center, the only listed species that has been determined to occur or have the potential to occur at this location is the eastern indigo snake (*Drymarchon corais couperi*). In addition, the USFWS has determined that development of the Cecil Commerce Center could affect but not adversely affect the eastern indigo snake, and prepared a Biological Opinion in May 2002 and issued an Incidental Take Permit to the Jacksonville Economic Development Commission and Jacksonville Port Authority.

U.S. Fish and Wildlife Service
Candace Martino, Fish and Wildlife Biologist

Comment:

1. Your conclusions indicated 'No adverse impacts to water resources, biological resources, geology and soils, environmental justice …etc. would occur. However, there was no subsection heading, discussion or identification of any Federally listed species that may potentially be located in the project area addressed in this assessment.

2. Based on the habitat types found in this general area, gopher tortoise burrows may be in the project area which may be utilized by the federally threatened eastern indigo snake. Based on the results of future surveys for the state threatened gopher tortoises that would be required by the Florida Fish and Wildlife Conservation Commission (FWC), [the] agency through consultation with the Army Corps of Engineers may request the applicant to adhere to the eastern indigo snake standard protection measures.

3. There is always a potential for a bald eagle nest to be located in the area by the time this project were to move forward with construction. If there is a nest within 660 feet of the project, the applicant would need to contact our office and the FWC for further guidance. In order to obtain the most recent survey data for bald eagles, you may contact Janell.Brush@MyFWC.com for location information or call her at (352)955-2081.

Response: Cecil Commerce Center has been evaluated in the past for evidence of utilization by protected species that are listed by the Florida Fish and Wildlife Conservation Commission and the USFWS, or the presence of their critical habitat. In addition to past site assessments conducted for Cecil Commerce Center, the latest Geographic Information System data from the Florida Fish and Wildlife Conservation Commission and the USFWS documenting the occurrences of federally and state-listed species were reviewed for the site and vicinity. No protected species or nesting areas were noted in that database search nor observed on the site.

A review of the Florida Fish and Wildlife Conservation Commission Geographic Information System database for bald eagle (*Haliaeetus leucocephalus*) nest occurrences revealed that the closest documented bald eagle next lies approximately 9.25 miles southwest of the site, in Section 29, Township 3 South, Range 29 East. The nest is identified as DU011.

Common protected species that depend upon uplands for some part of their life cycle include Sherman's fox squirrel (*Sciurus niger shermani*), red cockaded woodpecker (*Picoides borealis*), gopher tortoise (*Gopherus polyphemus*), southeastern American kestrel (*Falco sparverius*), Florida pine snake (*Pituophis melanoleucus*), eastern indigo snake (*Drymarchon corais couperi*), Florida gopher frog (*Rana areolata*), and Florida mouse (*Podomys floridanus*). While none of these species has been observed on the proposed project site, occupied gopher tortoise habitat has been observed south of Normandy Boulevard.

As stated in Section 1.4 of this EA, through previous USFWS consultation for the development of Cecil Commerce Center, the only listed species that has been determined to occur or have the potential to occur on or near the proposed project site is the eastern indigo snake. The USFWS had previously determined that development of Cecil Commerce Center could affect but not adversely affect the eastern indigo snake. A Biological Opinion was prepared in May 2002 to address the issue. An Incidental Take Permit subsequently was issued to the Jacksonville Economic Development Commission and Jacksonville Port Authority. Therefore, the USFWS, through this action, concluded that development of the Saft facility will have no adverse effect on federally listed species.

2. DOE PROPOSED ACTION AND ALTERNATIVES

DOE's alternatives to this project consist of the 45 technically acceptable applications received in response to the funding opportunity announcement, *Recovery Act – Electric Drive Vehicle Battery and Component Manufacturing Initiative*. Prior to selection, DOE made preliminary determinations regarding the level of review required by NEPA based on potentially significant impacts identified in reviews of acceptable applications. DOE conducted these preliminary environmental reviews pursuant to 10 CFR 1021.216 and a variance to certain requirements in that regulation granted by the Department's General Counsel (74 *Federal Register* 30558; June 26, 2009). These preliminary NEPA determinations and reviews were provided to the selecting official, who considered them during the selection process.

Because DOE's Proposed Action is limited to providing financial assistance in cost-sharing arrangements to projects submitted by applicants in response to a competitive funding opportunity, DOE's decision is limited to either accepting or rejecting the selected projects as proposed by the proponents, including their proposed technologies and selected sites. DOE's consideration of reasonable alternatives is therefore limited to the technically acceptable applications and a No-Action Alternative for each selected project.

2.1 DOE's Proposed Action

DOE's Proposed Action is to award Saft America, Inc. a grant through the Recovery Act to construct and operate an approximately 235,000-square-foot facility capable of manufacturing and delivery of high quantities of lithium-ion cells, modules, and batteries to the industrial energy, electric drive, military hybrid vehicle, other defense, and aerospace markets. DOE would provide $95.5 million in financial assistance in a cost-sharing arrangement with Saft America, Inc. The total cost of the proposed project is estimated to be $191 million.

2.2 Saft America, Inc.'s Proposed Project

The Saft facility would be built at the Cecil Commerce Center in Jacksonville, Florida (Figure 2-1). The Jacksonville Economic Development Commission serves as the master developer and operator for the 8,300-acre site zoned for industrial and commercial uses.

The Cecil Commerce Center is part of a former Naval Air Station closed during Base Realignment and Closure activities in the 1990s. The Naval Air Station Cecil Field has been redeveloped and the immediate surrounding area is planned for manufacturing, industrial, commercial, warehousing, and aviation development. The Cecil Commerce Center (South Area) serves more than 30 establishments including Boeing, Bridgestone Firestone, Logistical Services International, Northrop Grumman, and Flightstar. Development of the Cecil Commerce Center is progressing to the North Area, where the Saft facility would be constructed.

The proposed project site is located on the western side of Duval County immediately south of Interstate 10. The City of Jacksonville would deed up to 13 acres to Saft for construction and

operation of the Saft facility (Ballas 2009). The acreage is located on the north side of Waterworks Street. The closest residences are located to the southeast over a mile from the proposed project site, adjacent to the Cecil Commerce Center property boundary (Figure 2-2).

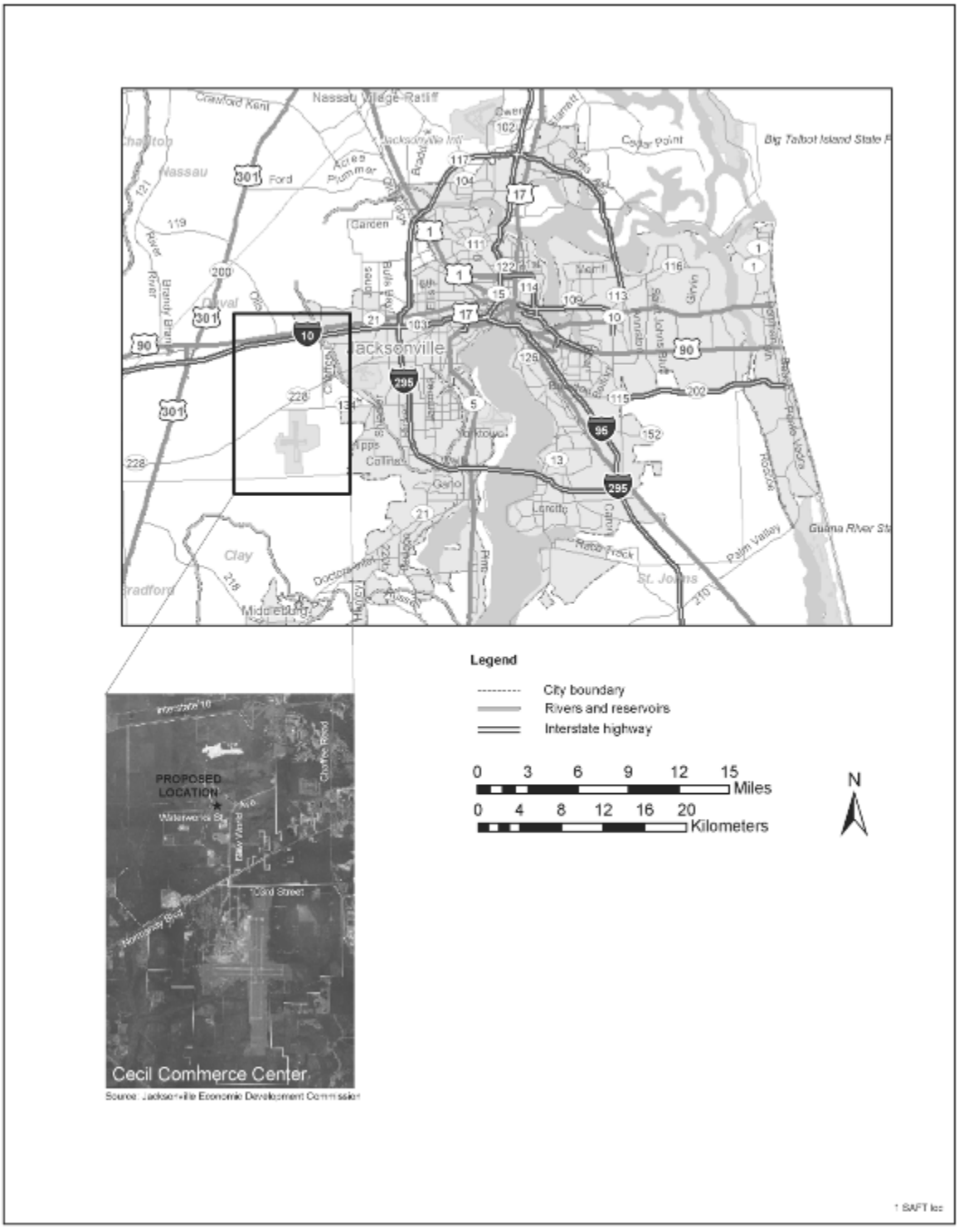

Figure 2-1. Location map – Cecil Commerce Center, Jacksonville, Florida.

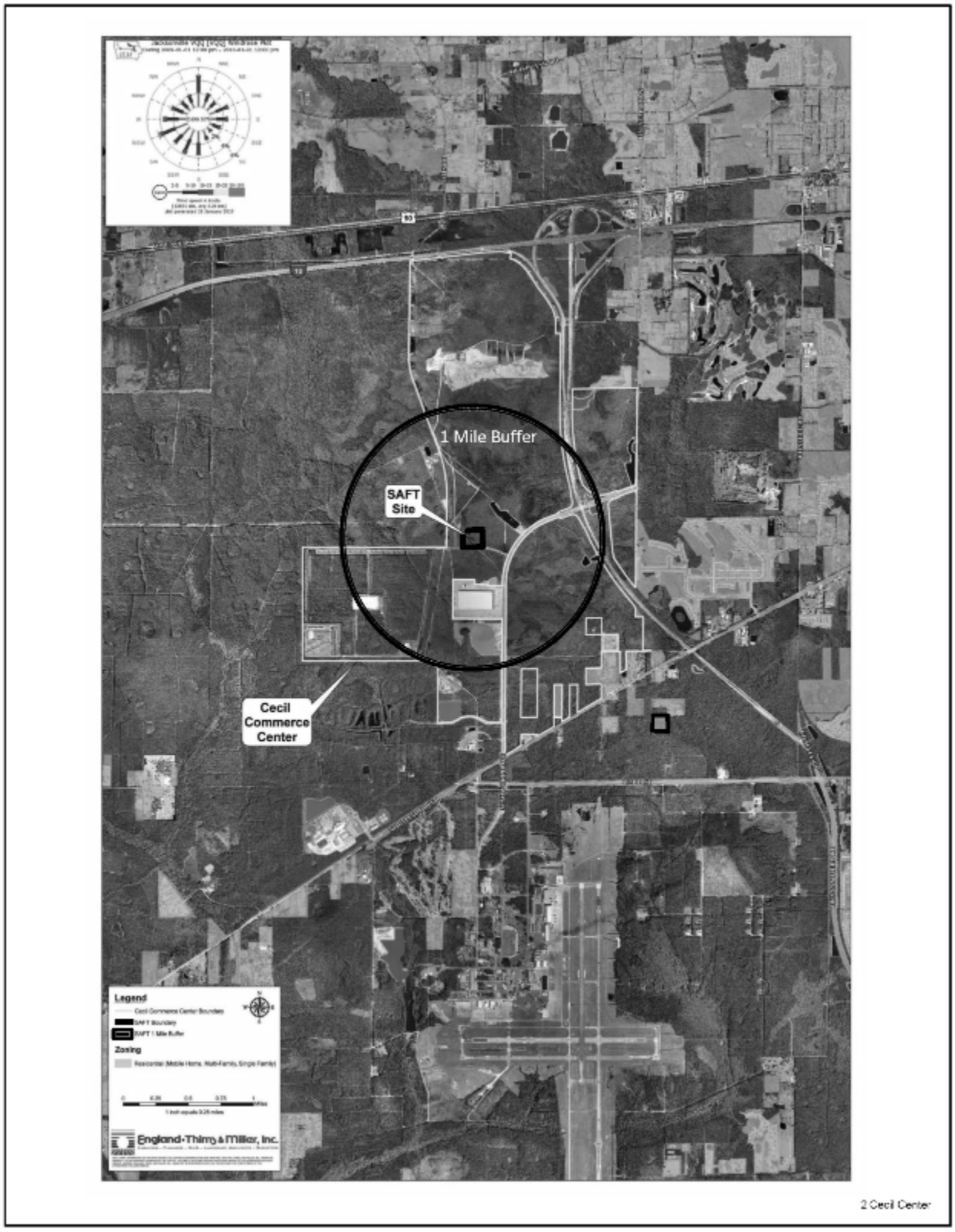

Figure 2-2. Proposed project site and surrounding area – Cecil Commerce Center, Jacksonville, Florida.

