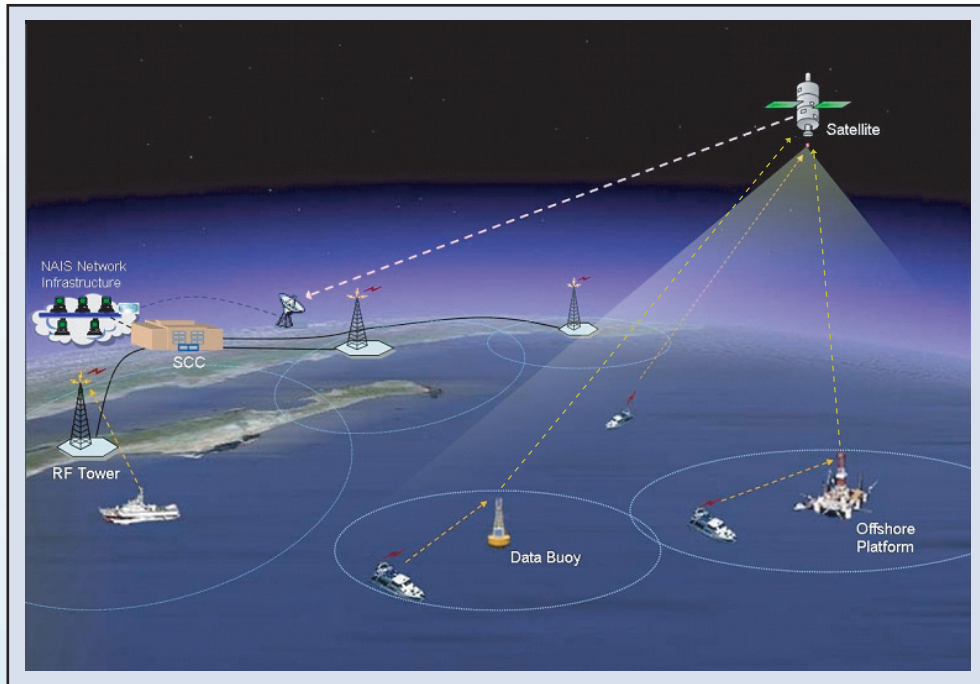




Programmatic Environmental Impact Statement for Implementation of the U.S. Coast Guard Nationwide Automatic Identification System Project



October 2006



NAIS

*Providing Vessel Identification, Tracking,
& Information Exchange Capabilities to Support National Maritime Interests*

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT ORGANIZATION

This Programmatic Environmental Impact Statement (PEIS) provides an assessment of the potential environmental impacts associated with proposed implementation of the U.S. Coast Guard Nationwide Automatic Identification System (NAIS) project.

An **EXECUTIVE SUMMARY** briefly describes the Proposed Action and alternatives and summarizes the anticipated environmental impacts.

A list of **ACRONYMS AND ABBREVIATIONS** is provided following the **TABLE OF CONTENTS**.

SECTION 1: PURPOSE OF AND NEED FOR THE PROPOSED ACTION. This section briefly identifies the purpose and need for the Proposed Action, defines the project scope, discusses NEPA and the public involvement process, and identifies the organization of the document.

SECTION 2: PROPOSED ACTION AND ALTERNATIVES describes the Proposed Action and the alternatives considered, identifies the preferred alternative, and presents a comparison of the environmental effects of the alternatives.

SECTION 3: AFFECTED ENVIRONMENT describes the environmental settings in the areas in which the Proposed Action and alternatives would occur.

SECTION 4: ENVIRONMENTAL CONSEQUENCES identifies the potential environmental impacts of the Proposed Action and alternatives on each resource area.

SECTION 5: CUMULATIVE AND OTHER IMPACTS discusses the potential cumulative impacts that could result from the impacts of the Proposed Action and alternatives when combined with past, other present, and reasonably foreseeable future actions.

SECTION 6: LIST OF PREPARERS identifies persons who prepared the document and their areas of expertise.

SECTION 7: REFERENCES provides a list of cited sources.

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- A International AIS Standards and Domestic AIS Regulations**
- B Public Involvement (Scoping Materials and Public Comments)**
- C Applicable Laws and Executive Orders**
- D Glossary**
- E Air Quality Emissions Calculations**



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U.S. COAST GUARD PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

FOR

Implementation of the U.S. Coast Guard
Nationwide Automatic Identification System Project

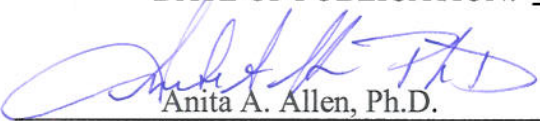
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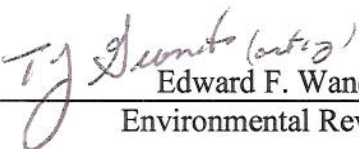
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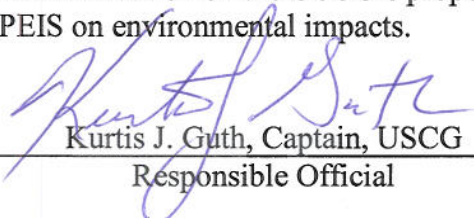
This Programmatic Environmental Impact Statement (PEIS) provides an assessment of the potential environmental impacts associated with the proposed implementation of the Nationwide Automatic Identification System (NAIS) project by the U.S. Coast Guard (USCG). The proposed implementation of the NAIS project would involve installing receivers, transmitters, transceivers, repeaters, and other equipment on towers or other structures at up to 450 sites at locations along 95,000 miles of coastline and inland waterways, as well as the use of selected remote platforms; such as satellites, offshore oil and gas platforms and data buoys. The proposed implementation of the NAIS project is a U.S. Department of Homeland Security (DHS) Level I investment and USCG major systems acquisition and would be expected to be fully implemented and operational by 2014. The proposed implementation of the NAIS project would provide the USCG with the capability to receive and distribute information from shipboard AIS equipment and transmit information to AIS equipped vessels to enhance Maritime Domain Awareness. The project would provide detection and identification of vessels carrying AIS equipment approaching or operating in the maritime domain where little or no vessel tracking currently exists.

DATE OF PUBLICATION: October 6, 2006

<u>9/25/06</u> Date	 Anita A. Allen, Ph.D. Preparer/Environmental Project Manager	<u>NAIS Environmental Manager</u> Title/Position
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<u>9-25-06</u> Date	 Edward F. Wandelt Environmental Reviewer	<u>USCG Office of Logistics, Chief, Environmental Management Div.</u> Title/Position
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In reaching my recommendation on the USCG's proposed action, I have considered the information contained in this PEIS on environmental impacts.

<u>9/25/06</u> Date	 Kurtis J. Guth, Captain, USCG Responsible Official	<u>NAIS Project Manager</u> Title/Position
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**PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT
FOR IMPLEMENTATION OF THE U.S. COAST GUARD
NATIONWIDE AUTOMATIC IDENTIFICATION SYSTEM PROJECT**



Docket Number: USCG-2005-22837

Prepared By: U.S. Coast Guard (USCG) and their contractor, engineering-environmental Management, Inc. (e²M).

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Abstract: This Programmatic Environmental Impact Statement (PEIS) provides an assessment of the potential environmental impacts associated with the proposed implementation of the Nationwide Automatic Identification System (NAIS) project by the USCG. The proposed implementation of the NAIS project would involve installing receivers, transmitters, transceivers, repeaters, and other equipment on towers or other structures at up to 450 sites at locations along 95,000 miles of coastline and inland waterways, as well as the use of selected remote platforms such as satellites, offshore oil and gas platforms, and data buoys. The proposed implementation of the NAIS project is a U.S. Department of Homeland Security (DHS) Level I investment and USCG major systems acquisition and would be expected to be fully implemented and operational by 2014.

The Automatic Identification System (AIS) is an international standard for ship-to-ship, ship-to-shore, and shore-to-ship communication of information, including vessel identity, position, speed, course, destination, and other data of critical interest for navigational safety and maritime security.

The proposed implementation of the NAIS project would provide the USCG with the capability to receive and distribute information from shipboard AIS equipment and transmit information to AIS-equipped vessels to enhance Maritime Domain Awareness. The project would provide detection and identification of vessels carrying AIS equipment approaching or operating in the maritime domain where little or no vessel tracking currently exists.

Date of Publication: October 6, 2006

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

FOR

IMPLEMENTATION OF THE U.S. COAST GUARD NATIONWIDE AUTOMATIC IDENTIFICATION SYSTEM PROJECT

Prepared for

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Prepared by



engineering-environmental Management, Inc.

**Contract No.: DACA63-03-D-0009 (USACE, Ft. Worth District)
e²M Project No.: 4100-012**

OCTOBER 2006

Executive Summary

Introduction

This Programmatic Environmental Impact Statement (PEIS) provides an assessment of the potential environmental impacts associated with the proposed implementation of the Nationwide Automatic Identification System (NAIS) project by the U.S. Coast Guard (USCG). The proposed implementation of the NAIS project would involve installing receivers, transmitters, transceivers, repeaters, and other equipment on towers or other structures at up to 450 sites at locations along 95,000 miles of coastline and inland waterways. Selected remote platforms such as satellites, offshore oil and gas platforms, and data buoys would also be used. The proposed implementation of the NAIS project is a U.S. Department of Homeland Security (DHS) Level I investment and USCG major systems acquisition and would be expected to be fully implemented and operational by 2014.

The Automatic Identification System (AIS) is an international standard for ship-to-ship, ship-to-shore, and shore-to-ship communication of information, including vessel identity, position, speed, course, destination, and other data of critical interest for navigational safety and maritime security. AIS equipment is required domestically and internationally aboard most commercial vessels. AIS shipboard equipment consists of a transceiver that continually transmits and receives vessel navigational information (e.g., position, course, speed) over very high frequency-frequency modulation (VHF-FM) maritime frequencies. AIS is an “open system” which allows vessels operating in proximity to each other to automatically share AIS-related information and create a virtual network. Shore stations can also join these virtual networks, and can receive shipboard AIS signals, perform network and frequency management, and send additional broadcast or individual informational messages to AIS-equipped vessels.

The proposed implementation of the NAIS project would provide the USCG with the capability to receive and distribute information from shipboard AIS equipment and transmit information to AIS-equipped vessels to enhance Maritime Domain Awareness (MDA). MDA is the effective understanding of anything associated with the global marine environment that could impact the security, safety, economy, or environment of the United States. The project would provide detection and identification of vessels carrying AIS equipment that are approaching or operating in the maritime domain where little or no vessel tracking capability currently exists.

Purpose and Need

The purpose of the Proposed Action is to establish a nationwide network of receivers and transmitters to capture, display, exchange, and analyze AIS-generated information. The Proposed Action would satisfy the USCG’s need to enhance homeland security while carrying out its mission to ensure marine safety and security, preserve maritime mobility, protect the marine environment, enforce U.S. laws and international treaties, and perform search and rescue (SAR) operations.

The need for the Proposed Action arises from several sources, including the following:

International Treaty. The United States is a member of the International Maritime Organization (IMO). IMO administers the Safety of Life at Sea Convention, also known as SOLAS, an international treaty. In December 2000, Chapter V of the SOLAS Convention was amended to require AIS, capable of providing information about the ship to other ships and to coastal authorities automatically, to be fitted aboard all ships of 300 gross tonnage and upwards engaged on international voyages, cargo ships of 500 gross tonnage and upwards not engaged on international voyages, and passenger ships irrespective of size built on or after July 1, 2002. The United States, through the USCG, works closely with the international community in AIS standards development and implementation.