Figure 2-3 shows a proposed site layout for the Saft facility at the Cecil Commerce Center. The Saft facility would be an approximately 235,000 square foot, single-story manufacturing facility that would consist of the following:

- Administrative office
- Bulk storage and manufacturing areas
- Mezzanine areas
- Cover subassembly
- Clean/Dry rooms
  - Class 10,000 (ISO Class 7), Non-certified
  - -40 degrees Celsius (ºC) and -63ºC supply air dew-points
- Formation area (charging)
- Open Circuit Voltage testing area
- Final manufacturing/assembly area
- Electrical, boiler, chillers and air compressor rooms
- Maintenance area
- Shipping and receiving dock area
- Two fork truck parking/battery-charging areas for two fork trucks each
- Shipping/receiving office
- Above ground storage tanks

The single-story administrative office would include: reception lobby/offices; conference rooms; training rooms; break room; storage rooms; large meeting room; locker rooms/showers; toilet rooms; copier; mail room; and an information technology/server room.

The site would include the following:

- On-grade auto and trailer parking (270 parking spaces)
- Paved loading areas
- Truck receiving window (controlled entry)
- Security fencing and gates
- Main employee entrance
- Ornamental fencing
- Onsite roadway additions
- Expansion of the storm water management pond

The design and construction of this facility would take into consideration the best practices and most economical design to obtain the Leadership in Energy and Environmental Design (LEED) Certification desired (Silver). General operations that would occur within the facility are shown in Figure 2-4.

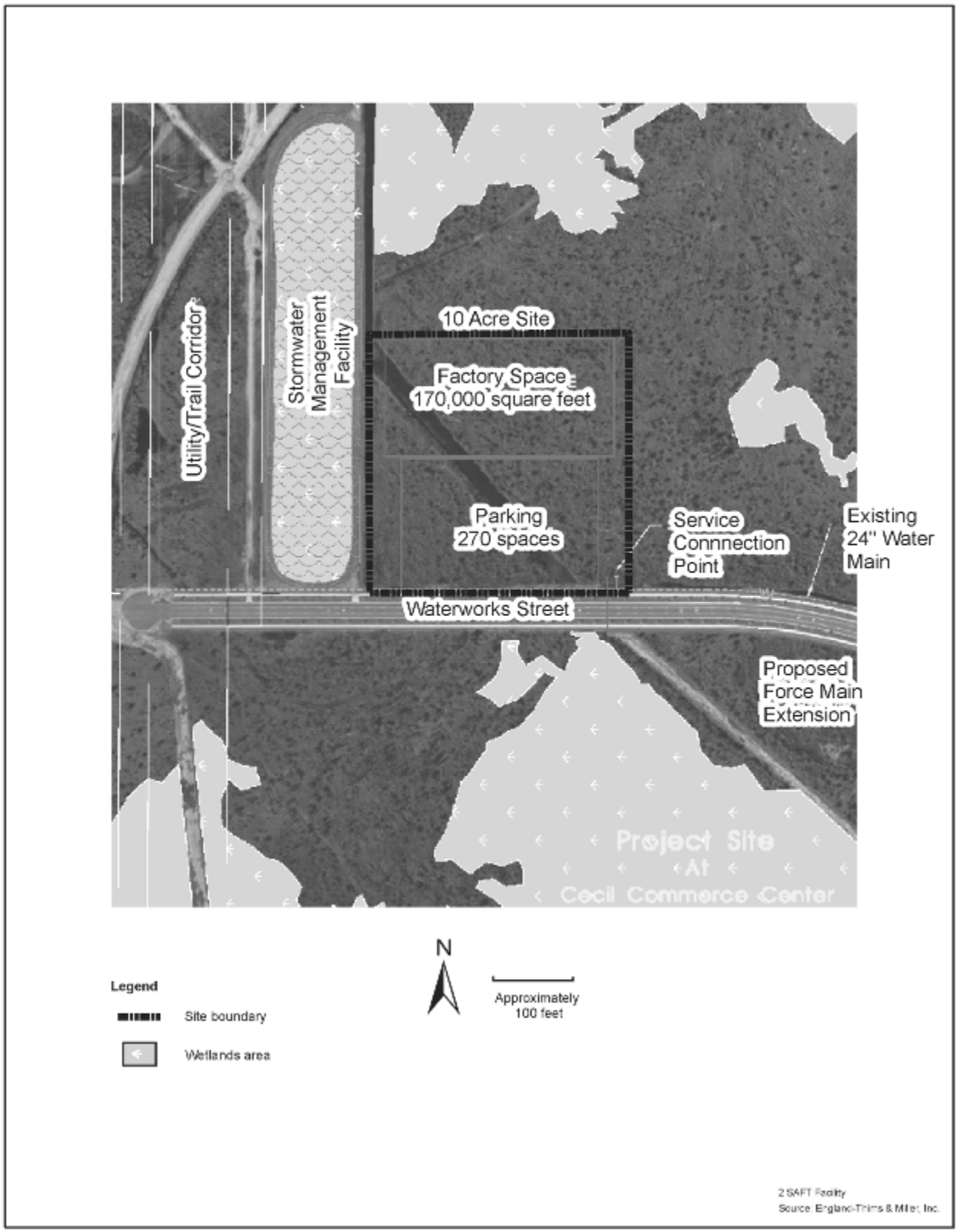

Figure 2-3. Proposed site layout – Cecil Commerce Center, Jacksonville, Florida.

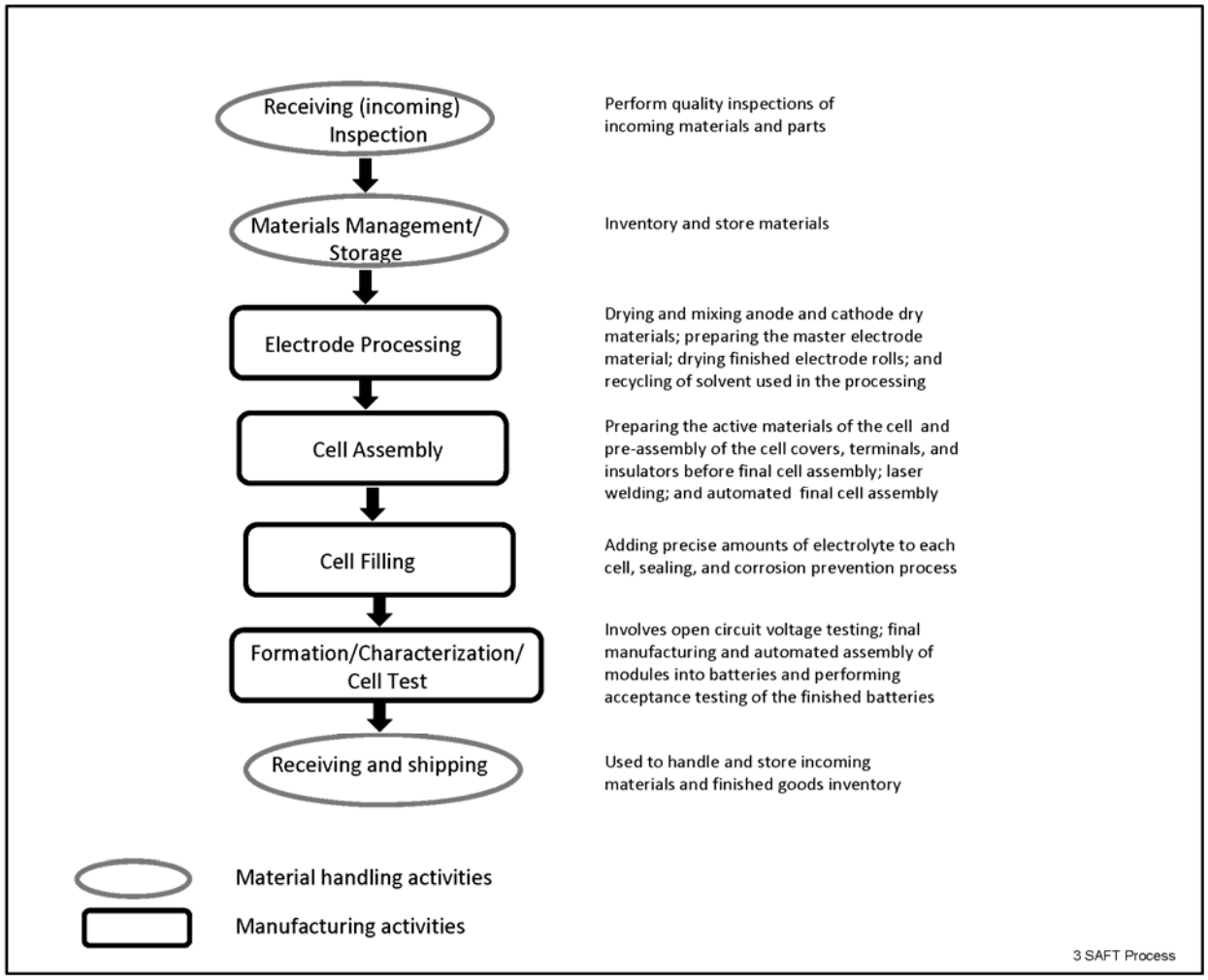

Figure 2-4. Flowchart of proposed manufacturing process.

Battery applications call for a specific combination of power, energy, running voltage, and safety. The Saft facility would manufacture batteries using a lithium-ion production chemistry known as the Nickel Cobalt Aluminum chemistry. Nickel Cobalt Aluminum production chemistry has been implemented in the most powerful cells in the world and has already been selected for the broadest application into hybrid electric vehicles. Three major automotive manufacturing programs, Mercedes Benz, BMW, and Ford, have selected Saft's Nickel Cobalt Aluminum technology. This technology also has been selected for the majority of satellite programs and numerous military programs.

Two toxic chemicals that would be used in the production process and stored at the Saft facility include N-methylpyrrolidone (NMP) and lithium hexafluorophosphate (LiPF6). NMP is a liquid solvent that would be used in the manufacturing process and would also be used to periodically flush out process lines and for other cleaning purposes. Saft may store NMP on site in above ground storage tanks. LiPF6 is an inorganic chemical compound in the form of a white

crystalline powder that would be used as an electrolyte in the lithium batteries. Saft could store LiPF6 in 55-gallon drums.

N-METHYLPYRROLIDONE (NMP)

NMP is a water-miscible organic solvent widely used in the petrochemical industry, in fabricating microelectronics, and in manufacturing of compounds such as pigments, cosmetics, pesticides, floor cleaners, and paint removers. NMP increasingly is used as a substitute for chlorinated hydrocarbons that are more toxic to the environment and human health.

NMP has low acute toxicity, is potentially irritating to the skin and eyes, and at high aerosol concentrations can cause respiratory tract irritation. It is readily absorbed through the skin and along with inhalation represents the primary exposure routes for humans. As with other organic solvents, breathing excessive amounts of NMP can affect the brain and result in temporary headaches, nausea, dizziness, clumsiness, drowsiness and other effects similar to being drunk. Testing on animals has not shown a link to cancer that can be related to human exposures. However, NMP has been shown to cause effects, such as delayed growth, to offspring of animals exposed during pregnancy. As a result of these types of test results, the State of California has identified NMP as a reproductive toxin and has established maximum allowable dose levels of 17,000 and 3,200 micrograms per day for dermal contact and inhalation exposures, respectively. Products that could result in daily exposures exceeding these levels must carry an appropriate label under California law.

LITHIUM HEXAFLUOROPHOSPHATE (LiPF6)

LiPF6 is a white crystalline powder that hydrolyzes readily in contact with water or moisture. It is very destructive to mucous membranes. LiPF6 is harmful if swallowed, inhaled, or absorbed through skin and causes burns through all exposure routes. LiPF6 is considered corrosive and can be dissolved in some organic solvents for use as an electrolyte in lithium batteries.

Saft may also employ the following other production chemistries in the future:

- Cobalt Oxide is in production for a variety of portable applications due to its heritage in this market and high capacity. These include military communications, intrinsically safe mining, and other mission critical applications.

- Iron Phosphate is recognized as an even safer electrochemical offering. This technology shows promise for several safety critical applications including submarine actuator power and hybrid drive naval ships.

- Nickel Manganese Cobalt chemistry is being used in specialty applications such as high temperature cells and space cells.

Saft plans to implement this proposed project as soon as successful negotiation of contracts with the DOE, the State of Florida, and the City of Jacksonville are complete. The facility would be ready to produce cells and batteries at a high volume by 2012.

2.3 No-Action Alternative

Under the No-Action Alternative, DOE would not provide funds to the proposed project. As a result, this project would be delayed as Saft looks for other funding sources to meet their need, or abandoned if other funding sources are not obtained. Furthermore, acceleration of the development and production of various electric-drive vehicle systems would not occur or would be delayed. DOE's ability to achieve its objectives under the Vehicle Technologies Program and the Recovery Act would be impaired.

Although this and other selected projects might proceed if DOE decided not to provide financial assistance, DOE assumes for purposes of this EA that the project would not proceed without DOE assistance. If projects did proceed without DOE's financial assistance, the potential impacts would be essentially identical to those under DOE's action alternative (that is, providing assistance that allows the project to proceed). In order to allow a comparison between the potential impacts of a project as implemented and the impacts of not proceeding with a project, DOE assumes that if it decided to withhold assistance from this project, the project would not proceed.