Maritime Transportation Security Act (MTSA) of 2002. Section 70113 of the MTSA of 2002 directs the Secretary of DHS to "... implement a system to collect, integrate, and analyze information concerning vessels operating on or bound for waters subject to the jurisdiction of the United States, including information related to crew, passengers, cargo, and intermodal shipments." Further, Section 70114 of the MTSA requires that certain vessels "while operating on the navigable waters of the United States, shall be equipped with and operate an automatic identification system under regulations prescribed by the Secretary." The USCG has determined that this Congressional directive would be largely satisfied through AIS carriage requirements and implementation of the proposed NAIS project.

Other Congressional Actions. In Senate Report 108-86, which accompanied the DHS Appropriations Bill for 2004, Congress directed that the AIS initiative be funded and identify specific capabilities that should be part of the system. Moreover, signaling its interest in timely performance, Congress required submission of a report detailing how and when the AIS would be implemented nationwide.

National Security Presidential Directive 14/Homeland Security Presidential Directive 13. In December 2004, the President of the United States directed the Secretaries of the Department of Defense (DOD) and DHS to lead the Federal effort to develop a comprehensive National Strategy for Maritime Security, to better integrate and synchronize the existing department-level strategies and ensure their effective and efficient implementation. The National Strategy for Maritime Security aligns all Federal government maritime security programs and initiatives into a comprehensive and cohesive national effort involving appropriate Federal, state, local, and private sector entities.

Eight supporting plans to the National Strategy for Maritime Security address the specific threats and challenges of the maritime environment. While the plans address different aspects of maritime security, they are mutually linked and reinforce each other. Of particular relevance to the Proposed Action is the *National Plan to Achieve Maritime Domain Awareness*. The MDA Plan is a cornerstone for successful execution of the security plans tasked in the National Strategy for Maritime Security. As stated in this plan, the basis for effective prevention measures is awareness and threat knowledge, along with credible deterrent and interdiction capabilities. Without effective understanding of maritime domain activities, gained through persistent awareness, vital opportunities for an early response can be lost. Awareness grants time and distance to detect, deter, interdict, and defeat adversaries. NAIS will provide the nation with the tools to conduct nationwide persistent surveillance of vessels operating in or bound for U.S. waters.

USCG Missions and NAIS Operational Requirements. The USCG is the lead Federal agency for maritime homeland security. USCG statutory responsibilities include ensuring marine safety and security, preserving maritime mobility, protecting the marine environment, enforcing U.S. laws and international treaties, and performing search and rescue. The USCG supports the DHS overarching goal of mobilizing and organizing our nation to secure the homeland from terrorist attacks, natural disasters, and other emergencies. In performing its duties, the USCG has established five strategic goals: maritime safety, protection of natural resources, maritime security, maritime mobility, and national defense.

AIS equipment would be installed on various platforms (e.g., buildings, towers, satellites, and offshore oil and gas platforms and data buoys) and would function in expected adverse operating environments. The information provided by the NAIS project would support most of the nation's maritime interest, from the safety of vessels and ports through collision avoidance, to the safety of the nation through detection, traffic identification, and classification of vessels out to 2,000 nautical miles (NM).

Scope of the PEIS

This PEIS examines the direct, indirect, and cumulative environmental impacts associated with the proposed implementation of the NAIS project. This document has been prepared in compliance with the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) regulations for implementing NEPA, and DHS and USCG policy.

A programmatic environmental document, such as this PEIS, is prepared when an agency is proposing to carry out a broad action, program, or policy. The USCG has determined that implementation of the proposed NAIS project is a broad action with national implications. Consistent with CEQ regulations, the USCG is preparing this PEIS at the program development stage. The purpose of this PEIS is to provide general environmental information on the Proposed Action and alternatives to USCG decisionmakers, expert agencies, and the interested and affected public, and to determine and disclose the significance of the environmental impacts associated with the proposed implementation of the NAIS project. The programmatic or systemwide approach creates a comprehensive, global analytical framework that supports subsequent environmental analyses that are then tiered off the PEIS to address specific actions at site-specific locations within the overall system once they are identified. Programmatic analysis can save resources by providing tiered NEPA coverage for the entire program, allowing subsequent NEPA analyses to be more narrowly focused on specific activities at specific locations.

Public Review and Comment

The USCG invites public participation in the NEPA process. Public participation opportunities are guided by CEQ regulations and policies of DHS and USCG. USCG consideration of the interests of potential stakeholders promotes open communication and enables better decisionmaking. All agencies, organizations, and individuals having an interest in the Proposed Action are urged to participate in the decisionmaking process.

A Notice of Intent (NOI) to prepare a PEIS was published in the *Federal Register* on November 23, 2005. The publication of the NOI initiated a 30-day public scoping period. The USCG published newspaper ads announcing the NOI and public scoping meeting in the *Washington Post* and *San Francisco Chronicle* on December 4, 2005, and repeated the ad in the *Washington Post* on December 16, 2005. The USCG also published this information in the Local Notice to Mariners. In addition, the USCG mailed an “Interested Party” letter to at least 230 potentially interested parties, including Federal, state, and local agencies, elected officials, stakeholders, and individuals. The letters included a copy of the NOI. All public involvement material is included in **Appendix B**.

An informational open house and public meeting concerning the Proposed Action and development of this PEIS was held at the USCG Headquarters Building in Washington, D.C., on December 22, 2005. Comments received at the meeting were taken into consideration in development of this PEIS.

In total, 21 written comments were received as a result of the public scoping process; 20 were received from various Federal and state agencies and 1 was received from a stakeholder association. Agency comments mainly fell into one of three categories: (1) coastal zone management coordination, (2) concerns over potential effects on historic or cultural resources, and (3) concerns over the potential impacts on migratory birds from construction of shore-based radio frequency (RF) sites (towers). One verbal comment was received at the public scoping meeting on December 22, 2005, from the Passenger Vessel Association. The comment, which is recorded in the official transcript of the public scoping meeting, raises this stakeholder group’s concerns about AIS carriage requirements and rulemaking and its potential economic impact on the group’s members.

In addition to the public involvement efforts prior to preparation of the Draft PEIS, A Notice of Availability (NOA) of the Draft PEIS was published in the *Federal Register* on June 30, 2006. Ads were placed in the *Washington Post* and *San Francisco Chronicle* on July 8, 2006 announcing the availability of the Draft PEIS. The USCG also published this information in the Local Notice to Mariners (see **Appendix B**). The USCG made the Draft PEIS available to the public for a 45-day comment period and held a public meeting on the Draft PEIS on August 9, 2006. No public comments were received at the Draft PEIS public meeting.

In total, 24 comments were received in response to the public Draft PEIS. Of these comments, 20 were received from various Federal and state agencies, 2 were received from Tribal Historic Preservation Offices (THPO), 1 was received from a regional citizens' advisory council, and 1 was received from a private citizen (**Appendix B**). Agency comments mainly requested continued consultation once decisions on individual tower sites has been made. The regional citizens' advisory council comment expressed overall support for implementation of the proposed NAIS project.

All comments received during the public comment period were taken into consideration in development of this Final PEIS. Comments received on the Draft PEIS and USCG responses to the comments are detailed in **Appendix B**.

Description of the Proposed Action and Alternatives

The technical and operational requirements for NAIS require the system to be operational in both inland navigable waters and the open ocean out to 2,000 NM offshore. No single implementation alternative could meet the technical and operational requirements of this large and geographically variable area. As a result, the USCG believed that a combination of implementation alternatives would be needed to meet the technical and operational requirements. The PEIS provides (in Section 2.2) a discussion of the process used by the USCG to formulate the alternatives carried forward for analysis in this document.

The proposed implementation of the NAIS project includes using a combination of the following coverage mechanisms.

NAIS Short-Range Coverage – Shore-Based Radio Frequency Sites. The establishment of shore-based RF sites was the only alternative found by the USCG to be viable for achieving short-range NAIS coverage. Short-range NAIS coverage includes inland navigable waters as defined in Section 1.2.5, and out to 50 NM. Shore-based RF sites would consist of AIS equipment mounted on towers, buildings, bridges, or other structures; the USCG anticipates the majority of these sites would be tower-based. The USCG would be faced with the choice of installing AIS equipment at new sites (“new build”); installing AIS equipment adjacent to existing communications equipment (“collocation”); or, programwide, using a combination of the collocation and new build sites for shore-based RF sites.

For the proposed implementation of the NAIS project, the USCG has chosen to bound or bracket the programmatic environmental analysis of the shore-based RF sites by evaluating three potential NAIS siting alternatives: All New Tower Builds, Combination of Collocations and New Tower Builds, and All Collocations.

NAIS Long-Range Coverage – Satellites. For long-range coverage, satellite services could be leased from commercial satellite providers or the government. The USCG is currently assessing technology development to support this capability. The analysis of this alternative assumes that the initial technology development would yield a deployable solution. The satellite system is envisioned to consist of a number of low earth orbit satellites to provide the needed long-range maritime tracking of vessels (i.e., coverage requirement to receive AIS signals with a minimum 4-hour reporting rate out to 2,000 NM offshore).

NAIS Long-Range Coverage – Offshore Platforms and Data Buoys. NAIS long-range coverage could be provided, in part, by using existing offshore platform and data buoy capabilities to provide additional coverage availability. The USCG is currently evaluating the effectiveness of deploying AIS base stations and AIS receivers on various offshore Gulf of Mexico oil and gas platforms and National Oceanic and Atmospheric Administration data buoys. Potential offshore platforms of interest include existing active U.S. Department of the Interior (DOI) Minerals Management Service (MMS)-regulated oil and gas infrastructures in the Gulf of Mexico, Pacific, and Alaska regions.

Summary. The USCG has identified the Proposed Action to implement the NAIS project using a combination of the following coverage mechanisms as the Preferred Alternative:

1. Establishing a combination of collocated and newly built shore-based RF sites for short-range AIS coverage.
2. Leasing commercial satellite services for long-range AIS coverage.
3. Installing AIS equipment on existing offshore oil and gas platforms and data buoys for supplemental long-range coverage.

Items 2 and 3 would involve no physical disturbances, earth moving, or construction activities; no actions inconsistent with present and foreseeable land use patterns; no activities that would contribute to changes in socioeconomic resources; and very minor installation and maintenance work. Leasing commercial satellite services would not require new satellites, only modification of existing constellations. As independent actions, leasing commercial satellite services for long-range AIS coverage and installing AIS equipment on existing offshore oil and gas platforms and data buoys for supplemental long-range coverage would likely be categorically excluded from detailed NEPA analysis. Consequently, no impacts would be expected, and any extraordinary circumstances would be addressed in the tiered NEPA analysis. Accordingly, the USCG has omitted detailed examination of leasing commercial satellite services for long-range AIS coverage and installing AIS equipment on existing offshore oil and gas platforms and data buoys for supplemental long-range coverage. The analysis in the PEIS focuses on the environmental impacts associated with the **No Action Alternative** and the three NAIS siting alternatives described above: **All New Tower Builds**, **Combination of Collocations and New Tower Builds**, and **All Collocations**.

No Action Alternative. The No Action Alternative is the continuation of existing conditions without implementation of the Proposed Action. Under the No Action Alternative, the USCG would not implement the NAIS project. The No Action Alternative would not meet the requirements of MTSA, would not improve MDA, and would not meet Congressional or Presidential direction. Although the No Action Alternative would not meet the Purpose and Need, analysis of the No Action Alternative is a requirement of CEQ's regulations for implementing NEPA and serves as a benchmark against which proposed Federal actions can be evaluated.

Summary of Environmental Impacts

Table ES-1 provides an overview of potential impacts anticipated under each of the alternatives considered, broken down by the resource area. Section 4 of the PEIS evaluates the impacts. It can be assumed that potential short-term impacts would occur from construction and long-term impacts would occur from operations of a site. For each alternative (see Section 4.1.2 of the PEIS), a set of assumptions was developed to describe possible requirements for installation of communication equipment; and NAIS tower, equipment building, and access road construction. The USCG would have some flexibility in the exact siting of NAIS towers and equipment and would seek to avoid impacts to the greatest extent possible. In addition, under each of the alternatives considered, locations selected as NAIS sites might

already possess attributes that eliminate the need for a portion, or in some cases all, of the construction. In such a case, no impacts or negligible impacts would be expected at that particular location.