3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

In this chapter, DOE assesses the following resources: air quality; water resources; socioeconomics; occupational health and safety; utilities, energy, and materials; waste; and transportation. The "environmental baseline" for each of these resource areas is described first, followed by an assessment of the potential consequences of the proposed project and of the No-Action Alternative.

3.1 Air Quality

3.1.1 AFFECTED ENVIRONMENT

This section describes the existing air quality conditions at and surrounding the project site. Wind conditions in the area are discussed first followed by a discussion of ambient air quality conditions, air quality conformity, and greenhouse gas emissions.

3.1.1.1 Wind Conditions

Easterly winds blowing about 40 percent of the time produce a maritime influence that modifies to some extent the heat of summer and the cold of winter. Prevailing winds are northeasterly in the fall and winter and southwesterly in the spring and summer. Wind movement, which averages slightly less than 9 miles per hour, is 2 to 3 miles per hour higher in the early afternoon than the early morning hours and slightly higher in spring than in other seasons of the year. A wind rose is shown on Figure 2-2 in Section 2.

3.1.1.2 Ambient Air Quality Conditions

The ambient air quality in an area can be characterized in terms of whether it complies with the primary and secondary National Ambient Air Quality Standards (NAAQS). The *Clean Air Act* (42 U.S.C. 7401 et seq.) requires the U.S. Environmental Protection Agency (EPA) to set NAAQS for pollutants considered harmful to public health and the environment. NAAQS have been established for six criteria pollutants: carbon monoxide; lead; nitrogen dioxide; ozone; particulate matter (which includes both particulate matter with an aerodynamic size less than or equal to 10 microns and less than or equal to 2.5 microns); and sulfur dioxide. National primary ambient air quality standards define levels of air quality which the EPA has determined as necessary to provide an adequate margin of safety to protect public health, including the health of "sensitive" populations such as children and the elderly. National secondary ambient air quality standards define levels of air quality which are deemed necessary to protect the public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Table 3-1 lists the NAAQS primary standards for each criteria pollutant.

Table 3-1. National Ambient Air Quality Standards.

Pollutant	Standard Value
Carbon monoxide (CO)	
8-hour average	9 ppm
1-hour average	35 ppm
Lead (Pb)	
Quarterly average	1.5 $\mu g/m^3$
Nitrogen dioxide (NO_2)	
Annual arithmetic mean	0.053 ppm
Ozone (O_3)	
8-hour average (2008 standard)	0.075 ppm
Particulate matter less than 10 microns (PM_{10})	
24-hour average	150 $\mu g/m^3$
Particulate matter less than 2.5 microns ($PM_{2.5}$)	
Annual arithmetic mean	15.0 $\mu g/m^3$
24-hour average	35 $\mu g/m^3$
Sulfur dioxide (SO_2)	
Annual arithmetic mean	0.03 ppm
24-hour average	0.14 ppm

Source: 40 CFR 50.4 through 50.13.
$\mu g/m^3$ = micrograms per cubic meter.
ppm = parts per million.

Regions in compliance with the NAAQS are designated as attainment areas. Duval County's air quality meets the NAAQS and is thus classified as being in attainment for all six criteria pollutants.

The project site occurs in an area of Duval County that is considered to have low potential for elevated indoor concentrations of radon gas. Radon is a radioactive gas that comes from the decay of radium and exists in varying amounts in most soils. Because radon is a gas, it can move through soil and into the atmosphere or into a building structure. The Florida Department of Health has determined that radon controls within buildings are normally not required at the location of the project site (Terracon 2009). However, testing would be required to evaluate site-specific concentrations of radon gas.

3.1.1.3 Air Quality Conformity

Section 176(c) (1) of the *Clean Air Act* requires federal agencies to ensure that their actions conform to applicable implementation plans for the achievement and maintenance of the NAAQS for criteria pollutants. To achieve conformity, a federal action must not contribute to new violations of standards for ambient air quality, increase the frequency or severity of existing violations, or delay timely attainment of standards in the area of concern. The EPA general conformity regulations (40 CFR Part 93, Subpart B) contain guidance for determination of whether a proposed federal action would cause emissions to be above certain levels in

nonattainment or maintenance areas. Duval County is within an attainment area for all criteria pollutants, so the construction and operation of the proposed facility meets conformity requirements.

3.1.1.4 Greenhouse Gas Emissions

The burning of fossil fuels such as diesel and gasoline emits carbon dioxide, which is a greenhouse gas. Greenhouse gases can trap heat in the atmosphere and have been associated with global climate change. The Intergovernmental Panel on Climate Change, in its Fourth Assessment Report issued in 2007, stated that warming of the Earth's climate system is unequivocal, and that most of the observed increase in globally averaged temperatures since the mid-20th Century is very likely due to the observed increase in concentrations of greenhouse gases from human activities (IPCC 2007). Greenhouse gases are well mixed throughout the lower atmosphere, such that any emissions would add to cumulative regional and global concentrations of carbon dioxide. The effects from any individual source of greenhouse gases therefore cannot be determined.

3.1.2 ENVIRONMENTAL CONSEQUENCES

3.1.2.1 Proposed Project

Potential impacts to air quality from construction and operation of the proposed facility would not be significant. High-volume output of lithium-ion batteries resulting from the operation of Saft's facility is expected to result in millions of tons less carbon dioxide generated across the nation; and thus, a significant beneficial impact to air quality could be realized.

Short-term air quality impacts would occur from construction activities associated with the movement of heavy equipment. Construction activities would be temporary and would occur in a localized area. Air emissions generated from construction would include particulate matter, vehicle emissions, and increased wind-borne dust (fugitive dust). Best management practices would be implemented for erosion control and fugitive dust mitigation. Vehicular and construction equipment exhaust would be a source of pollutant emissions, but would have a negligible impact on air quality. The emissions from construction activities and workers traveling to and from the site would be minor compared to the total existing vehicular emissions in the area.

Because Duval County is in an attainment area for all criteria pollutants, long-term impacts associated with operation of the proposed facility are not likely to occur. Estimated air emissions from the facility are as follows:

- The proposed facility would have the potential to emit organic solvent vapors and other volatile organic compounds. However, the facility would employ solvent recovery, along with distillation for reuse, as part of its air emission reduction and controls. The condensation system would be able to capture at least 97 percent of the material, so no more

than 3 percent would escape into the air as fugitive emissions (Denoncourt 2009); it is estimated that the facility would emit about 751 kilograms of volatile organic compounds per year (Saft 2009d).

- Minimal emissions of carbon monoxide and nitrogen dioxide would occur from the estimated 40.3 million British thermal units of natural gas burned annually.

- No air emissions of lead, particulate matter, or sulfur dioxide are expected.

The facility would not be a major source of air pollution as defined in Chapter 62-210, Florida Administrative Code and would therefore not require a Title V operating permit. Saft would apply to the Florida Department of Environmental Protection for any general air permits that may be required.

3.1.2.2 No-Action Alternative

Under the No-Action Alternative, no temporary air quality impacts [such as particulate matter, vehicle emissions, and increased wind-borne dust (fugitive dust)] would occur due to construction, and no new air emission sources would occur. The potential beneficial impact of long-term reduction of carbon dioxide gases nationwide would also not be realized.

3.2 Water Resources

3.2.1 AFFECTED ENVIRONMENT

This section describes the existing water resources on and in the area of the project site. Surface water includes lakes, rivers, and streams while groundwater comprises the subsurface hydrogeologic resources of the physical environment. Wetlands and floodplains are also discussed.

3.2.1.1 Surface Water

Most surface water in Duval County is derived from rainfall within the county. The average rainfall in the area ranges from a low of 2.36 inches in November to a high of 7.28 inches in September. Average annual rainfall in Duval County is 49 inches (U.S. Climate Data 2010). Rainfall of 1 inch or more in 24 hours normally occurs about 14 times a year, and very infrequent heavy rains, associated with tropical storms, reach amounts of several inches with durations of more than 24 hours (National Weather Service 2009).

The project site is located near the boundary of the St. Johns River Basin and the St. Marys River Basin, but is located entirely within the St. Johns River Basin. Due to the extremely low gradient (shown on Figure 3-1) and abundance of swampy areas, the surface water divide between the basins is not well defined (U.S. Navy 1998). Near the project site, the surface water in the St. Marys River Basin generally flows toward the northwest and water in the St. Johns River Basin

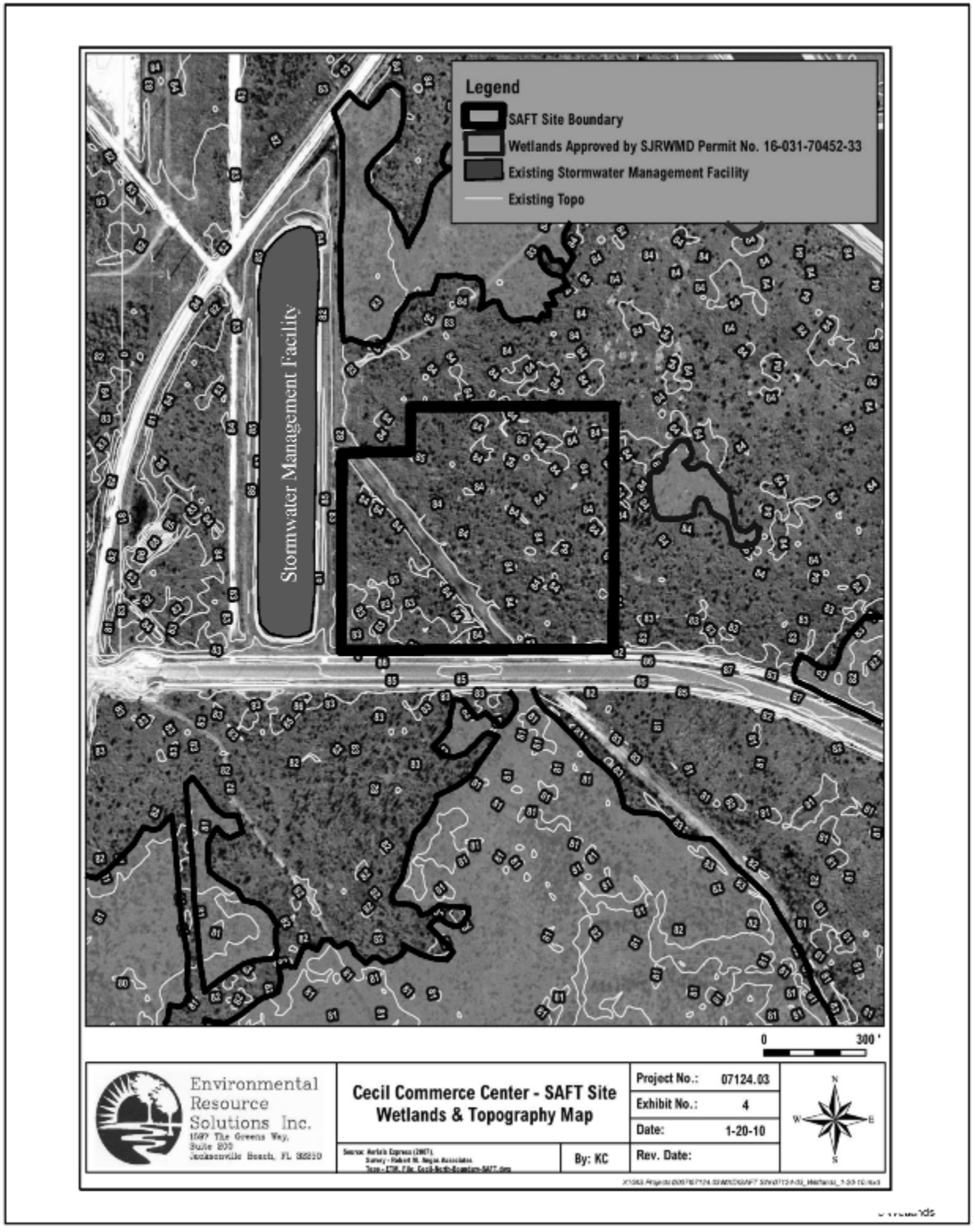

Figure 3-1. Permitted wetlands in the vicinity of the proposed project site – Cecil Commerce Center, Jacksonville, Florida.

flows toward the south. Streams in the general area of the project site include Caldwell Branch, which flows southerly into Yellow Water Creek and Rowell Creek, which flows in a southerly direction into the Sal Taylor Creek. Sal Taylor Creek, in turn, also flows into Yellow Water Creek. Yellow Water Creek flows south into Black Creek, which is a tributary of the St. Johns River to the east. The Ortega River northeast of the project site is also a tributary of the St. Johns River. Waters from these creeks transport nutrients and detritus which nourish the extensive estuaries near the mouth of the St. Johns River (Florida Archeological Services 2002).

Section 303(d) of the *Clean Water Act* establishes that states are required to develop lists of impaired waters. By definition, impaired waters do not meet the water quality standards that the state has set for them, even after point sources of pollution have installed the minimum required levels of pollution control technology. None of the streams that flow past the proposed project site are on Florida's 303d list. However, sections of Black Creek, approximately 15 miles southeast of the proposed site, are on the 303d list.

The closest surface water to the project site is an approximately 40-foot long storm water collection area just to the west of the site (Figure 3-1).

3.2.1.2 Groundwater

The three principal groundwater sources near the Cecil Commerce Center are the surficial aquifer system, the intermediate aquifer system, and the Floridan aquifer system (U.S. Navy 1998). Regional recharge to the surficial aquifer system occurs primarily through infiltration of rainwater. The upper unit of the intermediate aquifer is approximately 15 to 25 feet thick and can be used regionally as a private drinking water source (U.S. Navy 1998). Regional groundwater flow in this unit is to the east. The intermediate aquifer system is underlain by the thick limestone layers of the Floridan aquifer system. The Floridan aquifer is the principal source of groundwater derived for public drinking water in most of northern peninsular Florida (U.S. Navy 1998). The project site is located in an area of very low recharge to the Floridan aquifer system (Terracon 2009).