Table ES-1. Summary of Anticipated Environmental Impacts by Alternative

Resource Area	No Action	All New Tower Builds	Combination of Collocations and New Tower Builds	All Collocations
Noise	No impacts would be expected.	Short-term negligible adverse impacts would be expected.	Short-term negligible adverse impacts would be expected.	Short-term negligible adverse impacts would be expected.
Air Quality	No impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected.
Earth Resources	No impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	Negligible impacts would be expected.
Water Resources	No impacts would be expected.	Short-term and long-term negligible to minor adverse impacts on surface water and groundwater resources would be expected.	Short-term and long-term negligible to minor adverse impacts on surface water and groundwater resources would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	Short-term and long-term negligible to minor adverse impacts on surface water and groundwater resources would be expected.
Biological Resources	No impacts would be expected.	Short-term and long-term negligible to moderate adverse impacts would be expected.	Short-term and long-term negligible to moderate adverse impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	Short-term and long-term negligible to moderate adverse impacts would be expected.
Cultural Resources	No impacts would be expected.	Short-term and long-term negligible to major adverse impacts would be expected depending on the proposed tower site proximity to archaeological resources, historic buildings or structures, or Traditional Cultural Properties.	Short-term and long-term negligible to major adverse impacts would be expected depending on the proposed tower site proximity to archaeological resources, historic buildings or structures, or Traditional Cultural Properties. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	Long-term negligible to moderate adverse impacts would be expected.
Visual Resources	No impacts would be expected.	Short-term and long-term minor to moderate impacts would be expected.	Short-term and long-term minor to moderate impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	Long-term negligible to minor adverse impacts would be expected.

Table ES-1. Summary of Anticipated Environmental Impacts by Alternative (continued)

Resource Area	No Action	All New Tower Builds	Combination of Collocations and New Tower Builds	All Collocations
Land Use	No impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	No impacts would be expected.
Infrastructure	No impacts would be expected.	Short-term minor adverse impacts would be expected.	Short-term minor adverse impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	No impacts would be expected.
Hazardous Substances	No impacts would be expected.	No impacts would be expected.	No impacts would be expected.	No impacts would be expected.
Socioeconomics and Environmental Justice	No impacts would be expected.	Long-term negligible to minor adverse impacts would be expected.	Long-term negligible to minor adverse impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	No impacts would be expected.
Human Health and Safety	No impacts would be expected. However, the beneficial impacts of the Proposed Action would not be realized.	Short-term minor adverse impacts would be expected. Long-term beneficial impacts would be expected.	Short-term minor adverse impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative. Long-term beneficial impacts would be expected.	Long-term beneficial impacts would be expected.

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Acronyms and Abbreviations

ACHP	Advisory Council on Historic Preservation	COP	common operational picture
ACM	Asbestos-containing material	CTIA	Cellular Telecommunications Industry Association
AIS	Automatic Identification System	CWA	Clean Water Act
ANSI	American National Standards Institute	CZM	Coastal Zone Management
APE	area of potential effect	CZMA	Coastal Zone Management Act
AQCR	Air Quality Control Region	dB	decibel
ARPA	Archaeological Resources Protection Act	dba	A-weighted decibel
AtoN	aids to navigation	DHS	U.S. Department of Homeland Security
BLM	Bureau of Land Management	DOD	U.S. Department of Defense
BMP	Best Management Practice	DOI	U.S. Department of the Interior
C&D	construction and demolition	DSC	Digital Selective Calling
CAA	Clean Air Act	EA	Environmental Assessment
CB	citizen band	EEZ	exclusive economic zone
CBP	Customs and Border Protection	EIS	Environmental Impact Statement
CBRA	Coastal Barrier Resources Act	EO	Executive Order
CBRS	Coastal Barrier Resources System	ESA	Endangered Species Act
CE	Categorical Exclusion	FAA	Federal Aviation Administration
CEQ	Council on Environmental Quality	FCC	Federal Communication Commission
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	FEMA	Federal Emergency Management Agency
CFR	Code of Federal Regulations	FOIA	Freedom of Information Act
CIM	Commandant Instructions Manual	ft ²	square feet
CO	carbon monoxide	GMDSS	Global Maritime Distress and Safety System
COMDTINST	Commandant Instruction	HABS	Historic American Building Survey
COMDTPUB	Commandant Publication	hp	horsepower

HSWA	Hazardous and Solid Waste Amendment	NDRSMP	National Distress and Response System Modernization Project
ICE	Immigration and Customs Enforcement	NEPA	National Environmental Policy Act
IEEE	Institute of Electrical and Electronics Engineers, Inc.	NHPA	National Historic Preservation Act
IMO	International Maritime Organization	NM	nautical mile
ITU-R	International Telecommunications Union Recommendation	NMFS	National Marine Fisheries Service
		NO ₂	nitrogen dioxide
kHz	kilohertz	NOA	Notice of Availability
LBP	lead-based paint	NOAA	National Oceanic and Atmospheric Administration
LEO	low earth orbit	NOI	Notice of Intent
MBTA	Migratory Bird Treaty Act	NO _x	nitrogen oxide
MD	Management Directive	NPDES	National Pollutant Discharge Elimination System
MDA	Maritime Domain Awareness	NRCS	Natural Resources Conservation Service
mg/m ³	milligrams per cubic meter	NRHP	National Register of Historic Places
MHz	megahertz	NSR	New Source Review
MMS	Minerals Management Service	O ₃	ozone
MOA	Memorandum of Agreement	OSHA	Occupational Safety and Health Administration
MOU	Memorandum of Understanding	P.L.	Public Law
MTSA	Maritime Transportation Security Act	PAWSS	Ports and Waterways Safety System
NAAQS	National Ambient Air Quality Standards	Pb	lead
NAGPRA	Native American Graves Protection and Repatriation Act	PCB	polychlorinated biphenyl
NAIS	Nationwide Automatic Identification System	PCS	personal communications services
NDGPS	National Differential Global Positioning System	PEIS	Programmatic Environmental Impact Statement
NDRS	National Distress and Response System	PEL	permissible exposure limits

PIF	Partners in Flight	UAV	Unmanned Aerial Vehicle
PM _{2.5/10}	Particulate matter less than or equal to 2.5 or 10 microns in diameter	USACE	U.S. Army Corps of Engineers
ppm	parts per million	USCG	U.S. Coast Guard
PSD	Prevention of Significant Deterioration	USEPA	U.S. Environmental Protection Agency
RCRA	Resource Conservation and Recovery Act	USFWS	U.S. Fish and Wildlife Service
RF	radio frequency	VDL	VHF data link
ROD	Record of Decision	VHF	very high frequency
SAR	search and rescue	VHF-FM	very high frequency-frequency modulation
SARA	Superfund Amendments and Reauthorization Act	VMS	Vessel Monitoring System
SDWA	Safe Drinking Water Act	VOC	volatile organic compound
SHPO	State Historic Preservation Office	VTS	Vessel Traffic Service
SIP	State Implementation Plan	WSRA	Wild and Scenic Rivers Act
SO ₂	sulfur dioxide	µg/m ³	micrograms per cubic meter
SOLAS	Safety of Life at Sea		
SPCC	Spill Prevention, Control, and Countermeasure		
SPDES	State Pollutant Discharge Elimination System		
SWPPP	Storm Water Pollution Prevention Plan		
TCP	traditional cultural property		
THPO	Tribal Historic Preservation Office		
tpy	tons per year		
TSA	Transportation Security Administration		
TSCA	Toxic Substances Control Act		
U.S.C.	United States Code		

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1. Purpose of and Need for the Proposed Action

1.1 Background

The U.S. Coast Guard (USCG) is a military, multimission, and maritime agency. USCG statutory responsibilities include ensuring marine safety and security, preserving maritime mobility, protecting the marine environment, enforcing U.S. laws and international treaties, and performing search and rescue. The USCG supports the U.S. Department of Homeland Security (DHS) overarching goal of mobilizing and organizing our nation to secure the homeland from terrorist attacks, natural disasters, and other emergencies. In performing its duties, the USCG has established five strategic goals: maritime safety, protection of natural resources, maritime security, maritime mobility, and national defense. The USCG operates in all maritime regions, including approximately 95,000 miles of U.S. coastlines, inland waterways, and harbors; more than 3.36 million square miles of exclusive economic zone (EEZ) and U.S. territorial seas; and international waters and other maritime regions of importance to the United States.

This Programmatic Environmental Impact Statement (PEIS) provides an assessment of the potential environmental impacts associated with the proposed implementation of the Nationwide Automatic Identification System (NAIS) project by the USCG. NAIS project implementation might involve installing receivers, transmitters, transceivers, repeaters, and other equipment on towers or other structures at selected sites along 95,000 miles of coastline and inland waterways, as well as selected remote platforms such as satellites and offshore oil and gas platforms and data buoys.

The Maritime Transportation Security Act (MTSA) of 2002¹ establishes carriage requirements for Automatic Identification System (AIS) equipment on certain vessels and gives the USCG rulemaking authority to implement the requirements in MTSA². The MTSA also requires the Secretary of Homeland Security to "...implement a system to collect, integrate, and analyze information concerning vessels operating on or bound for waters subject to the jurisdiction of the United States, including information related to crew, passengers, cargo, and intermodal shipments."³ The USCG has determined that implementation of the proposed NAIS project would support the system requirements that are outlined in MTSA. The proposed implementation of the NAIS project is a DHS Level I investment and USCG major systems acquisition and would be expected to be fully implemented and operational by 2014.

The proposed implementation of the NAIS project would provide the USCG with the capability to receive and distribute information from shipboard AIS equipment to enhance Maritime Domain Awareness (MDA). The project would provide detection and identification of vessels carrying AIS equipment approaching or operating in the maritime domain where little or no vessel tracking currently exists.

AIS is an international standard (International Telecommunications Union Recommendation [ITU-R] M.1371-1, *Technical Characteristics for a Universal Shipborne Automatic Identification System Using Time Division Multiple Access in the Maritime Mobile Band*), adopted by the International Maritime Organization (IMO), for ship-to-ship, ship-to-shore, and shore-to-ship communication of information. Such information includes vessel

- Identity
- Position

¹ Public Law (P.L.) 107-295 (November 2002)

² The USCG final rule implementing AIS carriage requirements for certain vessels was published in the *Federal Register* on October 22, 2003. See 68 Fed. Reg. 60559.

³ 46 United States Code (U.S.C.) Section 70113(a)

- Speed
- Course
- Destination
- Other data of critical interest for maritime safety and security.

The IMO is a specialized agency of the United Nations which is responsible for implementing measures to improve the safety and security of international shipping and to prevent marine pollution from ships. AIS equipment is currently required domestically and internationally aboard major commercial vessels⁴. Starting in 2002, the IMO began a phased program requiring certain vessels on international voyages to carry AIS equipment. By December 31, 2004, thousands of vessels that call on U.S. ports were required to carry AIS equipment⁵. **Appendix A** contains international standards and domestic (USCG) regulations for AIS carriage, current as of the date of this document.

1.2 Purpose of and Need for the Proposed Action

The purpose of the Proposed Action is to establish a nationwide network of receivers and transmitters to capture, display, and analyze AIS-generated information. The Proposed Action would satisfy the USCG's need to enhance homeland security while carrying out its mission to ensure marine safety and security, preserve maritime mobility, protect the marine environment, enforce U.S. laws and international treaties, and perform search and rescue (SAR) operations.