Beneath the project site, the groundwater flow direction and depth to shallow, unconfined groundwater (if present) would likely vary depending upon seasonal variations in rainfall and other hydrogeological features. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly determined (Terracon 2009).

3.2.1.3 Wetlands and Floodplains

Wetlands are defined by the EPA and the U.S. Army Corps of Engineers (in the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*) as "those areas that are inundated or saturated by surface water or groundwater to a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

Six types of wetlands are present within the Cecil Commerce Center, including hardwood wetlands, cypress swamp, bay swamps, pine wetlands, palustrine emergent wetlands, and scrub/shrub wetlands (Florida Archeological Services 2002). Wetlands encountered at the Cecil Commerce Center have been surveyed, permitted and are being mitigated through an existing mitigation plan as part of the permit issued to the City of Jacksonville and the Jacksonville Airport Authority in 2004 by the U.S. Army Corps of Engineers, Jacksonville District.

Although standing water can occur at the project site, the entire transfer parcel from the Naval Air Station Cecil Field has been assessed for wetlands and none were identified on the proposed project site (Terracon 2009; Environmental Resource Solutions Inc. 2009). Figure 3-1 shows the permitted wetlands that occur in the vicinity, but outside, of the proposed project site.

Flood Insurance Rate Maps generated by the Federal Emergency Management Agency do not show any 100-year floodplain areas at the project site (U.S. Navy 1998).

3.2.2 ENVIRONMENTAL CONSEQUENCES

3.2.2.1 Proposed Project

Potential impacts to surface water from the proposed facility would not be significant. No discharges would occur that could contaminate surface water (Saft 2009d) and there would be no resulting reduction in surface water quality or availability. However, additional surface water runoff would occur as a result of an increase in impermeable surfaces associated with buildings, roads, and parking lots. Saft obtained an Environmental Resource Permit from the St. Johns River Water Management District in 2009. The permit is required prior to construction in order to ensure that the activities would not be harmful to water resources, alter surface water flows, or be inconsistent with the public interest (Saft 2009b). Best practice erosion control and dust mitigation measures, compliance with all governing regulations, including silt screens, hay bales, settling ponds, soil treatment, and rock at drainage areas and similar devices would be provided. In addition, Saft proposes to expand the onsite storm water detention facility, while maintaining its original permitted design elevations, to account for runoff from the project site, as well as the surrounding area. The storm water detention facility would be designed to attenuate the mean annual and 25-year, 24-hour storm events.

Potential impacts to groundwater from the proposed facility would not be significant. Local groundwater recharge to the Floridan aquifer system should not be affected, even with the increase in impermeable surfaces, because the site of the proposed facility is in an area of very low recharge to the Floridan system. Activities at the proposed facility would not impact water quantity within the aquifer because the project would receive its potable and process water from the local consolidated supplier, JEA. JEA has excess water capacity from the Floridan Aquifer, which it considers one of the world's most productive aquifers (JEDC 2009). Activities at the proposed facility also would not impact groundwater quality.

Saft would manage hazardous materials and wastes to prevent release of potential pollutants that could cause impacts to surface water or groundwater. Management of storage areas would be dictated through a Spill Prevention, Control and Countermeasures Plan and would include such measures as secondary containment in the event of spills. Above ground storage tanks for NMP would be constructed so that all tanks were within a secondary containment curbing. Saft's management of hazardous materials would consider the potential for release through spills, leaks, or equipment malfunctions. However, because the sources of such releases would be inside secondary containment structures, the potential for hazardous materials to reach the environment and be carried away by precipitation runoff is minor. However, should such an event ever happen, Saft would be subject to response and reporting requirements.

There would be no impacts to wetlands and floodplains from the proposed facility as wetlands and 100-year floodplains do not occur on the proposed project site.

3.2.2.2 No-Action Alternative

Under the No-Action Alternative, no impacts would occur to surface water, groundwater, wetlands, or floodplains because no changes would occur to the existing environment.

3.3 Socioeconomics

3.3.1 AFFECTED ENVIRONMENT

This section describes the existing socioeconomic environment for Clay County, Duval County, and the City of Jacksonville. Construction and operations of the proposed facility could potentially affect these areas and therefore, these areas make up the region of influence (ROI) for this analysis. Clay County is adjacent to Duval County to the west and could be a source of potential employees and spending. This section presents socioeconomic data at the city and county levels to analyze baseline socioeconomic conditions in the context of local trends and to provide an understanding of the socioeconomic forces that have shaped, and continue to shape, the area.

3.3.1.1 Population and Unemployment

Clay County has a population of 184,727 people; Duval County has a population of 850,962 people; and the City of Jacksonville has a population of 807,815 people (U.S. Census Bureau 2009). In 2008, the national percentage of minority people was 26.5 percent. Both the state of Florida and city of Jacksonville had similar percentages of minorities, at 24.5 percent and 29.9 percent, respectively. Duval County's percentage of minorities was higher, at 38 percent (SRC 2009). Within a 10-mile radius of the Cecil Commerce Center, the percent of minorities varied. Within 2 miles of the Cecil Commerce Center, the percent minority population was 37.6 percent. The percent of minorities decreased to 21.9 percent when extended to a 5-mile radius. Within a 10-mile radius of the Cecil Commerce Center, the percent of minorities was 31.5 percent, which

is not significantly higher than the national percentage of minorities during that time (SRC 2009).

Preliminary statistics for the metropolitan area of Jacksonville indicate that August 2009 unemployment rate was 10.5 percent (Bureau of Labor Statistics 2009a), compared to 6.2 percent in 2007 (U.S. Census Bureau 2009). The nationwide unemployment rate during August 2009 was 9.7 percent (Bureau of Labor Statistics 2009b). In 2008, the unemployment rates for Clay County and Duval County were 6.9 and 6.5 percent, respectively, which equates to over 6,500 unemployed in Clay County and over 28,500 unemployed in Duval County (U.S. Census Bureau 2009). Unemployment estimates were as high as 26.1 percent (March 2009) in the census tract where Cecil Commerce Center is located (Bureau of Labor Statistics 2009b), and data for an area encompassing a 5-mile radius from the Cecil Commerce Center indicate that unemployment was at 12.3 percent during June 2009 (SRC 2009).

3.3.1.2 Industry and Occupations

The ROI is largely suburban in nature, as reflected by its industry sectors and occupations. The top three industry sectors within the ROI include (1) educational services, health care, and social assistance; (2) finance and insurance, real estate, rental, and leasing; and (3) retail trade (U.S. Census Bureau 2009). The top three occupations include (1) management, professional, and related occupations; (2) sales and office occupations; and (3) service occupations (U.S. Census Bureau 2009).

3.3.1.3 Income

According to the U.S. Census, the per capita income in the ROI for 2006 to 2008 ranges from $25,853 in Jacksonville to $27,607 in Clay County. Median household incomes for 2006 to 2008 were significantly lower in Jacksonville ($49,784) and Duval County ($50,301) than in Clay County ($61,909) (U.S. Census Bureau 2009).

During 2006 to 2008, 9.1 percent of families in Jacksonville were below poverty level, which is higher than the percentage of families living in poverty within Duval County (8.9 percent) as a whole (U.S. Census Bureau 2009). Neighboring Clay County's poverty level during the same period was 5.7 percent (U.S. Census Bureau 2009). The national rate for people living in poverty during that time was higher, at 9.6 percent. In 2008, the poverty guideline for a family of four was an annual income of $21,200 in the 48 contiguous states and Washington, D.C.; for a family of three, it was $17,600 (Health and Human Services 2009).

3.3.1.4 Housing

During the period of 2006 to 2008, 86.8 percent of homes were occupied in both Duval County and Jacksonville, while 13.2 percent were vacant in each area. Of the occupied housing units, 64.1 percent were owner occupied in each area. In Clay County, 91.7 percent of housing units were occupied, while the remaining 8.3 percent were vacant. A larger percentage of occupied

homes were owner occupied (78.5 percent) compared to Duval County and Jacksonville. During this time period, the Florida housing occupancy rate was 81.5 percent, while the U.S. occupancy rate was 88.0 percent. Median home values of owner-occupied homes for the area ranged from $179,200 in Jacksonville to $200,300 in Clay County, which is significantly lower than median home values ($226,300) for the state.

3.3.2 ENVIRONMENTAL CONSEQUENCES

3.3.2.1 Proposed Project

The area's high unemployment rate, low labor costs, and moderate cost of living would benefit from positive, long-term socioeconomic impacts. Approximately 279 permanent jobs would directly result from this project within the first 6 years. Saft anticipates the creation of an additional 800 peripheral jobs based on multipliers provided by the U.S. Department of Commerce, Bureau of Economic Analysis Regional Input-Output Modeling System. The creation of new jobs could have a modest, positive impact on the local housing market. The area's low cost of housing, relative to Florida's housing costs as a whole, coupled with the low cost of living could result in a higher rate of owner occupancy and lower vacancy rates.

Saft has partnered with Florida agencies and companies, including the City of Jacksonville; State of Florida; Duval County; TECO Gas; JEA; and Haskell Co., a Jacksonville-based construction company. Saft has a Joint Venture with Johnson Controls, which also has several offices in the Jacksonville area. Employment opportunities are expected to benefit individuals living in Clay County, Duval County, and the City of Jacksonville.

The Cecil Commerce Center is located in an official Enterprise Zone, which allows qualified businesses to take advantage of the financial incentives offered by the state as well as the local government. Florida Enterprise Zones meet specific poverty and unemployment criteria and are developed to encourage economic growth and investment in distressed areas by offering tax advantages and incentives to businesses locating within the zone boundaries (Enterprise Florida 2009). Saft has plans to recruit up to 250 factory workers from the local economy, thus potentially staffing factory positions with a number of recently-unemployed individuals. Short-term benefits would be realized, as another estimated 150 construction jobs and 68 high-level engineering and factory installation jobs would be created immediately to install infrastructure.

The state and city have provided various incentives to encourage Saft to locate its project within the Jacksonville area to benefit the local economy. The Jacksonville Economic Development Commission has offered Saft incentives totaling $20.23 million and the state has offered to contribute an additional $14,905,700. Incentives include Qualified Target Industry tax credits, Brownfield and Enterprise Zone bonuses, a public service tax exemption, and $3.4 million from the Governor's Quick Action Closing Fund (Marbut 2009).

Potential environmental justice impacts would be considered significant if the proposed project would cause disproportionate impacts on low-income and/or minority populations. DOE has not

identified any high and adverse potential impacts to populations. Further, DOE has not identified subsections of the population, including minority or low-income populations, that would receive disproportionate impacts, and it has identified no unique exposure pathways, sensitivities, or cultural practices that would expose minority or low-income populations to disproportionately high and adverse impacts. Therefore, DOE has concluded that no disproportionately high and adverse impacts would occur from the proposed project.

3.3.2.2 No-Action Alternative

Under the No-Action Alternative, DOE would not provide funding to Saft for construction and operation of the proposed project, the facility would not be built, and associated increases in employment or other benefits to the local economy and the Enterprise Zone would likely not occur.

3.4 Occupational Health and Safety

3.4.1 AFFECTED ENVIRONMENT

Occupational health and safety is concerned with occupational and worker hazards during routine operations. The U.S. Department of Labor, Bureau of Statistics, maintains statistics on workplace injuries, illnesses, and fatalities. These statistics consider the potential for total recordable cases; days away from work, days of restricted work activity or job transfer; and worker fatalities in the work environment. The incidence rates (cases per 100 full-time workers for non-fatality statistics and cases per 100,000 full-time workers for fatality statistics) maintained by the Bureau of Labor Statistics are calculated separately for different industries based on the reported health and safety cases for that particular industry. A full-time worker is assumed to work 2,000 hours per year. The health and safety incident categories are defined as follows:

- Total Recordable Cases. The total number of work-related deaths, illnesses, or injuries that result in the loss of consciousness, days away from work, restricted work activity or job transfer, or required medical treatment beyond first aid.

- Days away from work, or days of restricted work activity or job transfer. Cases that involve days away from work, or days of restricted activity or job transfer, or both.

- Worker fatality. Cases that involve the death of a worker.

In order to minimize the effect of industrial health and safety hazards, industries must comply with all applicable regulations that relate to industrial health and safety.

3.4.2 ENVIRONMENTAL CONSEQUENCES

3.4.2.1 Proposed Project

DOE estimated health and safety impacts to workers from industrial hazards by using incidence rates from the U.S. Department of Labor, Bureau of Labor Statistics, for 2008 for nonfatal occupational injuries and for 2007 for occupational fatalities.

For construction activities, DOE used the Bureau of Labor Statistics incident rates from the category "non-residential building construction" for 2008. The total recordable cases incidence rate was 4.4 injuries per 100 full-time employees, and the days away from work, days of restricted work activity or job transfer incidence rate was 2.2 injuries per 100 full-time employees (Bureau of Labor Statistics 2009c). A peak of 150 construction workers would be required for a few months, with fewer workers during the remainder of the construction period. For this analysis, DOE conservatively assumed that the full 150 construction workers would be required during 7 months of construction. DOE estimates that about 3.8 total recordable cases and about 1.9 days away from work would occur during the construction phase. Standard best management practices for the construction industry would be implemented to reduce risks to workers. This includes, but is not limited to, complying with Occupational Safety and Health Administration regulation "Safety and Health Regulations for Construction" (29 CFR Part 1926).

The fatality incidence rate for construction activities in 2007 (2008 data was not available) was 10.5 fatalities per 100,000 full-time employees (Bureau of Labor Statistics 2007). For this analysis, DOE conservatively assumed that the full 150 construction workers would be required during 7 months of construction. DOE estimates that about 0.0092 fatalities would occur during the construction phase. Based on these results, DOE believes that a fatality during construction would be unlikely.

For operation activities, DOE used the Bureau of Labor Statistics incident rates from the category "battery manufacturing" for 2008. The total recordable cases incidence rate was 4.6 injuries per 100 full-time employees, and the days away from work, days of restricted work activity or job transfer incidence rate was 2.5 injuries per 100 full-time employees (Bureau of Labor Statistics 2009c). Assuming an annual work force of 279 factory workers, DOE estimates that about 13 total recordable cases and about 7 days away from work would occur annually during operations. There would be no unusual or potentially unacceptable hazards or risks to workers, who would be trained to operate under a safety program and procedures.

The fatality incidence rate for operation activities in 2007 (2008 data was not available) was 2.0 fatalities per 100,000 full-time employees for chemical manufacturing (Bureau of Labor Statistics 2007). For this analysis, DOE assumed an annual workforce of 279 factory workers. DOE estimates that about 0.0056 fatalities would occur annually during operations. Based on these results, DOE believes that a fatality during operations would be unlikely.

In order to minimize the number of injuries and fatalities in the workplace, Saft has a comprehensive safety program that would be implemented at the facility. New hires would receive a general facility safety training orientation and would receive department and job-specific safety training as part of their formal on-the-job training during their probationary period. All employees would receive annual safety and health training. Saft would establish safety incentives and rewards to encourage a safe working environment.

As described in Section 2.1, NMP is the liquid chemical of greatest use in Saft's manufacturing processes and LiPF6 is a corrosive powder that would be used as an electrolyte. NMP has toxicity concerns, as do essentially all industrial chemicals, and should only be used with appropriate precautions. However, NMP's primary concerns are associated with chronic exposures like those experienced in the work place. NMP has low acute toxicity, so the short-term exposure that would normally be associated with accident conditions, and which could involve the public, would also be considered low risk. Concerns related to LiPF6, as a corrosive, are also related to workplace exposures that could result in severe burns if proper protection is not employed. Saft's health and safety program would include on-going efforts to minimize the potential for accidents, including those that could involve the release of hazardous substances.

3.4.2.2 No-Action Alternative

Under the No-Action Alternative, DOE would not provide funding to Saft for construction and operation of the facility, the facility would not be built, and no injuries or fatalities would occur.

3.5 Utilities, Energy, and Materials

3.5.1 AFFECTED ENVIRONMENT

This section describes the existing electric, natural gas, water, sewer, and storm water systems at the project site. JEA is the consolidated provider of electricity, water and sewer for Jacksonville. Various public entities have previously invested approximately $51 million have in Cecil Commerce Center electric, water, and sewer infrastructure (JEDC 2009).

3.5.1.1 Energy Sources

The JEA electric system currently serves more than 360,000 customers in Jacksonville and parts of three adjacent counties. JEA has the capacity to generate about 3,200 megawatts through its power plants and through power purchase agreements with other utilities (JEA 2009). Electricity is available in the Cecil Commerce Center a few hundred feet northwest of the proposed project site (Saft 2009b). The Cecil Commerce Center is served by TECO Peoples Gas, Florida's largest provider of natural gas. Natural gas is available approximately 0.5 mile southeast of the proposed project site (Saft 2009b).

3.5.1.2 Water and Sewer

JEA's water system serves more than 240,000 water customers and 186,000 sewer customers. Unlike many other communities in Florida, Jacksonville has excess water capacity. JEA's Water System consists of 150 artesian wells tapping the Floridan Aquifer, one of the world's most productive aquifers. Water is distributed through 44 water treatment plants and 3,480 miles of water lines. The JEA sewer system includes more than 2,500 miles of collection lines and six regional sewer treatment plants (JEA 2009).

The Cecil Commerce Center water system is a loop served from two existing high capacity treatment plants. Total system excess capacity within the water treatment grid serving Cecil Commerce Center is 75 million gallons per day. The Cecil Commerce Center sewer system includes a treatment plant with a capacity of 52 million gallons per day (JEDC 2009).

3.5.1.3 Storm Water System

A storm water management facility is located adjacent to the site to the west (Figure 2-2). An approximately 40-foot-wide storm water collection area traverses diagonally from northwest to southeast through the western portion of the site at the location of a former road (Terracon 2009).

3.5.2 ENVIRONMENTAL CONSEQUENCES

3.5.2.1 Proposed Project

Saft expects that all utilities would be extended to the site prior to the start of construction (Saft 2009b). Figure 3-2 shows the existing utilities and the necessary extensions. Besides extension of the utilities, existing utility systems would meet the demands of the proposed facility, and therefore no significant impacts to utilities are expected.

Electricity is available in the Cecil Commerce Center a few hundred feet northwest of the proposed project site and would be brought to its designated transformer pad by JEA as primary service (26.4 kilovolt) (Figure 3-2). The proposed facility is expected to use 20,000 megawatt-hour of electricity. Natural gas is available approximately 0.5 mile away to the southeast and would be brought to the designated building hook up point by a line addition by TECO Peoples Gas (Figure 3-2) (Saft 2009b). Saft estimates the proposed facility would use 40.3 million British thermal units of natural gas annually (Saft 2009d). The facility would use a generator for emergency and egress lighting, fire alarm system, security system, public address system and telephone and data system (Saft 2009c). The type of generator would depend upon the final design of the building. Saft plans to use photovoltaic roof power for an estimated 25 percent of its energy needs (Saft 2009b, Saft 2009d). The facility would be energy efficient and LEED-certified (Silver).

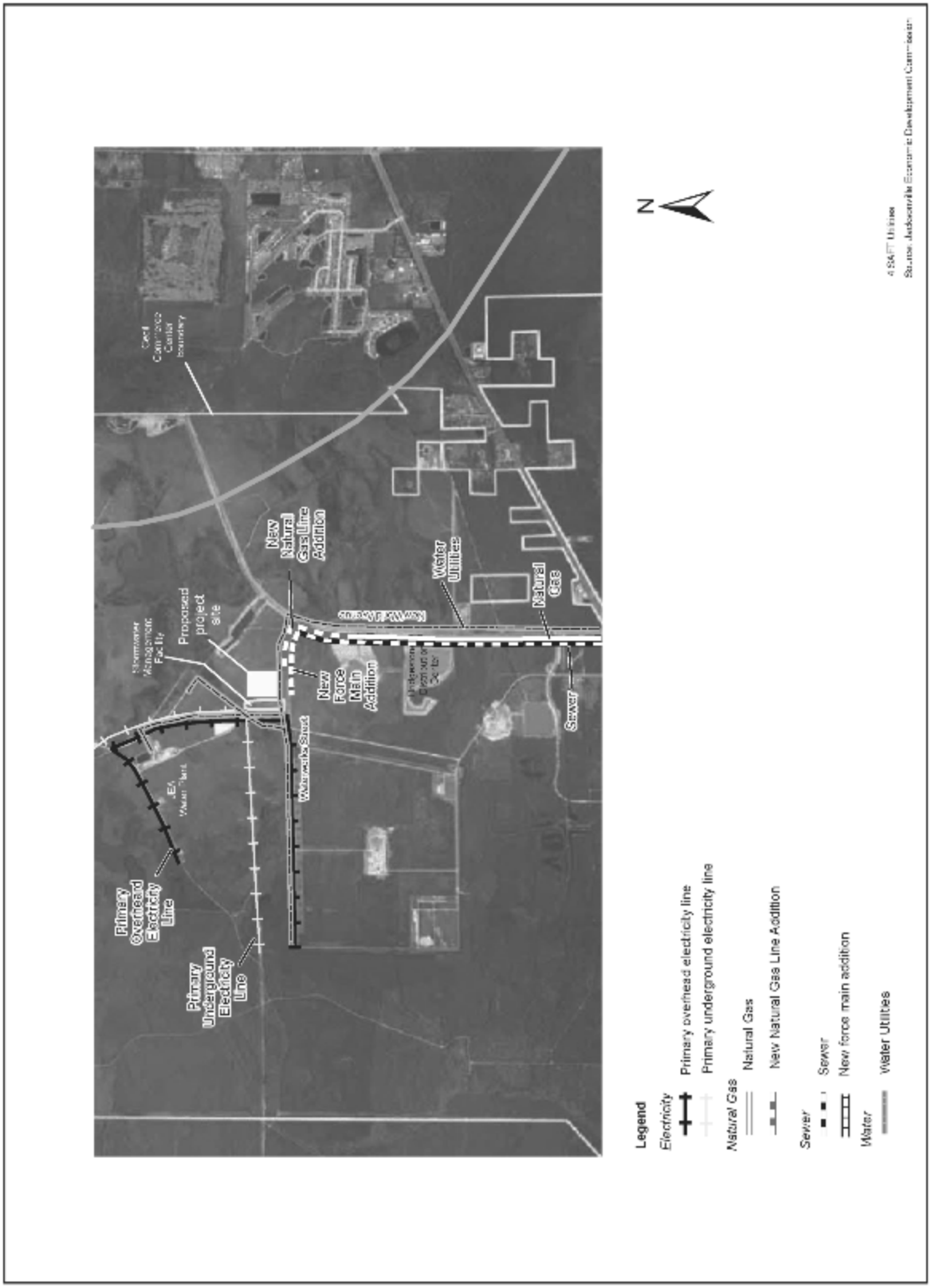

Figure 3-2. Existing utilities and proposed extensions at the proposed project site.

Potable water is adjacent to the site and would be brought to the building designated hook up point (Figure 3-2). Saft would use potable water for all requirements except for toilets which would use reclaimed rainwater (Saft 2009d). A 30-inch water main runs parallel to the western boundary of the site and a smaller branch main line parallels the south side of the site along Waterworks Street. The water connections for the proposed facility originate at the existing water main along Waterworks Street and New World Avenue (Saft 2009c). Both domestic water and fire water service would be provided at the project location. The proposed facility is expected to use 250,000 gallons per year of water (Saft 2009a). Saft would obtain a permit from JEA for construction of an extension to a JEA drinking water distribution system.

A city sewer connection point is located at the intersection of Waterworks Street and New World Avenue approximately 2,000 feet from the proposed project site. Saft would hire a local contractor to extend the sewer lines to the building location (Figure 3-2). Wastewater would be discharged to the JEA public sanitary sewer collection system. Saft would obtain a permit from JEA for construction of an extension to a JEA wastewater collection/transmission system. There would be onsite industrial pretreatment prior to release. The proposed facility is expected to discharge 120,000 gallons per year of wastewater to the JEA Southwest District Wastewater Treatment Plant (National Pollutant Discharge Elimination System Permit #FL0026468) (Saft 2009a).

The City of Jacksonville's site engineering firm has previously engineered drainage at the Cecil Commerce Center so that only fill and localized drainage effort are required at the proposed project site (Saft 2009b). In order to prepare the site, Saft would dig out water retention ponds. The dirt removed to form the ponds would be used to build up ground for the facility. This would eliminate or greatly reduce the amount of fill dirt required. The storm drainage design would be based on St. Johns River Management District requirements. Storm water runoff would be managed through surface drainage to catch basins and curb inlets to an underground storm water conveyance system. Storm water from the building would be discharged directly into the underground storm water conveyance system (Saft 2009c). Saft would submit a Storm Water Pollution Prevention Plan to the Florida Department of Environmental Protection for review and approval.

Saft would use standard construction materials such as concrete and steel to build the proposed facility. Environmentally preferable building materials such as industrial recycled construction materials would be used as much as possible. The building materials are in stock and U.S. domestic steel would be used exclusively (Saft 2009b). The design and construction of the facility would take into considerations the best practices and most economical design to obtain the LEED Certification desired (Silver).

Operations of the proposed facility would consume materials used to manufacture lithium-ion batteries, such as cathode materials, anode materials, separators, cans, and foils (Saft 2009b). The chemicals used and maximum amounts stored at the facility would be: N-Methyl pyrrolidone, 5,000 gallons; and LiPF6, 2,500 gallons. This represents 2 weeks of consumption at

the maximum projected production rate (Denoncourt 2009). NMP would be stored on-site in above ground storage tanks, and LiPF6 would be stored in 55-gallon drums.

Battery construction is designed with consideration for end of life recycling. Battery chemistry is engineered to not contain materials that would be problematic at end of life, such as Resource Conservation and Recovery Act (RCRA)-metals or toxics. Parts recovered from spent batteries for reuse in building new and refurbished batteries could include the electrodes, module cases, hardware etc. Saft continues to work with recyclers to evaluate anode, cathode, and electrolyte materials recovered from recycled batteries for reuse in the production of new batteries (Saft 2009b).

3.5.2.2 No-Action Alternative

Under the No-Action Alternative, DOE would not provide funding for construction of the Saft facility and the facility would not be constructed. No changes would occur to utilities, energy, and materials.

3.6 Waste

3.6.1 AFFECTED ENVIRONMENT

This section describes existing hazardous and solid waste conditions at the project site.