At present, there are few USCG facilities available to consistently track vessels approaching or operating near or within the U.S. Maritime Domain. Consistent vessel tracking capability exists only in discrete areas where the USCG has established Vessel Traffic Services (VTSs). Until recently, this tracking was accomplished using primarily radar and vessel radio reports, relying on voice communications to associate a vessel identity with its radar image. Additional information on the vessel (such as cargo, course, and speed) was gathered by voice reports, which was time-consuming to the vessel and shoreside operators. Since the establishment of AIS carriage requirements in 2004, VTSs⁶ were provided capability to receive and transmit AIS signals. The experience with AIS gained at these VTS areas has indicated the usefulness of AIS and future NAIS capability, such as reliable vessel tracking and automated information management.

Vessel location information is obtained through USCG vessel and aircraft patrols and by other means, such as self-reporting by ships. This approach only provides "snapshot" surveillance, even in near-coastal areas. The need for consistent and persistent surveillance capability is crucial to MDA. MDA is the effective understanding of anything associated with the global marine environment that could impact the security, safety, economy, or environment of the United States. The goal of MDA is to provide situational awareness for decisionmakers at all levels using a host of systems, sensors, and processes. Collection, integration, and analysis of information concerning vessels operating on or bound for waters subject to the jurisdiction of the United States, through resources such as NAIS, enhances MDA.

⁴ "SOLAS" class—generally ships more than 300 gross tons on an international voyage and cargo ships more than 500 gross tons and passenger ships carrying more than 12 passengers.

⁵ 33 Code of Federal Regulations (CFR) 164.46 and SOLAS V Regulation 19.2.4.

⁶ There are only 10 VTSs with consistent capability to track and monitor vessels approaching or operating near or within the U.S. Maritime Domain. These VTSs are established in the areas of: Prince William Sound (Valdez, AK); Puget Sound (Seattle, WA); San Francisco, CA; Los Angeles-Long Beach, CA; Houston-Galveston, TX; Port Arthur, TX; Berwick Bay (Morgan City, LA); Lower Mississippi River (New Orleans and the Ports of Southern Louisiana); New York, NY' and Saint Marys River (Sault Ste. Marie, MI).

Continually updated information on vessel position and destination, course and speed, vessel identification, and other AIS-provided data is needed on a nationwide basis to help assess the potential threats posed by a vessel and to protect vessels from potential harm. This information needs to be correlated with other sensors and databases to help identify anomalies, sort out innocent vessels from suspicious ones, and give timely, accurate information to decisionmakers.

The need for the Proposed Action arises from several sources, discussed in the following subsections.

1.2.1 International Treaty

The United States is a member of the IMO. IMO administers the Safety of Life at Sea Convention (SOLAS), an international treaty. In December 2000, Chapter V of the SOLAS Convention was amended to require AIS, capable of providing information about the ship to other ships and to coastal authorities automatically, to be fitted aboard all ships of 300 gross tonnage and upwards engaged on international voyages, cargo ships of 500 gross tonnage and upwards not engaged on international voyages, and passenger ships irrespective of size built on or after July 1, 2002.

As a member of the IMO, the United States, through the USCG, works closely with the international community in AIS standards development and implementation. The IMO has adopted performance standards for AIS. The standards provide that AIS should improve the safety of navigation by assisting in the efficient navigation of ships, protection of the environment, and operation of VTS. These objectives are met by satisfying functional requirements in a ship-to-ship mode for collision avoidance, as a means for littoral states to obtain information about a ship and its cargo, and as a VTS tool (e.g., shore-to-ship traffic management). Moreover, AIS should be capable of providing information automatically from a ship and with the required accuracy and frequency to other ships and competent authorities to facilitate accurate tracking.

1.2.2 Maritime Transportation Security Act of 2002

Section 70113 of the MTSA of 2002 directs the Secretary of DHS to "... implement a system to collect, integrate, and analyze information concerning vessels operating on or bound for waters subject to the jurisdiction of the United States, including information related to crew, passengers, cargo, and intermodal shipments." Further, Section 70114 of the MTSA requires that certain vessels "while operating on the navigable waters of the United States, shall be equipped with and operate an automatic identification system under regulations prescribed by the Secretary." The USCG has determined that this Congressional directive would be largely satisfied through AIS requirements and the NAIS project.

1.2.3 Other Congressional Actions

In Senate Report 108-86, which accompanied the DHS Appropriations Bill for 2004, Congress funded the AIS initiative and identified specific capabilities that should be part of the system. Moreover, signaling its interest in timely performance, Congress required submission of a report detailing how and when the AIS would be implemented nationwide.

Automatic Identification System.—Included in the Committee recommendation is \$40,000,000 for the Automatic Identification System [AIS]. International regulations require that by December 31, 2004, all vessels greater than 300 gross tons and engaged on international voyages be equipped with and operate an AIS. Additionally, the Maritime Transportation Security Act accelerates the international rules to require all passenger ships and tankers to carry AIS equipment by July 1, 2003. It also requires all domestic commercial vessels greater than 65 feet, and towing vessels 26 feet or greater and 600 horsepower to have AIS equipment

on board by the end of 2003. The AIS system transmits important safety and security information that can be used to prevent a transportation security incident, such as a vessel's identification, position, heading, ship length, beam type, draft, and hazardous cargo information. Since 1998, the Coast Guard has been installing a nationwide shore-based universal AIS coverage system to receive this information and track vessels throughout the coastal zone [referring to the Ports and Waterways Safety System]. The Committee directs the Coast Guard to submit a report to the Committee within 90 days of enactment of this Act detailing the acquisition and installation schedule of the shore-based universal AIS coverage system in ports nationwide, including associated costs to complete such a schedule.

1.2.4 Presidential Directive

The safety and economic security of the United States depends in large part upon the secure use of the world's oceans. Since the attacks of September 11, 2001, the Federal government has reviewed and strengthened all of its strategies to combat the evolving threat in the Global War on Terrorism. Various departments have carried out maritime security strategies which have provided an effective layer of security since 2001. In December 2004, the President directed the Secretaries of the Department of Defense (DOD) and DHS to lead the Federal effort to develop a comprehensive *National Strategy for Maritime Security*, to better integrate and synchronize the existing department-level strategies and ensure their effective and efficient implementation⁷.

The *National Strategy for Maritime Security* aligns all Federal government maritime security programs and initiatives into a comprehensive and cohesive national effort involving appropriate Federal, state, local, and private sector entities. Eight supporting plans to the *National Strategy for Maritime Security* address the specific threats and challenges of the maritime environment. While the plans address different aspects of maritime security, they are mutually linked and reinforce each other.

Of particular relevance to the Proposed Action is the *National Plan to Achieve Maritime Domain Awareness* (MDA Plan). The MDA Plan is a cornerstone for successful execution of the security plans tasked in the *National Strategy for Maritime Security*. As stated in this plan, the basis for effective prevention measures is awareness and threat knowledge, along with credible deterrent and interdiction capabilities. Without effective understanding of maritime domain activities, gained through persistent awareness, vital opportunities for an early response can be lost. Awareness grants time and distance to detect, deter, interdict, and defeat adversaries. NAIS will provide the nation with the tools to conduct nationwide persistent surveillance of vessels operating in or bound for U.S. waters.

1.2.5 USCG Missions and NAIS Operational Requirements

The USCG is the lead Federal agency for maritime homeland security. One of the primary missions of the USCG is to protect the U.S. maritime domain and the U.S. marine transportation system. USCG traditional missions include

- Securing maritime borders against illegal drugs, illegal aliens, firearms, and weapons of mass destruction
- Ensuring that U.S. military assets can be rapidly supplied and deployed by keeping USCG units at a high state of readiness, and by keeping marine transportation open for the transit of assets and personnel from other branches of the armed forces

⁷ National Security Presidential Directive NSPD-14/Homeland Security Presidential Directive HSPD-13, Subject: Maritime Security Policy, December 21, 2004.

- Protecting against illegal fishing and indiscriminate destruction of living marine resources
- Preventing and responding to oil and hazardous material spills—both accidental and intentional
- Coordinating efforts and intelligence with Federal, state, and local agencies.

Operating Requirements. NAIS would meet the following operating requirements:

- *Operating Environment.* AIS equipment would be installed on various platforms (e.g., buildings, towers, satellites, and offshore oil and gas platforms and data buoys) and function in expected adverse operating environments (e.g., high surf, temporary submersion, extreme weather conditions).
- *Geographic Area.* NAIS would be a contributor to MDA and therefore would be designed to provide coverage for waters subject to the jurisdiction of the United States and out to 2,000 nautical miles (NM) from the baseline⁸.
- *Climatological Envelope.* The system would operate in the regional environmental conditions expected during a 50-year time period.
- *Operational Functions.* NAIS would receive and process information transmitted by AIS-equipped vessels and distribute this information to and among a variety of users. The system would have the ability to transmit standard AIS messages from specified shore stations to AIS-equipped vessels. NAIS would perform or support the following operational functions:
 1. Receipt and transmission of AIS information to detect, identify, monitor, and track AIS-equipped vessels and to communicate data to and from shoreside and shipboard AIS equipment.
 2. Network services to enable conveyance of data between shoreside AIS equipment, processing equipment, and command and control systems; and interoperability with such systems.
 3. Data management capabilities, including data processing, fusion with data from other marine and vessel databases, recording, retrieval, warehousing, and analysis.
 4. Interoperability and interface with a variety of command and control systems, including user interfaces for situation display, analysis, and control of the system.

Coverage Requirements. As a contributor to MDA, the proposed NAIS project would be designed to provide coverage for waters subject to the jurisdiction of the United States and out to 2,000 NM. NAIS coverage will include all coastal areas and the following rivers, lakes, and U.S. Territory waters:

- Columbia River from Astoria, Oregon, to Kennewick, Washington
- Sacramento River to Sacramento, California
- San Joaquin River to Stockton, California
- Mississippi River to Baton Rouge, Louisiana
- Western Rivers covered by the Inland Rivers Vessel Movement Center
- Intracoastal Waterway
- Hudson River to Albany, New York
- U.S. Waters of the Great Lakes (including connecting rivers: Detroit, St. Clair, St. Marys)

⁸ The baseline is “the line from which maritime zones are measured. The normal baseline for measuring the territorial seas (TS), contiguous zone (CZ), exclusive economic zone (EEZ) and continental shelf is the low-water line along the coast” (NOAA 2005).

- U.S. Waters of the St. Lawrence River
- Guam
- Puerto Rico
- The U.S. Virgin Islands.

Table 1-1 presents the coverage requirements and corresponding receive/transmit messaging requirements of the proposed NAIS project. **Figure 1-1** shows U.S. maritime areas of interest and coverage requirements.

Table 1-1. NAIS Coverage Requirements ¹

Geographic Area	Receive Coverage ²	Transmit Coverage ³
Ports or other specified areas	Threshold: 1 minute Objective: 15 seconds	Threshold: 98% Objective: 99%
Inland Navigable Waters and Coastal Waters out to 24 NM	Threshold: 5 minutes Objective: 1 minute	Threshold: 90% Objective: 95%
24 – 50 NM	Threshold: 2 hours Objective: 5 minutes	Threshold: 0 Objective: 66%
50 – 300 NM	Threshold: 2 hours Objective: 1 hour	Threshold: 0 Objective: 33%
300 – 2,000 NM	Threshold: 4 hours Objective: 1 hour	Threshold: 0 Objective: 25%

¹ For Class A vessels carrying “Type 1” AIS mobile equipment (higher-powered AIS equipment).

² The required rate of receiving AIS position reports from AIS-equipped vessels.

³ The probability that a message transmitted from a Nationwide AIS transmitter would be successfully received.

Concept of Operations. The primary purpose of NAIS would be to receive AIS data transmitted from AIS-equipped vessels for the purpose of tracking their movements. The data collected would be disseminated to other systems in support of navigation safety, maritime security, maritime safety, and other missions. A secondary purpose of NAIS would be to employ the additional AIS functionality available through transmission capability. **Figure 1-2** presents a notional depiction of how AIS works and AIS broadcast report contents.