3.6.1.1 Hazardous Waste

The proposed project site is part of the former U.S. Naval Air Station Cecil Field that was transferred to the City of Jacksonville in 2000 after a Finding of Suitability to Transfer determined the land was environmentally suitable for deed transfer. In the Finding, the Federal Government indemnified the Jacksonville Economic Development Commission and any future successor, assignee, transferee, lender, or lessees of the Transfer Parcel from any suit, demand, cost, or liability arising out of any claim of personal injury or property damage that may result from, or be predicated upon, the release or threatened release of any hazardous substance, pollutant, and/or petroleum or petroleum derivative contaminant resulting from Department of Defense activities on the property subject to the conditions specified in and to the extent authorized by Section 330 of Public Law 100-484 as amended by Public Law 103-160. The Environmental Baseline Survey Report (1994), prepared in support of Base Realignment and Closure activities at the U.S. Naval Air Station Cecil Field, is a compilation of all existing information related to storage, release, treatment, and disposal of hazardous substances or petroleum products at U.S. Naval Air Station Cecil Field under all environmental regulatory programs (such as Comprehensive Environmental Response, Compensation and Liability Act; RCRA; Toxic Substance Control Act), as well as information on the status of compliance, removal, closure, and remediation activities. No Installation Restoration Program sites, Areas of Interest sites, or Potential Sources of Contamination sites were located at the proposed project area.

Terracon conducted a Phase I Environmental Site Assessment of the proposed project site for Saft in August 2009 (Terracon 2009). The assessment indicates that the closest area of soil restrictions are associated with polynuclear aromatic hydrocarbons and are located approximately 1,600 feet north of the site and along a former railroad track over 2,500 feet southeast of the site. The report also indicates that the closest area with groundwater restrictions is located over a mile southwest of the site. The assessment concluded that, based on previous environmental assessment activities, distance to known areas of soil and groundwater contamination and topographic gradient, the former U.S. Naval Air Station Cecil Field facility does not appear to constitute a recognized environmental hazard to the proposed site (Terracon 2009). Further, the site assessment did not identify any recognized environmental hazards at the project site (Terracon 2009).

3.6.1.2 Solid Waste

Advanced Disposal Services of Jacksonville provides collection, transfer, and disposal operations for commercial tenants in the Cecil Commerce Center. The city's landfill is the Trail Ridge Landfill, located about 4.5 miles south of the intersection of U.S. 301 and Interstate 10 and about 9 miles southwest of the proposed project site. The Trail Ridge Landfill is a 977-acre property with an existing footprint of 144-acres that is scheduled to reach capacity in 5 to 7 years. The city is finalizing the request for proposals that will ask companies to bid for an opportunity to design and obtain permits for the Trail Ridge Landfill expansion.

3.6.2 ENVIRONMENTAL CONSEQUENCES

3.6.2.1 Proposed Project

3.6.2.1.1 *Hazardous Waste*

During construction, the potential for spills and leaks from construction equipment would be mitigated by contractor spill management plans and response equipment. During operations, the facility would generate about 100,000 pounds per year of hazardous waste (Saft 2009a). The majority of this waste would be recycled for reuse by Saft. Saft would be classified as a large quantity generator and would be subject to reporting requirements for large quantity generators. Hazardous wastes would include Waste Flammable Liquids UN2924, II ERG 132 from waste electrolyte from filling the cells and Waste Solids containing flammable liquids UN3175, PG II ERG 133 from scrap winding from autopsies. In addition, some miscellaneous paint and epoxies would be disposed of as hazardous waste. All hazardous waste would be collected in UN containers no larger than 55 gallons and stored in a waste storage area. Saft does not plan to treat hazardous waste or store hazardous waste on site for more than 90 days and therefore would not need a RCRA permit. Management of the storage area would be dictated through a Spill Prevention, Control and Countermeasures Plan. A RCRA-permitted transport, storage and recycling facility would receive the majority of the waste generated. A RCRA-permitted transport, storage, and disposal facility would dispose of the remaining waste (Saft 2009a). Storage, transportation, and disposal of hazardous waste would require compliance with RCRA,

as implemented through Florida hazardous waste management regulations contained in Fla. Stat Ch. 403, Part IV (1997).

3.6.2.1.2 *Solid Waste*

Construction would generate standard construction debris that would not be hazardous and would be disposed of in permitted landfills or recycled, as appropriate by the construction contractor hired by Saft. During operations, the facility is expected to generate about 9,000 yards per year of solid waste. This solid waste would be collected and transported by Advanced Disposal Services of Jacksonville for disposal off-site at the Trail Ridge Landfill (Saft 2009a).

3.6.2.2 No-Action Alternative

Under the No-Action Alternative, DOE would not provide funding to Saft and the proposed facility would not be built. No impacts related to solid or hazardous waste would occur.

3.7 Transportation

3.7.1 AFFECTED ENVIRONMENT

This section describes the existing transportation infrastructure on and surrounding the project site.

3.7.1.1 Roadways

The Cecil Commerce Center is located adjacent to Interstate 10 and is served by a large regional roadway network. Interstate 295, 7 miles to the east, provides access to Interstate 95 (16 miles away) that provides links to all major areas along the eastern coast of the United States. Interstate 75 is 57 miles away. The new Interstate 10 interchange (Exit 350) for Cecil Commerce Parkway was completed in October 2009 and provides direct access to Cecil Commerce Center at New World Avenue, Normandy Boulevard and 103rd Street. The Cecil Commerce Parkway is a four-lane, limited-access highway and will also be known as State Road 23.

Arterial highways immediately adjacent to the Cecil Commerce Center provide direct access to regional routes. Normandy Boulevard, a four-lane arterial State Road bisects the Cecil Commerce Center and provides a direct link to Interstate 10 via Chaffee Road. 103rd Street extends to the east and provides arterial access to Interstate 95.

The proposed project site is on the north side of Waterworks Street, with access from New World Avenue (Figure 2-1).

The Jacksonville Transportation Authority transit system provides bus service via the B6 Stockton-Wilson-Cecil Commerce bus line that connects to the Cecil Community shuttle at the intersection of Hillman Drive and 103rd Street (Highway 134). The shuttle travels east-west

along 103rd Street to New World Avenue. Currently the shuttle stops at the Florida Community College of Jacksonville about 1.5 miles south of the project site (JTA 2009). The Jacksonville Transportation Authority is currently working to establish viable mass transit directly to the project site. The Cecil Commerce Center has sidewalks and bike lanes for a pedestrian friendly environment and to facilitate mass transit commuters.

3.7.1.2 Aviation

Cecil Field (VQQ), located in the southern portion of the Cecil Commerce Center, is part of Jacksonville's network of four airports managed by the Jacksonville Aviation Authority. It consists of two sets of parallel runways. The two north/south runways include a 12,500-foot runway and an 8,000-foot runway. The two east/west runways are each 8,000 feet in length. Additional airport facilities include 537,000 square yards of apron, eight hangars, and more than 150,000 square feet of office space. The other three Jacksonville airports include: Jacksonville International Airport (JAX), 26 miles from the project site; Craig Airport (CRG), 23 miles away; and Herlong Airport (HEG), 6 miles away.

3.7.1.3 Deep Water Port

The Jacksonville Port Authority is an international trade seaport with multiple cargo terminals. The seaport is located along the St. Johns River, capable of handling container, automobile, bulk, break bulk and refrigerated cargoes, as well as cruise passenger service and local ferry service. The Jacksonville Port Authority is located approximately 20 miles from the project site.

3.7.1.4 Rail

A well-developed railway system serves the region and includes service by CSX, Florida East Coast (an affiliate of RailAmerica, one of the nation's leading short-line and regional railroad operators) and the Norfolk and Southern Railway Company. Cecil Commerce Center provides access to the railway via CSX trackage just north of Interstate 10. There is a rail bed which extends into the northern portion of Cecil Commerce Center which may be reactivated.

3.7.2 ENVIRONMENTAL CONSEQUENCES

3.7.2.1 Proposed Project

Potential impacts to transportation from construction and operation of the proposed facility would not be significant. However, high-volume output of lithium-ion batteries resulting from the operation of Saft's proposed facility is expected to result in long-term benefits to our nation's transportation industry by potentially saving millions of barrels of fuel oil and helping achieve the Obama Administration's goal of a million plug-in hybrid electric vehicles on the road by 2015.

Limited short-term and long-term impacts associated with increased vehicle traffic would occur during construction and operation of the proposed facility. Sufficient transportation

infrastructure is in place to access the site as described in Section 3.7.1. As a result, significant impacts to transportation are not expected. The proposed site is near all necessary modes of transportation (including three interstate highways), with direct access from Interstate 10. This provides adequate access for trucks, parking, and puts the facility within an overnight truck delivery of the majority of customers (Saft 2009b). Jacksonville International Airport is located 26 miles from the site. The Port of Jacksonville is less than 20 miles away and could be used for bulk shipments if economics warranted that mode of shipment (Saft 2009b).

Saft would employ approximately 100 new full-time workers at start up and projects a total of 279 new jobs over 6 years. The anticipated truck traffic from the proposed project is four trucks in-bound and four trucks out-bound per day. A State of Florida Traffic Concurrency Permit has already been obtained. Traffic concurrency is used to manage growth and development by requiring the availability of adequate transportation capacity to support the proposed development. The Cecil Commerce Center currently provides enough concurrency trips to cover all of the proposed development included in the Master Plan at approximately 34 million square feet of industrial and support mixed uses. Mass transit would be available and plans have been made for use of plug-in hybrid electric vehicles and hybrid electric vehicles at the proposed facility.

The site would include: on-grade auto and trailer parking (270 parking spaces), paved loading areas, truck receiving window (controlled entry), main employee entrance, and on-site roadway additions. On site traffic control measures such as 4-inch wide striping, gates and code-required signage would be provided. Auto parking and dock positions would be delineated using 4-inch wide white striping including directional arrows and dock position numbers on the pavement (Saft 2009c).

The U.S. Department of Transportation Pipeline & Hazardous Materials Safety Administration governs the shipment of lithium-ion batteries in the United States and the United Nations Dangerous Goods Committee coordinates worldwide regulations. Saft would use already established procedures to ensure that required testing and certifications occur in the cell and battery design cycles, in time for the shipment of batteries according to the regulations.

3.7.2.2 No-Action Alternative

Under the No-Action Alternative, no increase in traffic would occur as a result of the proposed facility construction and operations. The beneficial impact of long-term reduction of use of fuel oil in our nation’s transportation system would also not be realized.

3.8 The Relationship between Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity

Council on Environmental Quality regulations that implement the procedural requirements of NEPA requires consideration of "the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity" (40 CFR 1502.16). Construction and operation of the facility would require short-term uses of land and other resources. Short-term use of the environment, as used here, is that used during the life of the project, whereas long-term productivity refers to the period of time after the project has been decommissioned, the equipment removed, and the land reclaimed and stabilized. The short-term use of the project site for the proposed facility would not affect the long-term productivity of the area. If it is decided at some time in the future that the project has reached its useful life, the facility and foundations could be decommissioned and removed, and the site reclaimed and revegetated to resemble a similar habitat to the pre-disturbance conditions.

3.9 Irreversible and Irretrievable Commitments of Resources

There would be an irretrievable commitment of land required for construction and operation of the new facility; because other uses would be precluded during the time the land is being used for the proposed use. There would also be an irreversible commitment of energy and materials used to construct and operate the facility. The materials used for the project would include construction materials and materials used to manufacture lithium-ion batteries, such as cathode materials, anode materials, separators, cans, and foils and chemicals such as N-methyl pyrrolidone and LiPF6. DOE would also have expended the finances associated with the funding for the proposed project.

3.10 Unavoidable Adverse Impacts

Construction and operation of the proposed facility would cause unavoidable emissions of some criteria air pollutants. Air pollutant concentrations would not exceed the NAAQS. The need for construction materials, such as steel and concrete would be unavoidable, but would represent a small fraction of available materials. The generation of some solid wastes, construction debris, and hazardous wastes would be unavoidable. Saft would handle all wastes in accordance with applicable regulations, and would implement best management practices and pollution prevention/waste minimization programs.

4. CUMULATIVE IMPACTS

Council on Environmental Quality regulations stipulate that the cumulative effects analysis within an EA consider the potential environmental impacts resulting from the "incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions" (40 CFR 1508.7). This chapter presents past, present, and reasonably foreseeable actions at the Cecil Commerce Center, followed by an analysis of the potential cumulative impacts.

4.1 Past, Present, and Reasonably Foreseeable Actions

The Cecil Commerce Center is part of a former Naval Air Station which was closed during the recent Base Realignment and Closure process. The Naval Air Station has been redeveloped and the immediate surrounding area is under development for use by manufacturing, industrial, commercial, warehousing, and aviation customers.

Presently, the Cecil Commerce Center is primarily home to aviation and aerospace uses. The Center employs more than 2,400 people at more than 30 establishments; including Boeing, Bridgestone Firestone, Logistical Services International, and Northrop Grumman and FlightStar. The Florida State College Aviation Center of Excellence and the Embry Riddle Aeronautical University are also located at Cecil Commerce Center. Approximately 900 acres are designated for the Cecil Recreation Complex that includes tournament level playing fields and sports complexes, playgrounds, open play field areas, a community center, a park maintenance facility and the Jacksonville Equestrian Center.

Overall plans for Cecil Commerce Center predict up to 40,000 jobs created over the next 30 years and for the Center to become one of the premier aviation, warehousing, distribution and logistical hubs of the southeast United States over the next 20 years. Approximately 1,500 acres in the northern-most section of Cecil Commerce Center are certified as a "Mega Site,", a large industrial property qualified to support a major automotive manufacturing facility or similar activity.

The Jacksonville Economic Development Commission issued a formal request for proposals for a master developer to oversee the planning and development of approximately 4,500 acres of City-owned property at Cecil Commerce Center. The request for proposal closed on March 13, 2009 and the Commission selected Hillwood Development Company, LLC as the top-ranked proposer. The Jacksonville Economic Development Commission is currently in negotiations with Hillwood.

Existing plans for future development include:

- Alenia North America plans to build a $65 million final assembly and delivery center for the C-27J Spartan cargo plane. The center would involve 300 new jobs and approximately $42 million in new, private capital for manufacturing equipment, technology, infrastructure and furniture.