NAIS operational requirements would be achieved when the system is capable of short-range receive-and-transmit and long-range receive coverage. Short-range coverage would be achieved by installing AIS receivers, transmitters, and transceivers on land. Long-range coverage would be achieved through installing AIS equipment on remote platforms such as satellites, offshore oil and gas platforms, and data buoys. The system would be tied together through land-based infrastructure allowing for data networking, data processing and analysis, data storage, and system administration. The system design would consider the likelihood of all potential failures, inherent or causative, natural or man-made, including sabotage and vandalism. NAIS installations would be designed to withstand, and operate in, severe weather and environmental conditions in their respective geographic areas of operation.

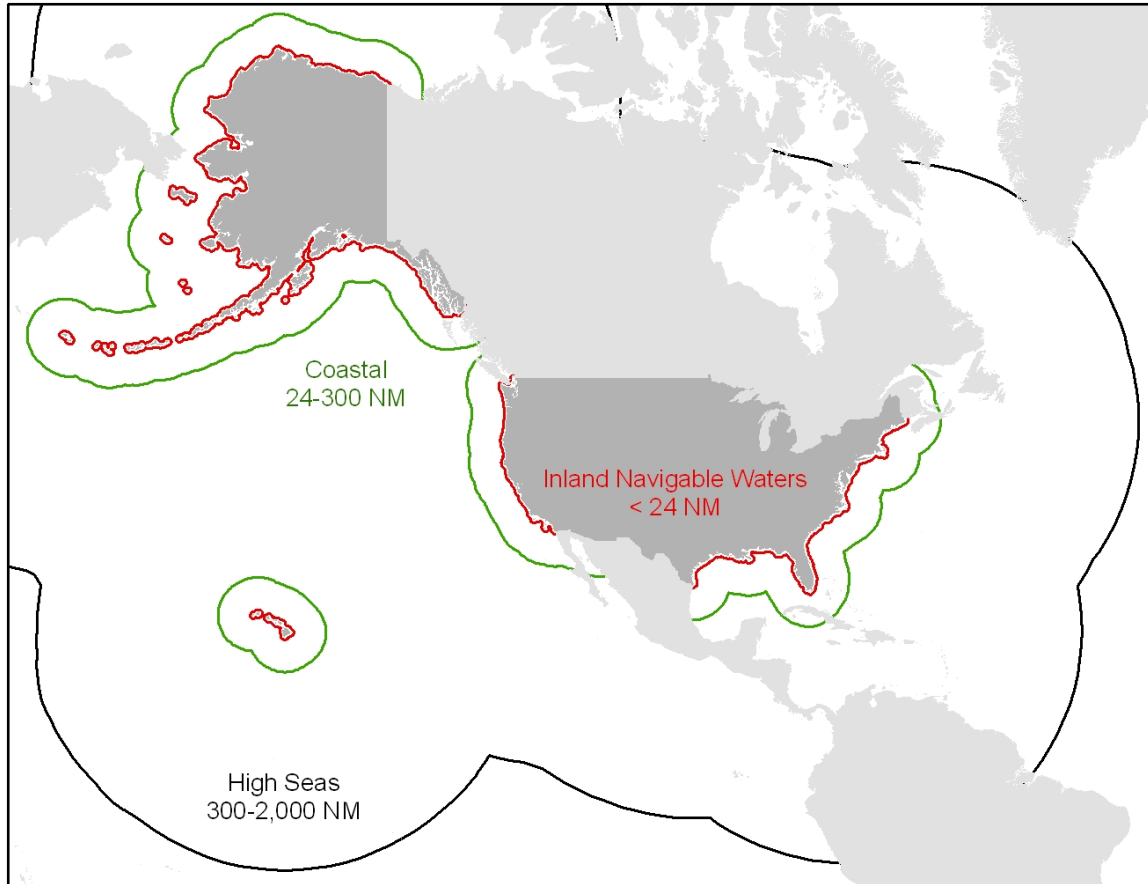


Figure 1-1. U.S. Maritime Areas of Interest and NAIS Coverage Requirements

NAIS data and functionality would be used by USCG, DHS, DOD, and other government agencies' communications, surveillance, and data processing systems in support of their missions; therefore, NAIS would be capable of exporting data and exchanging information in a standard format without interference to the various systems' operations. NAIS data would also be available to state and local government port partners in support of security and safety operations. This information would be invaluable to agencies, such as Customs and Border Protection (CBP), Immigration and Customs Enforcement (ICE), and the Transportation Security Administration (TSA), because it would provide real-time location data on all major cargo and other commercial vessels in the maritime domain.

The primary means of distributing AIS data would be via the sensitive but unclassified common operational picture (COP). The (maritime) COP is a display of relevant maritime information shared by more than one command or organization. The COP provides a shared display of friendly, enemy/suspect, and neutral vessel tracks on a chart, with applicable geographically referenced overlays and data enhancements to facilitate collaborative planning and strategic decisionmaking. However, many external information systems would rely on raw AIS data, so a means of processing and distributing AIS data to meet this need would be required.

In general, the services provided by the proposed NAIS project would be new to USCG operations, although some functions already being performed manually or by other systems would be expanded or

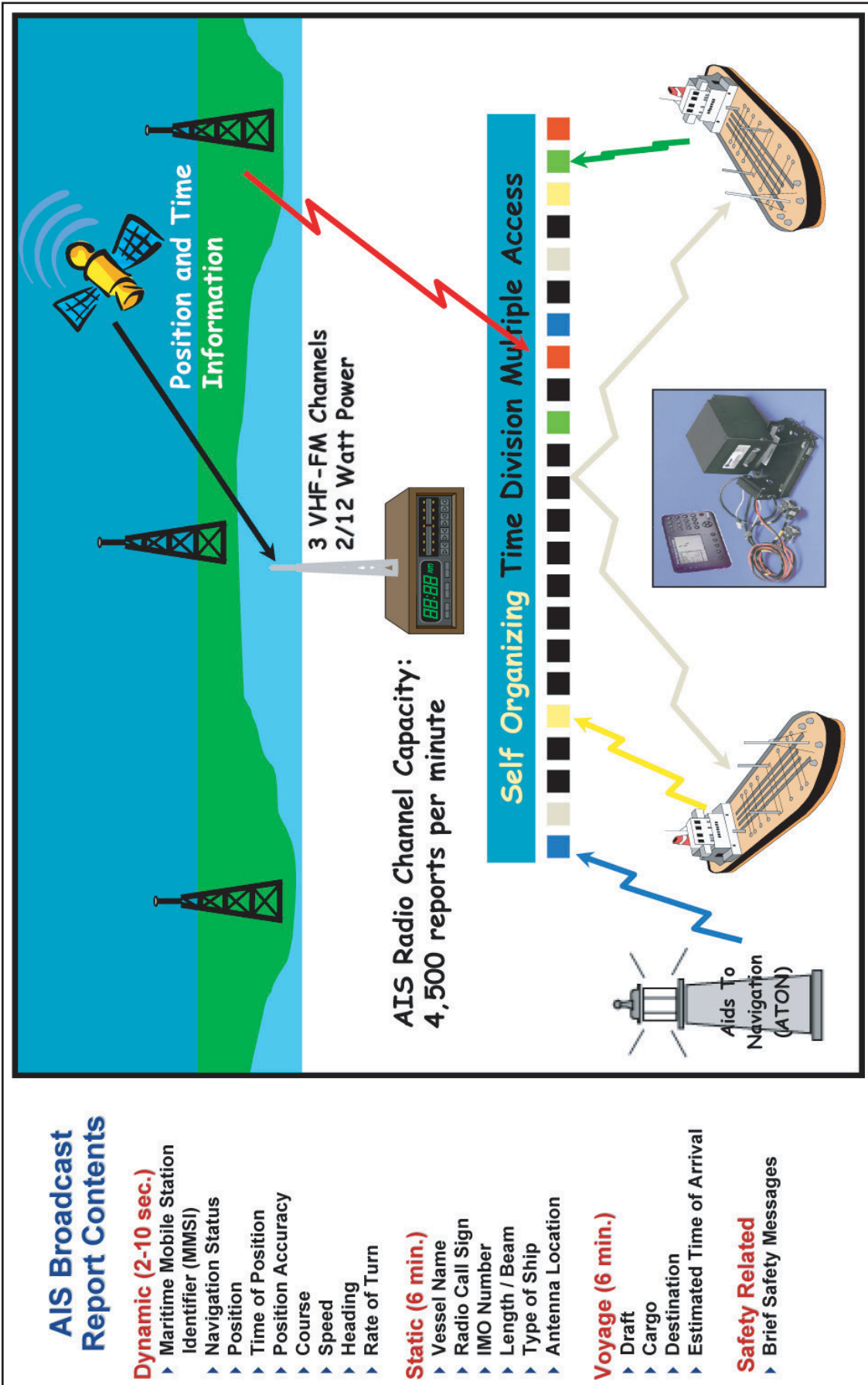


Figure 1-2. How AIS Works and What It Does

automated. Several specific operational concepts are described below to illustrate how NAIS would support USCG and allied agency missions.

- *Sector Command Center Operations.* Sector Commanders would employ the capabilities provided by NAIS to build MDA and conduct Sector operations across the spectrum of USCG missions in their area of responsibility. Sector command centers would receive a direct feed of AIS data and would control AIS functionality (e.g., transmission of text messages, polling) in their area of responsibility.
- *Maritime Safety and Mobility.* NAIS would be used to enhance maritime safety and mobility in support of domestic icebreaking, aids to navigation (AtoN), bridge administration, and vessel traffic management; and by ensuring and managing the proper operation of AIS and the integrity of the AIS very high frequency (VHF) data link (VDL). The SOLAS Convention, Chapter V, Regulation 19 requires AIS to automatically exchange navigational information between ships and competent authorities to, among other things, monitor and track ships and their cargo and enhance maritime safety. AIS would increase situational awareness and assist in optimizing vessel traffic flow by identifying vessels and their status and intentions.
- *Navigation Safety and Mobility.* NAIS would assist in navigation safety by providing vessel tracking and simplifying the exchange of navigation data and additional other pertinent information to assist in reducing the risk of collisions, allisions, and groundings. It would also enhance efficient ship-to-ship exchange of navigation information in areas prone to poor voice communications or “radar shadow” areas by use of AIS repeaters. NAIS would also enhance mobility and voyage planning by providing urgent navigation warnings, AtoN status, and other pertinent navigation information (e.g., waterway closures, critical chart corrections). NAIS would support mobility and facilitate domestic icebreaking operations by providing a universal communication link that provides near real-time ship’s operation status (e.g., position, speed, heading, course, draft).
- *AtoN.* NAIS would support AtoN missions through the use of AtoN status messages to automatically provide the AtoN operational status or by providing “virtual AtoN” messages. AIS data would assist in identifying current commercial shipping routes to improve placements of AtoN and improve Waterways Analysis and Management System assessments and other such studies. The AtoN mission would also benefit substantially from the increase in marine information flow from the USCG to AIS-equipped mariners.
- *Vessel Traffic Management.* NAIS would support vessel traffic management by extending VTS coverage areas, thereby providing some vessel traffic management capabilities to Sector Command Centers. It would also support the monitoring of compliance with existing vessel traffic management regulations, such as vessel routing schemes, regulated navigation areas, mandatory ship reporting systems, safety and security zones, transits of high-value assets, management of marine events and regattas, and other such requirements. NAIS would require the long-term retention of AIS data to support strategic vessel traffic management and AtoN activities through provision of historical vessel transit data for use in Port Access Route Studies, Waterways Analysis and Management System assessments, and other such studies or analyses.
- *SAR Operations.* The data that would be collected by the proposed NAIS project could be used for SAR operations. During a vessel in distress event, it is often necessary to coordinate a response with private vessels that are in the vicinity of the incident. With the use of AIS data, SAR coordinators could more easily identify, communicate, plan, and work with other responding vessels to facilitate a SAR response. AIS-equipped vessels in distress in an area of AIS coverage would be easier to locate and identify through the capabilities provided by the proposed NAIS project. The proposed NAIS project support for SAR operations would be provided through interoperability with command and control systems used for SAR.