- Florida State College has plans for a new, 44,000-square-foot campus in Cecil Commerce Center North and recently completed phase one of the new campus that offers general education courses.

- The City of Jacksonville acquired more than 4,000 acres of the northern portion of Cecil Commerce Center for recreational use. Portions of this area are being master planned to include forms of recreation such as hiking and horseback riding trails, camping, hunting and fishing. This area is a small portion of a larger natural wildlife preservation corridor connecting Jennings State Forest, in Clay County with Cary State Forest, north of Cecil Commerce Center.

4.2 Cumulative Impacts Summary

Short- and long-term cumulative impacts are consistent with the findings of the environmental impact statement prepared by the Navy for the disposal of surplus property and the subsequent reuse of the Naval Air Station Cecil Field in 1998. The Cecil Commerce Center is part of the former Naval Air Station Cecil Field. The environmental impact statement concluded that beneficial impacts of disposing the property and its subsequent reuse would include creation/retention of employment and increased availability of recreational facilities. It also identified potential adverse impacts to wetlands, threatened and endangered species, storm water runoff, water quality, municipal services, traffic, and air quality. However, it concluded that mitigation measures can be employed to reduce potential impacts to acceptable levels (U.S. Navy 1998).

Short-term cumulative impacts to air quality, waste, transportation, noise, soils, and visual resources could occur if construction of multiple facilities occurs in close proximity during the same time periods. Impacts from construction activities include increased exhaust emissions and noise from machinery, traffic, construction debris, soil erosion, and visual impacts of the construction site. These impacts would be temporary and best construction management practices would be used to lessen these impacts.

Specifically, the long-term cumulative impacts would include the conversion of open land to industrial and commercial uses. However, the Cecil Commerce Center is pre-approved by all state and local zoning and land use regulatory agencies for light and heavy industrial, office and commercial applications. The Cecil Commerce Center Conceptual Master Plan identifies areas that will not be developed as well as recreation areas that would preserve some open land. In addition, Cecil Commerce Center Design Guidelines were created to ensure development will

result in a visually pleasing and enhanced environment. The Architectural Review Board is meant to ensure the guidelines are followed appropriately. Cecil Commerce Center currently has enough traffic concurrency trips to cover all of the proposed development included in the Master Plan for Cecil (34 million square feet) and therefore no significant impacts are expected to transportation. As the area becomes more developed, cumulative impacts to air quality could occur from air emissions from the facilities themselves as well as from increased traffic in the area. Developers of future facilities would be responsible for obtaining proper permits prior to development. Long-term cumulative impacts to socioeconomics would be beneficial, including increases in employment and increased spending in the local economy.

5. CONCLUSIONS

The proposed project would be constructed at the Cecil Commerce Center and is compatible with existing and surrounding land use of the project site. Vehicular and construction equipment exhaust would be a source of pollutant emissions, but would have a negligible impact on air quality. DOE estimates that the facility would emit about 751 kilograms of volatile organic compounds per year. The facility would cause minimal emissions of carbon monoxide and nitrogen dioxide from burning natural gas. No air emissions of lead, particulate matter, or sulfur dioxide are expected. High-volume output of lithium-ion batteries resulting from operations of the facility is expected to result in millions of tons less carbon dioxide generated across the nation; and thus, a significant beneficial impact to air quality could be realized.

Minor long-term beneficial socioeconomic impacts would occur from increased employment opportunities and spending in the local economy, specifically at a site designated as a Brownfield and Enterprise Zone. Long-term benefits to the nation's transportation industry would also occur from high-volume output of lithium-ion batteries by savings of fuel oil and greater use of plug-in hybrid electric vehicles.

No adverse impacts to water resources, environmental justice, utility systems, hazardous and solid waste management, transportation, noise, visual resources, geology and soils, biological resources, cultural resources, or occupational health and safety would occur.

Under the No-Action Alternative, DOE would not provide funding to Saft and the proposed facility would not be built. No impacts to the existing environment would occur. In addition, the potential beneficial impacts discussed above would not be realized.

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APPENDIX A. DISTRIBUTION LIST

This appendix contains the list of persons and agencies who received a copy of this Environmental Assessment.

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Lauren P. Milligan, Environmental Manager
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Florida Department of Environmental Protection
3900 Commonwealth Blvd, M.S. 47
Tallahassee, FL 32399-3000

Maryann Poole, Office of Planning and Policy Coordination
Florida Fish and Wildlife Conservation Commission
Farris Bryant Building
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620 S. Meridian Street
Tallahassee, FL 32399-1600

Laura A. Kammerer
Deputy State Historic Preservation Officer
for Review and Compliance
Division of Historical Resources
500 South Bronough Street - Room 423
Tallahassee, FL 32399-0250

Marjorie Bixby, Manager
Florida Department of Transportation
Environmental Management Office
605 Suwannee Street MS 37
Tallahassee, FL 32399

Federal Offices

U.S. Environmental Protection Agency, Region 4
Heinz Mueller, Chief
NEPA Program Office
61 Forsyth Street, SW
Atlanta, GA 30303

Mr. Jay Harrington, Regulatory Chief
U. S. Fish & Wildlife Service
North Florida Field Office
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517

Jacksonville District Corps of Engineers
Regulatory Division, Enforcement Section
North Permits Branch
Osvaldo Collazo, Branch Chief
701 San Marco Blvd., Room 372
Jacksonville, FL 32207-8175

APPENDIX B. CONSULTATIONS

This appendix contains the U.S. Fish and Wildlife's Biological Opinion and Incidental Take Permit and a letter from the State Historic Preservation Officer.

Correspondence received on the draft EA during the public comment period from the following agencies is also contained in this appendix:

Florida State Clearinghouse
Florida Department of Environmental Protection
Lauren P. Milligan, Environmental Manager

Florida Department of State, Division of Historical Resources
Laura Krammerer, Deputy State Historic Preservation Officer

Jacksonville District Corps of Engineers, Regulatory Division
Jeffrey Collins, Chief, Jacksonville Permits Section

U.S. Environmental Protection Agency, Region 4
Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

U.S. Fish and Wildlife Service
Candace Martino, Fish and Wildlife Biologist

FLORIDA DEPARTMENT OF STATE
Kurt S. Browning
Secretary of State
DIVISION OF HISTORICAL RESOURCES

Mr. Edward W. Randolph
Jacksonville Economic Development Commission
1 West Adams Street, Suite 200
Jacksonville, Florida 32202

October 26, 2009

RE: DHR Project File Number: 2009-6159
U.S. Department of Energy
Saft America Inc. - Proposed Commercial Development Site along Water Works Street within the Cecil Commerce Center
Jacksonville, Duval County

Dear Mr. Randolph:

This office reviewed the referenced project for possible impact to historic properties listed, or eligible for listing, in the *National Register of Historic Places*. The review was conducted in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended and *36 CFR Part 800: Protection of Historic Properties*.

We note that the proposed project area is not located within any of the archaeological sensitivity areas. Therefore, based on the information provided, it is the opinion of this office that the above-referenced undertaking will have no effect on historic properties.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservationist, by electronic mail *sedwards@dos.state.fl.us*, or at 850-245-6333 or 800-847-7278.

Sincerely,

Laura A. Kammerer

Laura A. Kammerer
Deputy State Historic Preservation Officer
For Review and Compliance

500 S. Bronough Street • Tallahassee, FL 32399-0250 • http://www.flheritage.com

☐ Director's Office (850) 245-6300 • FAX: 245-6436
☐ Archaeological Research (850) 245-6444 • FAX: 245-6452
☑ Historic Preservation (850) 245-6333 • FAX: 245-6437

United States Department of the Interior

FISH AND WILDLIFE SERVICE
6620 Southpoint Drive South
Suite 310
Jacksonville, Florida 32216-0958

IN REPLY REFER TO:
FWS/R4/ES-JAFL

May 29, 2002

Colonel James G. May
District Engineer
Corps of Engineers
P.O. Box 4970
Jacksonville, Florida 32232

FWS Log No: 02-934
Application No: 199801374 (IP-BL)
Dated: November 1, 2000
Applicant: Jacksonville Economic Development Commission and Jacksonville Port Authority
County: Duval

Dear Colonel May:

The U.S. Fish and Wildlife Service has reviewed the project plans for the above referenced Public Notice. Our comments are submitted in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*).

The applicants are requesting a 20-year permit in order to revitalize and develop the recently closed Naval Air Station Cecil Field (NAS Cecil) as a Commerce Center. The installation is 17, 200 acres in size, of which the applicants propose to develop about 11,000 acres. The applicants are requesting authorization to fill about 570 acres of wetlands in order to accomplish this objective. Much of the installation is already developed as NAS Cecil was a fully operational military base until is was recently closed.

To mitigate for the wetland loss, the applicants will establish a 5,970-acre natural area along the western boundary of the installation. Approximately one-half of the total on-site wetlands lie within the natural area. A restoration and management plan has been developed for the mitigation site.

ENDANGERED SPECIES ACT

The Corps evaluated the impact this project would have on the eastern indigo snake, and determined that the proposed project may affect, not likely to adversely affect this species. We anticipate that the future development of NAS Cecil will result in the incidental take of this species; therefore, a biological opinion is required.

Status of the Species

The eastern indigo snake is the largest nonpoisonous snake in North America, attaining lengths of up to 104 inches (Ashton and Ashton 1981). The adult eastern indigo snake is glossy black in color with red, rust, or white under the chin; juveniles have a light, blotched pattern.

The indigo snake (*Drymarchon corais*) ranges from southeastern United States to Argentina. *Drymarchon corais* has eight recognized subspecies, two of which occur in the United States (Conant 1975, Moler 1985). At one time, the eastern indigo snake (*Drymarchon corais couperi*) occurred throughout the coastal plain of the southeastern United States, ranging from South Carolina to Florida and west to Louisiana. Georgia and Florida currently support the remaining populations of the eastern indigo snake (Lawler 1977).

Threats to this species are habitat destruction from development, gassing of gopher tortoise (*Gopherus polyphemus*) burrows, highway mortality, residual pesticides, and blatant killing (Diemer and Speake 1981, U.S. Fish and Wildlife Service 1982). Low density development is also a potential threat to indigo snakes, increasing the likelihood of snakes being killed by property owners and domestic pets. Lawler (1977) noted that habitat has been destroyed by real estate development and farming agriculture. He stated that the loss of natural sandhill habitat from agricultural production, construction, and forestry is increasing, with losses at the rate of five percent per year in Florida. Bioaccumulation of pesticides may pose a potential hazard to the snake as well (Speake unpublished data).

Over most of its range in Florida, the indigo snake frequents diverse habitats such as pine flatwoods, scrubby flatwoods, flood plain edges, sand ridges, dry glades, tropical hammocks, muckland fields, and xeric sandhill communities. On the central east coast, indigos can be found in orange groves and near ditches and canals. In south Florida, they are found in pine woods and tropical hammocks, or in most undeveloped areas (Kuntz 1977). The snake also utilizes agricultural lands and various types of wetlands, with higher population concentrations occurring in sandhill/pineland regions in northern and central Florida.

Adult male eastern indigo snakes have larger home ranges than adult females and juveniles, encompassing as much as 553 acres (224 hectares) in winter and 390 acres (158 hectares) in summer (Moler 1986). A gravid female may use from 3.4 acres (1.4 hectares) to 106 acres (42.9 hectares) (Smith 1987).

Environmental Baseline

Action Area

The action area for this biological opinion is defined as that portion of the property that will be developed by the applicants on NAS Cecil.

Status of the Species in the Action Area

There has not been a survey for this species on NAS Cecil, but the habitats are suitable for the snake, both within the proposed development and mitigation areas. While there is much development throughout the base, including runways and attendant facilities and a vast roadway network, it has been demonstrated that eastern indigo snakes can and do survive in urban settings, at least in the short term. Sites such as these are sinks for this species, however.

Effects of the Action on the Eastern Indigo Snake

The proposed action will result in the loss of eastern indigo snake habitat through destruction and fragmentation. The proposed development will likely result in "take," as defined by the Act. Snakes that are not taken directly as a result of construction, will more than likely be injured or killed as they move between buildings, cross roadways, and come into contact with people.

Cumulative effects

Cumulative effects include the effects of future State, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

The Service has considered cumulative effects with respect to this project and determined they do not apply in this instance.

Conclusion

The eastern indigo snake is threatened by the loss of habitat. Although the proposed project will result in habitat loss, there is a significant amount of habitat that will be retained and managed on NAS Cecil for the benefit of all fish and wildlife resources, including the eastern indigo snake. The eastern indigo snake ranges from southeast Georgia through peninsular Florida. This species is not dependent on any particular habitat type.

After reviewing the current status of the eastern indigo snake, the environmental baseline for the action area, the effects of the proposed action and the cumulative effects, it is the Service's biological opinion that the future development on NAS Cecil is not likely to jeopardize the continued existence of the eastern indigo snake. No critical habitat has been designated for this species, therefore, none will be affected.

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INCIDENTAL TAKE

Sections 4(d) and 9 of the Act, as amended, prohibit taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or to attempt to engage in any such conduct) of listed species of fish or wildlife without a special exemption. "Harm" and "harass" are further defined in Service regulations (50 CFR 17.3). "Harm" is defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. "Harass" is defined as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, which include, but are not limited to, breeding, feeding or sheltering.

Under the terms of sections 7(b)(4) and 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary, and must be implemented by the agency so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply.