- *Maritime Incident Investigation.* NAIS data would be used to assist in the investigation of maritime incidents (such as collisions, grounding, criminal acts, and environmental accidents) by providing a detailed record of events. This could include previous transits over a period of years of the vessel or vessels involved in the incident. In the case of such investigation, it would be a routine function for any authorized personnel to query the NAIS database to analyze archived vessel data. The data would be accessed from and analyzed on a variety of systems and software; therefore a standard format for the archived data would be required. Although not solely related to investigation of maritime incidents, historical AIS data would be subject to Freedom of Information Act (FOIA) requests and the NAIS system would be able to support responses to such requests in accordance with FOIA requirements.
- *Maritime Security.* AIS information would be used for all maritime security purposes including enforcement of security zones, protection of critical assets and infrastructure, and other risk-reduction measures. NAIS capability would be used to monitor the normal movement of AIS-equipped vessel traffic to better identify anomalies and to monitor the location and movement of vessels of particular interest, including those which could present a threat as well as high-value vessels that might be threatened. The capability provided would support coordination of enforcement efforts.
- *Support to Other Agencies.* NAIS information would be shared in support of the missions of other Federal, state, and local agencies. This sharing would support such activities as customs clearance and local law enforcement. The primary method for sharing AIS data with other agencies would be via the sensitive but unclassified COP. Some external entities could require access to basic AIS data. NAIS would include a means to disseminate AIS data in support of other agencies' missions in a standard format and with basic processing capabilities.

1.2.6 Summary

Table 1-2 summarizes the functional capability that each authority requires. As indicated, only by implementing all functional areas listed do the requirements of all authorities get satisfactorily met.

Table 1-2. Satisfaction of Needs by NAIS Operational Function

Functional Requirement	IMO	MTSA	Other Congressional Actions	Presidential Directive	USCG Mission Requirements
Receipt and Transmission of AIS Information	•	•	•	•	•
Network Service	•	•	•	•	•
Data Management		•		•	•
Interoperability	•	•		•	•

1.3 Scope of this PEIS

This PEIS examines the direct, indirect, and cumulative environmental impacts associated with the proposed implementation of the NAIS project. This document has been prepared to comply with the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ)

regulations for implementing NEPA, and DHS and USCG policy⁹. Information on the formulation of alternatives is presented in **Section 2.2**. Alternative systems for the collection, integration, and analysis of information are discussed. Implementation alternatives, alternatives for the installation of equipment, and the No Action Alternative are also discussed.

The proposed implementation of the NAIS project involves decisions on how to implement and meet operational requirements for nationwide coverage, full-AIS functionality, and interoperability in order to enhance USCG missions and meet the requirements of MTSA. In developing and implementing the proposed NAIS project, the USCG would balance the needs of maritime commerce, national security, maritime safety, and environmental protection. The decision will take into account maritime operational and environmental considerations, public input during the PEIS process, and the results of PEIS analysis.

1.4 National Environmental Policy Act

1.4.1 Background

NEPA is a Federal statute requiring the identification and analysis of potential environmental impacts of proposed Federal actions before those actions are taken. For each proposed major Federal action significantly affecting the quality of the human environment, NEPA requires the Federal agency to issue a “detailed statement” on the environmental impacts prior to deciding whether and how to implement a proposed action. The USCG has determined that implementation of the NAIS project is a proposed Federal action requiring preparation of a PEIS. This PEIS fulfills USCG requirements under NEPA to consider potential impacts of the action and assists in the proposed NAIS project implementation decisionmaking process.

The intent of NEPA is to protect, restore, or enhance the environment through well-informed Federal decisions. NEPA requirements help ensure that environmental information is made available to the public during the decisionmaking process and prior to implementing proposed actions. The premise of NEPA is that the quality of Federal decisions will be enhanced when proponents provide information to the public and involve the public in the planning process.

The CEQ was established under NEPA to implement and oversee Federal policy in this process. CEQ regulations mandate that all Federal agencies use a systematic interdisciplinary approach to environmental planning and the evaluation of potential environmental impacts of proposed actions. Whenever Federal agencies propose major actions, such as the one addressed in the PEIS, CEQ’s procedural regulations direct the Federal agency to prepare an Environmental Impact Statement (EIS).

1.4.2 Programmatic EIS Process

A programmatic environmental document, such as this PEIS, is prepared when an agency is proposing to carry out a broad action, program, or policy. The USCG has determined that implementation of the proposed NAIS project is a broad action with national effects. Consistent with CEQ regulations¹⁰, the USCG prepared this PEIS at the program development stage. The purpose of this PEIS is to provide general environmental information on the Proposed Action and alternatives to USCG decisionmakers, expert agencies, and the interested and affected public, and to determine and disclose the significance of

⁹ NEPA, P.L. 91-190, 42 U.S.C. 4321–4347, as amended; CEQ Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 40 CFR Parts 1500–1508; DHS Management Directive 5100.1, *Environmental Program Planning* (MD 5100.1); and Commandant Instruction (COMDTINST) M16475.1D, *National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts*.

¹⁰ 40 CFR 1502.4(b)

the environmental impacts associated with the proposed implementation of the NAIS project. The programmatic or systemwide approach creates a comprehensive, global analytical framework that supports subsequent analyses of specific actions at site-specific locations within the overall system. Programmatic analysis can save resources by providing NEPA coverage for the entire program, allowing subsequent NEPA analyses to be more narrowly focused on specific activities at specific locations. Site-specific impact assessment of the NAIS is not practicable at the program development level because specific site alternatives are unknown at this time.

1.4.3 Tiering and Follow-on Environmental Documents

Tiering refers to the process of addressing a broad, general program, policy, or proposal in an initial EIS, and analyzing in a subsequent document a narrower site-specific proposal related to the initial program. The concept of tiering was promulgated in the CEQ regulations. This PEIS will enable the USCG to tier additional site-specific environmental analysis under NEPA as the USCG proceeds with the identification of options for installation of towers, equipment, or related NAIS infrastructure (see **Figure 1-3**). The USCG would continue to involve the public in those later site-specific actions that will flow out of this PEIS and that are connected to the overall NAIS project. This PEIS is a first-tier environmental review; subsequent tiered environmental analysis and documentation (such as a Categorical Exclusion [CE] or Environmental Assessment [EA]) might be prepared for future individual actions to address potential site-specific impacts.

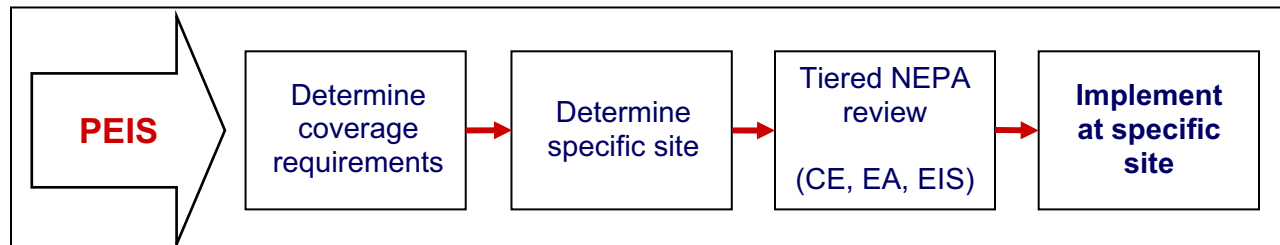


Figure 1-3. PEIS and Follow-on NEPA Documentation Flow Diagram

1.5 Public Involvement Process

The USCG invites public participation in the NEPA process. Public participation opportunities are guided by CEQ regulations and policies of the USCG. A flowchart illustrating the public involvement process for this PEIS is shown on the next page. Consideration of the interests of potential stakeholders promotes open communication and enables better decisionmaking. All agencies, organizations, and individuals having an interest in the Proposed Action are urged to participate in the decisionmaking process. A Notice of Intent (NOI) to prepare a PEIS was published in the *Federal Register* on November 23, 2005. The publication of the NOI initiated a 30-day public scoping period. The USCG also mailed an “Interested Party” letter to at least 230 potentially interested parties, including Federal, state, and local agencies, elected officials, stakeholders, and individuals. The letters included a copy of the NOI.

An informational open house and public meeting concerning the Proposed Action and development of this PEIS was held at the USCG Headquarters Building in Washington, D.C., on December 22, 2005. Comments received at the meeting were taken into consideration in development of this PEIS.

In total, 16 comments were received as a result of the public scoping process; 15 were received from various Federal and state agencies and 1 was received from a stakeholder association. Agency comments mainly fell into one of three categories: (1) coastal zone management coordination, (2) concerns over

potential effects on historic or cultural resources, and (3) and concerns over the potential impacts on migratory birds from construction of shore-based radio frequency (RF) sites (towers). One verbal comment was received at the public scoping meeting on December 22, 2005, from the Passenger Vessel Association. The comment, which is recorded in the official transcript of the public scoping meeting, raises this stakeholder group's concerns about AIS carriage requirements and rulemaking and their potential economic impact on the group's members.

Concerns regarding AIS carriage requirements and rulemakings are not within the scope of this programmatic PEIS. However, similar concerns might be directed to the AIS rulemaking docket. The three categories of comments discussed above are addressed in the respective impact topic categories in **Sections 3 and 4** of this PEIS.

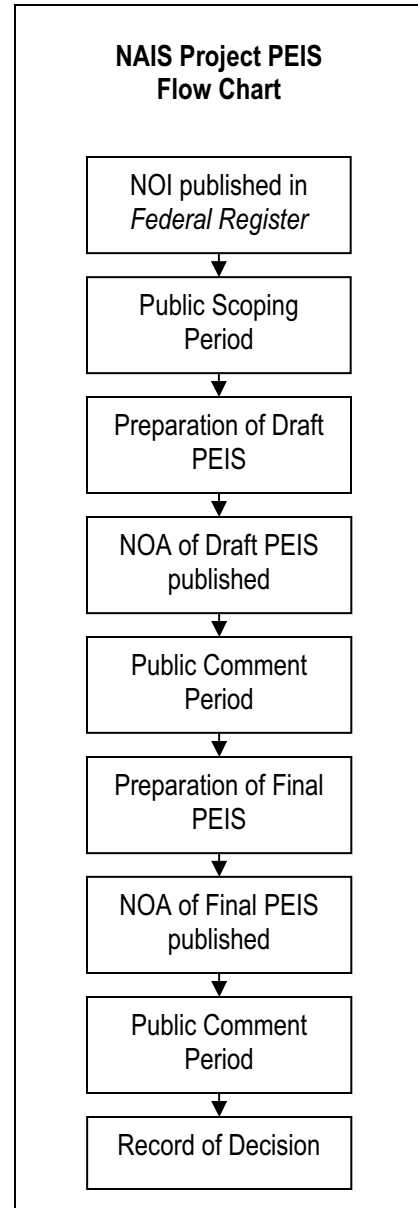
A Notice of Availability (NOA) of the Draft PEIS was published in the *Federal Register* on June 30, 2006. The USCG made the Draft PEIS available to the public for a 45-day comment period and held a public meeting on the Draft PEIS on August 9, 2006. All comments received were taken into consideration in development of this Final PEIS (see **Appendix B**). Upon completion, the USCG will make the Final PEIS available to the public for 30 days. At the conclusion of the 30-day period, the USCG will issue a Record of Decision (ROD), which will be published in the *Federal Register*.

Documents related to the Proposed Action are available in a public docket accessible at <http://dms.dot.gov> under docket number USCG-2005-22837. Documents can also be viewed at the Document Management Facility, U.S. Department of Transportation, Room PL-401, 400 Seventh Street SW, Washington, D.C., between 9 a.m. and 5 p.m. Monday through Friday, except Federal holidays. Throughout the PEIS process, the public can obtain information on the status of the Proposed Action and the PEIS through the NAIS Project Support Team at 202-475-3329 or via email to nais@comdt.uscg.mil, and via the World Wide Web at <http://www.uscg.mil/hq/g-a/Ais/>.

A copy of the NOI, Interested Party letter, and mailing list are provided in **Appendix B**.

1.6 Other Applicable Environmental Laws, Regulations, and Executive Orders

A decision on whether to proceed with the Proposed Action will take into consideration the requirements of numerous environmental laws, implementing regulations, and Executive Orders (EOs). These authorities establish standards and provide guidance on environmental and natural resources management and planning. The laws, regulations, and EOs that apply to the project are applicable in various sections throughout this PEIS when relevant to particular environmental resources and conditions. These authorities are described in **Appendix C** and their full text is available on the U.S. Government's Official Web Portal at <http://www.firstgov.gov/>.



1.7 Organization of the PEIS

The principal sections of this PEIS are as follows:

Section 1: Purpose of and Need for the Proposed Action. This section briefly identifies the purpose and need for the Proposed Action, defines the project scope, discusses NEPA and the public involvement process, and identifies the organization of the document.

Section 2: Proposed Action and Alternatives. This section describes the Proposed Action and the alternatives considered, identifies the preferred alternative, and presents a comparison of the environmental effects of the alternatives.

Section 3: Affected Environment. This section describes the environmental settings in the areas in which the Proposed Action and alternatives would occur.

Section 4: Environmental Consequences. This section identifies the potential environmental impacts of the Proposed Action and alternatives on each resource area.

Section 5: Cumulative and Other Impacts. This section discusses the potential cumulative impacts that could result from the impacts of the Proposed Action and alternatives when combined with past, other present, and reasonably foreseeable future actions.

Sections 6 and 7. These sections provide a list of preparers and references used in preparing this document.

Appendices. **Appendix A** includes AIS carriage requirements. **Appendix B** contains material related to the public involvement efforts for this PEIS, including scoping materials and public comments on the Draft PEIS. **Appendix C** includes a list of those regulations, laws, and EOs that might reasonably be expected to apply to the Proposed Action. **Appendix D** includes a glossary of terms applicable to the Proposed Action. **Appendix E** includes air quality emissions calculations.

2. Proposed Action and Alternatives

2.1 Introduction

In compliance with the MTSA, emerging homeland security requirements, the need to improve vessel traffic management and navigational safety, and the goals to improve maritime safety, security, and mobility, the USCG is proposing to implement the NAIS project in support of MDA. The information provided by the NAIS project would support most of the nation's maritime interests, from the safety of vessels and ports through collision avoidance, to the safety of the nation through detection, management, and classification of vessels out to 2,000 NM.

This section identifies the alternatives considered by the USCG to achieve the purpose of and need for the Proposed Action. There are alternative systems for the collection, integration, and analysis of information; implementation alternative (i.e., the platforms upon which NAIS equipment would be installed or carried); and alternatives for installation of shore-based RF sites (i.e., use of existing facilities, construction of new facilities, or reliance on a combination of these two approaches).

2.2 Alternatives

2.2.1 No Action Alternative

The No Action Alternative is the continuation of existing conditions without implementation of the Proposed Action. Under the No Action Alternative, the USCG would not implement the NAIS project. The No Action Alternative would not meet the requirements of MTSA, would not improve MDA, and would not meet Congressional or Presidential direction. Although the No Action Alternative would not meet the Purpose and Need, analysis of the No Action Alternative is a requirement of CEQ's regulations for implementing NEPA and serves as a benchmark against which proposed Federal actions can be evaluated.

Under the No Action Alternative the USCG would not develop or implement the NAIS project and would not expand beyond current VTS and capability to collect, integrate, and analyze information concerning vessels operating on or bound for waters subject to the jurisdiction of the United States. The USCG would continue to have some AIS capability only in select VTS ports. Under this alternative, without access to the substantial amount of easily collected information available through implementation of the Proposed Action, the USCG cannot achieve MDA. Potential benefits to USCG missions, particularly maritime security, marine safety, maritime mobility, and SAR, would not be realized under this alternative.

2.2.2 Non AIS-Based System Alternatives

Traditionally, vessel tracking at the USCG VTS has been accomplished by a vessel-movement reporting system, which relies upon the user to provide identity and position information via onerous and burdensome voice reporting at predesignated points. The information provided is then corroborated by VTS personnel using their own eyes, cameras, or radar. The USCG has sought ways to increase the reliability, frequency, and accuracy of these reports to better accomplish their vessel traffic management and safety duties.

From the advent of digital electronic communication protocols in the 1990s emerged an alternative to voice reporting. Digital Selective Calling (DSC), used worldwide in the early 1990s (at VTS Valdez since 1994), demonstrated the potential for digital communication and highlighted the need for a more

robust, agile, continuous, and autonomous, digital communication system that would be interoperable worldwide; from this arose the universal AIS that is known today. Since 2002, USCG VTS have availed themselves of this new technology to do their job and, likewise, mariners have been spared the burden of voice reporting within the VTS. The value of AIS, as demonstrated through VTS use of this technology, coupled with a mandate for more mariners to use AIS, demands the development and implementation of the NAIS project to support MDA.

A system of vessel identification based on manual call-in would involve, as described above, the physical effort of the vessel's operator or crew to originate a voice report or initiate a data transmission. Such a system was considered but eliminated from detailed analysis in this PEIS. Manual call-in procedures could encompass reporting of a wide variety of information, some of which could be tailored to specific circumstances that might exist at the time of the call (e.g., current weather conditions or sea state). However, manual call-in can be prone to human error through reporting of inaccurate or inconsistent information. The frequency of reporting in a manual call-in system can be severely reduced due to other operational demands on the operator or crew.

An example of another non-AIS-based reporting system considered but eliminated from detailed analysis in this PEIS is the Vessel Monitoring System (VMS). VMS is a system employed by the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) to monitor and enforce compliance with NMFS requirements. VMS relies upon satellite communications to monitor the movements of and collect data from fishing vessels meeting specific criteria, such as vessels participating in a specific fishery. Information such as vessel name, catch data, and location are collected and logged by NMFS and used for fisheries enforcement activities. Information transmitted by the VMS can be reviewed to determine if a vessel is allowed to fish in and how long it can stay in a particular location. VMS does not enable ship-to-ship or shore-to-ship information flow, though recent developments have enabled some two-way communications. Unlike AIS, which would be a nonproprietary system, VMS is tied to proprietary software or communications services.

Another example of a non-AIS-based reporting system considered but eliminated from detailed analysis in this PEIS is the Global Maritime Distress and Safety System (GMDSS). GMDSS is an internationally agreed set of safety procedures, types of equipment, and global communication system (provided through a system of interlinked satellites) enabling vessels in distress to transmit distress signals to nearby coast stations and vessels. GMDSS provides a positioning system combined with emergency communications. Personnel aboard a suitably equipped vessel can push a button on the vessel's console and its position and other data are automatically transmitted and displayed on equipment in emergency centers, making it easier to locate and rescue the vessel.

The USCG has found the VMS and GMDSS systems to be of limited use because the data they can collect are of insufficient detail to serve USCG needs. The USCG has determined that non-AIS-based systems, such as those discussed above, have common limitations including limited messaging capabilities, insufficient report rates, limits of one-way communications, they are closed systems, they are not autonomous, and additional communication costs limit their effectiveness. These factors render the non-AIS-based systems insufficient for meeting the USCG's operational requirements and purpose and need for the Proposed Action. In addition to VMS, GMDSS, and manual call-in, other examples of system alternatives considered by the USCG include various technologies for vessel tracking such as radar systems, acoustic systems, manual visual systems, and electronic emissions tracking systems. However, none of these systems can consistently identify and track vessels and are not feasible for meeting the purpose of and need for the Proposed Action. Accordingly, the USCG has eliminated all systems but the AIS-based NAIS from further consideration in this PEIS.

2.2.3 Proposed Action

2.2.3.1 NAIS

AIS is an international standard for ship-to-ship, ship-to-shore, and shore-to-ship communication of information, including vessel identity, position, speed, course, destination, and other data of critical interest for navigational safety and maritime security. AIS equipment is required domestically and internationally aboard most commercial vessels. AIS shipboard equipment consists of a transceiver that continually transmits and receives vessel navigational information (e.g., position, course, speed) over very high frequency-frequency modulation (VHF-FM) maritime frequencies. AIS is an “open system” which allows vessels operating in proximity to each other to automatically share AIS-related information and create a virtual network. Shore stations can also join these virtual networks, and can receive shipboard AIS signals, perform network and frequency management, and send additional broadcast or individual informational messages to AIS-equipped vessels.

2.2.3.2 NAIS Implementation Alternatives

The technical and operational requirements for NAIS require the system to be operational in both inland navigable waters and the open ocean out to 2,000 NM offshore. No single implementation alternative could meet the technical and operational requirements of this large and geographically variable area. As a result, the USCG determined that a combination of implementation alternatives would be needed to meet the technical and operational requirements. This section discusses the practicable and reasonable implementation alternatives that can be employed to achieve full NAIS project coverage and other technical requirements. In addition, implementation alternatives that were identified and evaluated for use as part of implementing NAIS, but were found to be impractical or technically infeasible, are also discussed.

NAIS Short-Range Coverage – Shore-Based RF Sites

Shore-based RF sites were the only alternative found by the USCG to be viable for achieving short-range NAIS coverage. Short-range NAIS coverage includes inland navigable waters as defined in **Section 1.2.5**, and out to 50 NM. Shore-based RF sites would consist of AIS equipment mounted on towers, buildings, bridges, or other structures. The USCG has not determined the precise locations, numbers, or designs of the shore-based RF sites. For the purpose of this PEIS, the USCG assumed that AIS equipment would need to be installed in approximately 450 locations to meet the technical and operational requirements of NAIS.

Although some shore-based RF sites could be located on existing buildings, bridges, and other structures, it is expected that the majority would be on tower structures. A typical RF tower for the NAIS would be approximately 150 to 200 feet tall. The maximum footprint for a typical NAIS RF tower would be approximately 80 feet by 80 feet. Typical equipment at a tower site would include the tower structure, a small building within the footprint to house electronic equipment, and a small generator. The building would be climate-controlled to protect AIS-related electronic equipment from the elements. Shore-based RF sites would require electric utility service and communications lines for routing AIS signals and data.

Should the Proposed Action be implemented, the USCG would conduct site-specific environmental analysis concomitant with project implementation, once specific sites become known. The following means for establishing shore-based antenna sites (e.g., towers) would be evaluated in future site-specific NEPA documentation that is tiered from this PEIS: use of existing or currently proposed government sites, lease of commercial sites, and construction of new sites.

NAIS Long-Range Coverage – Satellites

For long-range coverage, satellite services could possibly be leased from commercial satellite providers or the government. The USCG is currently assessing technology development to support this capability. The analysis of this alternative assumes that the initial technology development would yield a deployable solution. The satellite system is envisioned to consist of a number of low earth orbit (LEO) satellites to provide the needed long-range maritime tracking of vessels (i.e., coverage requirement to receive AIS signals with a minimum 4-hour reporting rate out to 2,000 NM offshore). Satellites cannot be used for 100 percent of NAIS coverage requirements (i.e., both short- and long-range) because they are limited in their capability to distinguish AIS signals in nearshore, high vessel traffic environments. As such, satellite usage for nearshore coverage would be unreliable and would not meet the purpose and need of the Proposed Action.

NAIS Long-Range Coverage – Offshore Platforms and Data Buoys

NAIS long-range coverage could be provided, in part, by using existing offshore platform and data buoy capabilities to provide additional coverage availability. The USCG is currently evaluating the effectiveness of deploying USCG-owned AIS base stations and AIS receivers on various offshore Gulf of Mexico oil and gas platforms and NOAA data buoys. There are four existing AIS-capable offshore platforms under evaluation by the USCG, with one more prototype planned for installation in Fiscal Year 2006.