The Federal agency has a continuing responsibility to regulate the activity that is covered by this incidental take statement. If the agency (1) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

Sections 7(b)(4) and 7(o)(2) of the Act do not apply to the incidental take of listed plant species. However, protection of listed plants is provided to the extent that the Act requires a Federal permit for removal or reduction to possession of endangered plants from areas under Federal jurisdiction, or for any act that would remove, cut, dig up, or damage or destroy any such species on any State or in the course of any violation of a State criminal trespass law.

Amount or Extent of Take

The Service has reviewed the biological information for this species, information presented by the applicant's consultants, and other available information relevant to this action, and based on our review, incidental take is anticipated for all eastern indigo snakes and their eggs within the construction areas on NAS Cecil.

Effect of the Take

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

Reasonable and Prudent Measures

When providing an incidental take statement the Service is required to give reasonable and prudent measures it considers necessary or appropriate to minimize the take along with terms and conditions that must be complied with, to implement the reasonable and prudent measures. Furthermore, the Service must also specify procedures to be used to handle or dispose of any individuals taken. The Service believes the following reasonable and prudent measure is necessary and appropriate to reduce take:

Implement on-site procedures to avoid take of the eastern indigo snake.

Terms and Conditions

To implement the above reasonable and prudent measure, the Service has outlined the following terms and conditions for incidental take. In accordance with the Interagency Cooperation Regulation (50 CFR 402), these terms and conditions must be complied with to implement the reasonable and prudent measure for incidental take:

1. An eastern indigo snake protection/education plan shall be developed by the applicant or requestor for all construction personnel to follow. The plan shall be provided to the Service for review and approval at least 30 days prior to any clearing activities. The educational materials for the plan could consist of a combination of posters, videos, pamphlets, and lectures (*e.g.*, an observer trained to identify eastern indigo snakes could use the protection/education plan to instruct construction personnel before any clearing activities occur). Informational signs should be posted throughout the construction site and contain the following information:

   a. a description of the eastern indigo snake, its habits, and protection under Federal Law;
   b. instructions not to injure, harm, harass or kill this species;
   c. directions to cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site on its own before resuming clearing; and,
   d. telephone numbers of pertinent agencies to be contacted if a dead eastern indigo snake is encountered. The dead specimen should be thoroughly soaked in water, then frozen.

2. Only an individual, who has been either authorized by a section 10(a)(1)(A) permit issued by the Service, or designated as an agent of the State of Florida by the Florida Fish and Wildlife

   Conservation Commission for such activities, is permitted to come in contact with or relocate an eastern indigo snake.

3. If necessary, eastern indigo snakes shall be held in captivity only long enough to transport them to a release site; at no time shall two snakes be kept in the same container during transportation.

4. An eastern indigo snake monitoring report must be submitted to the North Florida Field Office within 60 days of the conclusion of clearing phases. The report should be submitted whether or not eastern indigo snakes are observed. The report should contain the following information:
   a. any sightings of eastern indigo snakes;

5

b. summaries of any relocated snakes if relocation was approved for the project (*e.g.*, locations of where and when they were found and relocated);
c. thorough description of the preserve area for eastern indigo snakes if a preserve area was approved (*e.g.*, types of habitats, percent cover of dominant species); and
d. summaries of maintenance activities and schedules for the preserve area.

REINITIATION OF SECTION 7 CONSULTATION

This concludes formal consultation on the action outlined in the request. As provided in 50 CFR Section 402.16, reinitiation of formal consultation is required when discretionary Federal agency involvement or control over the action has been retained and if: (1) the amount or extent of incidental take is exceeded, (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this biological opinion, for example the results of the red-cockaded woodpecker survey, (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this biological opinion, or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

Sincerely,

Don Palmer

for Peter M. Benjamin
Assistant Field Supervisor

cc:

FWS-Atlanta ES

S: palmer\02-934\acm\05.29.02

LITERATURE CITED

Ashton, R.E. and P.S. Ashton. 1981. Handbook of Reptiles and Amphibians of Florida. Windward Publishing, Inc., Miami, FL. 176 pp.

Conant, R. 1975. A field guide to reptiles and amphibians of eastern and central North America. 2nd Ed. Houghton-Mifflin Co., Boston. 429 pp.

Diemer, J.E. and D. Speake. 1981. The status of the eastern indigo snake in Georgia. Pp. 52-61 in R.R. Odom and J.W. Guthrie, Ed., Proc. Nongame and End. Wildl. Symp., Georgia Dept. Nat. Res. Game and Fish Div. Tech. Bull. WL 5.

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U.S. Fish and Wildlife Service. 1982. Eastern indigo snake recovery plan. Atlanta, Ga. 23pp.

Mr. Mark W. Lusk
Office of Project Facilitation & Compliance
National Energy Technology Laboratory
U.S. Department of Energy
P.O. Box 880
Morgantown, WV 26507-0880

RE: U.S. Department of Energy - Renewable Energy Research and Development - Draft Environmental Assessment for Saft America, Inc., Electric Drive Vehicle Battery and Component Manufacturing Initiative Application – Jacksonville, Duval County, Florida. SAI # FL200912165058C

Dear Mr. Lusk:

Florida State Clearinghouse staff has received and reviewed the referenced Draft Environmental Assessment (EA) under the following authorities: Presidential Executive Order 12372; Section 403.061(40), *Florida Statutes*; the Coastal Zone Management Act, 16 U.S.C. ◆◆ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. ◆◆ 4321-4347, as amended.

Based on the information contained in the Draft EA and issuance of Environmental Resource Permit (ERP) No. 4-031-70452-8 by the St. Johns River Water Management District (SJRWMD), the state has determined that the proposed project is consistent with the Florida Coastal Management Program (FCMP). The state's final concurrence of the project's consistency with the FCMP was determined during the environmental resource permitting stage in accordance with Section 373.428, *Florida Statutes*. The funding applicant is advised to continue coordination with SJRWMD staff to ensure compliance with the conditions of the ERP and any subsequent modifications.

If you have any questions regarding this message or the state intergovernmental review process, please don't hesitate to contact me at (850) 245-2170 or Lauren.Milligan@dep.state.fl.us. Thank you.

Yours sincerely,

Lauren P. Milligan

Lauren P. Milligan, Environmental Manager
Florida State Clearinghouse
Florida Department of Environmental Protection
3900 Commonwealth Blvd, M.S. 47
Tallahassee, FL 32399-3000
ph. (850) 245-2170
fax (850) 245-2190

FLORIDA DEPARTMENT OF STATE
Kurt S. Browning
Secretary of State
DIVISION OF HISTORICAL RESOURCES

Mr. Mark W. Lusk
U.S. Department of Energy
P.O. Box 880, MS B07
Morgantown, West Virginia 26507-0880

January 5, 2010

RE: DHR Project File Number: 2009-7493
US Department of Energy
Draft Environmental Assessment for Saft America, Inc. Electric Drive Vehicle Battery and Component Manufacturing Initiative Application
Jacksonville, Duval County

Dear Mr. Lusk:

This office reviewed the referenced environmental assessment for possible impact to historic properties listed, or eligible for listing, in the National Register of Historic Places. The review was conducted in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and 36 CFR Part 800: Protection of Historic Properties.

It is the opinion of this office that cultural and historical resources have been adequately addressed in this document, and we maintain our concurrence that the proposed undertaking will have no effect on historic properties.

If you have any questions concerning our comments, please contact Samantha Earnest, Historic Preservationist, by electronic mail at *sweatnest@dos.state.fl.us*, or by telephone at 850.245.6333 or 800.847.7278.

Sincerely,

Laura A. Kammerer

Laura A. Kammerer
Deputy State Historic Preservation Officer
For Review and Compliance

500 S. Bronough Street • Tallahassee, FL 32399-0250 • http://www.flheritage.com

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☐ Archaeological Research (850) 245-6444 • FAX: 245-6452
☒ Historic Preservation (850) 245-6333 • FAX: 245-6437

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
POST OFFICE BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF
Regulatory Division
North Permits Branch
Jacksonville Permits Section

January 6, 2010

U.S. Department of Energy
National Energy Technology Laboratory
Attn: Mr. Mark Lusk
Post Office Box 880
Morgantown, West Virginia 26507-0880

Dear Mr. Lusk:

The U.S. Army Corps of Engineers (Corps) received and reviewed documents associated with your correspondence, dated December 10, 2009, concerning the *Draft Environmental Assessment for Saft America, Inc. Electric Drive Vehicle Battery and Component Manufacturing Initiative Application, Jacksonville, FL (DOE/EA-1711D)* (Draft EA).

The Draft EA indicates that waters of the United States (wetlands) encountered at the Cecil Commerce Center have been surveyed, permitted and are being mitigated through an existing mitigation plan as part of the permit issued to the City of Jacksonville and the Jacksonville Airport Authority in 2004 by the Corps, Jacksonville District. Further, the Draft EA indicates that although standing water can occur at the Saft America project site, the entire transfer parcel from the Naval Air Station Cecil Field has been assessed for wetlands and none were identified on the proposed project site.

In consideration of the information contained within the Draft EA, resources within our purview would not be affected by the work proposed. Therefore, the Corps has no objection to the work proposed.

If you have any questions regarding this correspondence, please contact Mr. Mark R. Evans at the letterhead address, by electronic mail at mark.r.evans@usace.army.mil, or by telephone at 903-232-2028.

Sincerely,

for Jeffrey Collins
Chief, Jacksonville Permits Section

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

January 12, 2010

Mr. Mark W. Lusk
Office of Project Facilitation & Compliance
U.S. Department of Energy
National Energy Technology Laboratory
3610 Collins Ferry Road
P.O. Box 880, MS B07
Morgantown, WV 26507-0880

RE: EPA Review and Comments on
Draft Environmental Assessment (EA) for
Saft America, Inc. Electric Drive Vehicle Battery and
Component Manufacturing Initiative Application
Jacksonville, Florida

Dear Mr. Lusk:

EPA Region 4 reviewed the subject Environmental Assessment (EA) pursuant to Section 309 of the Clean Air Act. The purpose of this letter is to provide you with EPA's comments regarding potential impacts of the proposed project.

The document describes the proposed construction and operation of a high-volume manufacturing plant to build advance lithium-ion cells and batteries for military hybrid vehicles, aviation, smart grid support, broadband backup power, and energy storage for renewable energy. This action would take place pursuant to the American Recovery and Reinvestment Act of 2009. The DOE's proposed action is to provide cost-shared funding for the facility's construction and operation.

Based on the information provided in the EA, we support the project and believe the proposed Saft America facility and its operation do not appear to represent a significant impact to human health and the environment. However, appropriate worker protection measures and adherence to OSHA standards will be important measures during construction and operation of the facility, as the most likely receptors of any adverse impacts to public health would be experienced by on-site employees. Based on our review of the Draft EA, clarification of demographics, data references and maps should be addressed. Our detailed comments are attached.

Thank you for the opportunity to comment on this EA. If you have any questions, contact Ramona McConney of my staff at (404) 562-9615.

Sincerely,

Ramona K McConney for

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

EPA Review and Comments on
Draft Environmental Assessment (EA) for
Saft America, Inc. Electric Drive Vehicle Battery
and Component Manufacturing Initiative Application

Demographics data/Environmental Justice (EJ):

1. Section 2.1: Based on the maps included in the Draft EA, it is unclear how far the residents are from the proposed project site. A map should be provided that shows the locations of residential areas.

2. Section 3.3.1.1: The Draft EA indicates that the project is in an enterprise zone, and there is high unemployment within the proposed project area. However, demographics information regarding race does not appear to be included in the document. A race and ethnicity assessment of the surrounding area should be provided and associated with the unemployment information to clarify EJ impacts.

Supporting data:

3. Section 3.1: A windrose assessment including maps should be provided, showing prevailing wind direction for the area.

4. Section 3.2: Rainfall amounts should be provided relative to run-off potential and groundwater infiltration.

5. Section 3.2.1.1: References regarding the low gradient, including a topographical map, should be provided.

6. Section 3.2.1.3: A pictorial result of the Terracon 2009 and ERS 2009 wetland assessment should be provided. Otherwise, wetland areas should be delineated via maps. Construction details should be provided regarding potential wetland impacts, if any impacts are anticipated.

7. Section 3.3.2.1: Documentation of the local terrestrial and aquatic ecological structures associated with the area should be evaluated. This should include a list of endangered species potentially associated with the area.

>>> <Candace_Martino@fws.gov> 1/19/2010 3:30 PM >>>

Hello Mark - Thank-you for sending your draft environmental assessment to the U.S. Fish and Wildlife Service to review the Saft America, Inc. Electrive Drive Vehile Battery & Component Manufacturing initiative - at Cecil Field Commerce Center in Jacksonville, FL, in order to obtain ARRA funding.

We apologize for responding after the January 12, 2010, deadline. Our comments regarding this assessment are as follows:

1) Your conclusions indicated 'No adverse impacts to water resources, biological resources, geology and soils, environmental justice,.....etc. would occur. However, there was no subjection heading, discussion or identification of any Federally-listed species that may potentially be located in the project area addressed in this assessment.

2) Based on the habitat types found in this general area, gopher tortoise burrows may be in the project area which may be utilized by the federally-threatened Eastern Indigo snake. Based on the results of future surveys for the state threatened gopher tortoises that would be required by the Florida Fish and Wildlife Conservation Commission (FWC), our agency through consultation with the Army Corps of Engineers may request the applicant to adhere to the Eastern Indigo Snake Standard Protection Measures.

3) There is always a potential for a bald eagle nest to be located in the area by the time this project were to move forward with construction. If there is a nest within 660 feet of the project, the applicant would need to contact our office and the FWC for further guidance. In order to obtain the most recent survey data for bald eagles, you may contact Janell.Brush@MyFWC.com for location information or call her at (352)955-2081.

This concludes our review for this referenced project. Thank-you for the opportunity to comment.

****

Candace Martino, Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
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