Potential offshore platforms of interest include existing active U.S. Department of the Interior (DOI) Minerals Management Service (MMS)-regulated oil and gas infrastructures in the Gulf of Mexico, Pacific, and Alaska regions. Installing AIS base-station hardware on space leased on these offshore oil and gas platforms could help ensure required reliability is achieved in those specific areas where vessel traffic is denser with higher messaging activity.

Vessel messages and reports received by an offshore platform or buoy would be transmitted to the NAIS network backbone by commercial methods (i.e., non-AIS satellite data transport). Because DOI MMS-regulated offshore platforms exist only in a few regions, redundant coverage in the Atlantic Coast region would be provided by the use of data buoys. In addition, to provide redundant support where offshore platform coverage might not be available, AIS receiver hardware would be installed on various data buoys throughout the remaining coverage areas of interest.

This alternative would require using approximately 30 existing offshore platforms and 70 existing data buoys to implement the NAIS long-range coverage requirements. The actual number and location of offshore platforms and data buoys needed to meet coverage requirements would be determined based on availability and effectiveness during final system design and configuration.

Alternatives Considered but Dismissed

In addition to the various implementation alternatives described above, the NAIS project considered other options for providing long-range coverage. These alternatives were evaluated based on a screening process that considered reliability and continuity of coverage, feasibility, and cost. The following alternatives, described below, did not meet the screening criteria and were eliminated from further consideration at this time as a coverage mechanism to implement the Proposed Action.

- *Unmanned Aerial Vehicles (UAV)*. A UAV is a small unmanned aircraft configured for a specific purpose. UAV services would be leased to meet long-range coverage requirements. Vessel messages and reports received by the UAVs would be transmitted to the NAIS network backbone

using a third-party or contractor-owned network. The network would transfer data from the UAV to the NAIS system when the UAV was close enough to a land-based receiver station to successfully transmit data. This implementation alternative would allow the USCG to use the UAVs that might be deployed by the USCG Deepwater Project. Northrop Grumman's Global Hawk Tier II+ High-Altitude Long-Endurance UAV was selected as a potential technology to meet this need because its capabilities, including endurance, would mean that fewer UAVs would be required to achieve NAIS requirements. Based on preliminary analysis, a fleet of 94 UAVs would be required to meet NAIS long-range technical and operational requirements. This coverage mechanism would require support from commercial satellites and obstacles could be faced in obtaining Federal Aviation Administration approval for flying UAVs in domestic airspace. This alternative was eliminated from further detailed study because of the high operational cost and because of the inability to use the UAVs during bad weather or under certain climatic conditions.

- *Aerostat.* An aerostat is a lighter-than-air craft, such as a balloon or airship. This coverage mechanism was found to have high initial cost estimates because comprehensive coverage does not exist around the United States and the USCG would need to develop its own fleet of aerostats for this method to be effective. In addition, aerostats operate at low altitude (as opposed to high-altitude UAVs) and thus can be affected by severe weather. Finally, the technology for these vessels has not been fully developed and would require significant investments of time and research funds to fully evaluate its applicability to NAIS. As a result, this coverage mechanism was eliminated from further detailed study in this PEIS.
- *Radiosonde.* A radiosonde is a small device used to measure conditions high in the atmosphere such as temperature, wind speed and direction, air pressure, and humidity while suspended from a weather balloon. The device has a radio transmitter and sends data back to ground recorders. This coverage mechanism was not evaluated because, similar to the aerostat, the implementation would be costly, radiosondes are affected by severe weather, and the technology has not been fully developed. Therefore, this coverage mechanism was eliminated from further detailed study in this PEIS.
- *Commercial Air Carriers.* This coverage mechanism was found to be undesirable because of high initial cost estimates and technical issues. To account for planes being switched to different flight routes, a commercial air carrier's entire fleet would need to be outfitted with AIS, even if only a small number of planes would be required to achieve continual coverage. In addition, flight routes are based on the shortest path between locations, not on providing equal coverage over the globe. Coverage gaps would occur in spots not included in the commercial air carrier's set of flight routes. Therefore, this coverage mechanism was eliminated from further detailed study in this PEIS.
- *Commercial Maritime and National Assets.* The use of commercial maritime vessels already carrying AIS mobile stations could provide additional storage and communication links through satellites to relay AIS data received by those vessels while operating in the open ocean. This coverage mechanism was eliminated from detailed evaluation because of high initial cost estimates and technical issues. To account for ships being switched to different shipping routes, a commercial maritime carrier's entire fleet would need to be outfitted with AIS, even if only a small number of ships would be required to achieve continual coverage. In addition, coverage gaps would occur in spots not included in the commercial maritime carrier's set of shipping routes. In addition, the NAIS project could not direct national assets to patrol specific areas only to receive AIS data. Therefore, this alternative was eliminated from further detailed study in this PEIS.

Evaluation and Selection of Implementation Alternatives

A combination of shore-based RF sites, satellites, and offshore platforms and data buoys would provide the necessary coverage to enable an NAIS to meet the purpose of and need for the Proposed Action. As discussed in the preceding sections, these locations would ensure comprehensive coverage of NAIS communications. Accordingly, this array of means to implement the AIS technology is evaluated in detail in this PEIS.

2.2.3.3 NAIS Siting Alternatives

The USCG would achieve the selected implementation alternative through use of a combination of shore-based RF sites, satellites, and offshore platforms and data buoys. The USCG would be faced with the choice of installing AIS equipment at new sites (“new build”); installing AIS equipment adjacent to existing communications equipment (“collocation”); or, programwide, using a combination of the collocation and new build sites for shore-based RF sites.

It is expected that implementation of the shore-based RF sites would consist of using some combination of collocations and new tower builds. Although it can be assumed that AIS equipment would be collocated at a minimum of 100 USCG sites, the specific ratio of collocations to new tower builds cannot be determined with any certainty at this time. Other tower-based communications programs being implemented by the USCG have experienced significant changes in the ratios of the originally proposed collocations to new tower builds because of the lack of availability of suitable sites in the required locations, lack of tower space at the height required to achieve coverage goals, and other technical issues. In some cases, the variation between proposed and actual implementation options has required the USCG to re-evaluate the potential effects of these other options in supplemental NEPA documentation that reflects the current implementation strategies.

For the proposed implementation of the NAIS project, the USCG has chosen to bound the programmatic environmental analysis of the shore-based RF sites by evaluating three potential NAIS siting alternatives: **All New Tower Builds**, **Combination of Collocations and New Tower Builds**, and **All Collocations**. The USCG recognizes that budgetary constraints likely will prevent the implementation of the NAIS project with all new tower builds. The USCG also recognizes, based on recent experience with other tower-based programs, that implementing shore-based RF sites using all collocations is also not likely to occur. The goal of the analysis presented in this PEIS is to evaluate the complete range of impacts that could occur using the three potential NAIS siting alternatives. This approach allows presentation of not only the highest and lowest level of impacts that would be expected, but also provides a mid-range of impacts that would likely be more representative of what would actually occur. By presenting the impact analysis in this way, if the implementation ratio (i.e., collocations vs. new tower builds) for the NAIS project moves away from that selected for the mid-range analysis, new programmatic NEPA documentation would not be required. This approach assumes that the overall impacts associated with the actual implementation ratio would fall within the range of the impacts identified in this PEIS.

All New Tower Builds

The USCG estimates that approximately 450 sites would be required to achieve complete short-range coverage of NAIS communications. Building 450 new sites to support all required NAIS equipment installations could allow the siting process to provide optimal coverage because exact locations of new towers could be adjusted to meet coverage requirements. This “all new tower build” siting alternative would necessarily lead to increased costs for land acquisition and construction and would likely involve more extensive environmental impacts. This alternative is evaluated in detail in this PEIS.

Combination of Collocations and New Tower Builds

Between the extremes of all new tower builds and all collocations is the alternative of using a combination of collocation and new builds. At any particular location, existing conditions (e.g., the availability of adequate infrastructure) would dictate use of a collocation or new build approach. For the purposes of analyzing this alternative, the USCG assumes that approximately 90 percent of the required shore-based RF sites would be collocated, or shared with towers and infrastructure that already exist. Therefore, of the required 450 total shore-based RF sites, this alternative assumes that approximately 400 would be collocated with existing towers and 50 would be new tower builds. This alternative is evaluated in detail in this PEIS.

The NAIS project would establish a priority system to give an order of preference for siting shore-based RF sites. First priority would be to collocate NAIS shore-based RF sites on existing towers or infrastructure to maximize the existing infrastructure and minimize cost and environmental impacts. Efforts are currently underway to evaluate the compatibility of NAIS project requirements with other existing tower programs, such as Rescue 21 and USCG's Ports and Waterways Safety System (PAWSS). If collocation on existing towers or structures is not possible in certain coverage areas, the USCG has established a process for selecting sites where new towers or similar infrastructure to support NAIS equipment could be constructed. The descending order of priority for selecting sites that fall into this category would be

1. USCG-owned and -operated sites
2. Other federally owned and operated sites
3. State-owned sites
4. Privately owned sites

All Collocations

The opposite of building 450 new shore-based RF sites would be to collocate them. The USCG is considering collocating all 450 proposed shore-based RF sites with other tower sites and equipment already in existence. Due to the potential of collocating all 450 proposed shore-based RF sites, this PEIS analyzes the "all collocation" siting alternative in detail.

2.2.4 Summary of Alternatives Analysis

Table 2-1 identifies the alternatives that were presented in **Sections 2.2.1 through 2.2.3**. Alternatives considered and rejected because they do not meet the system requirements are underlined. NAIS implementation alternatives that are not considered viable at this time are shown in italics. Alternatives that are analyzed in this PEIS are shown highlighted in boldface type. **Section 4.1** provides further details on the alternatives analyzed in this PEIS and the assumptions used for the analysis.

Table 2-1. Summary of Alternatives Analysis

No Action Alternative (Section 2.2.1)	<u>Non AIS-Based System Alternatives</u> <i>(Section 2.2.2)</i>	Proposed Action (Section 2.2.3)	
		NAIS Implementation Alternatives (Section 2.2.3.2)	NAIS Siting Alternatives (Section 2.2.3.3)
		<i>Unmanned aerial vehicles</i>	
		<i>Surveillance aircraft</i>	
		<i>Aerostat</i>	
		<i>Radiosonde</i>	
		<i>Commercial air carriers</i>	
		<i>Commercial maritime</i>	
		Satellites	
		Offshore platforms and data buoys	
		Shore-based RF sites →	All new tower builds
			Combination of collocations and new tower builds
			All collocations

2.3 Identification of the Preferred Alternative

CEQ’s implementing regulation 40 Code of Federal Regulations (CFR) 1502.14(c) instructs EIS preparers to “Identify the agency’s preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.” The USCG has identified the Proposed Action to implement the NAIS project using a combination of the following coverage mechanisms as the Preferred Alternative:

1. Establishing a combination of collocated and newly built shore-based RF sites for short-range AIS coverage.
2. Leasing commercial satellite services for long-range AIS coverage.
3. Installing AIS equipment on existing offshore oil and gas platforms and data buoys for supplemental long-range coverage.

Implementation of the Preferred Alternative, as described above, would fully meet the requirements described in **Section 1.2.5**. **Figure 2-1** presents a conceptual overview of the Proposed Action. Implementation of the Preferred Alternative would also provide the benefit of redundancy in heavy traffic shipping areas and would not be as subject to the effects of climate and weather conditions as are inherent with other potential alternatives, such as use of UAVs and surveillance aircraft. Finally, the Preferred Alternative could be implemented at a reasonable cost. Therefore, the proposed utilization of shore-based RF sites, satellites, and offshore platforms and data buoys would best position the USCG to implement the NAIS project in support of DHS MDA initiatives.

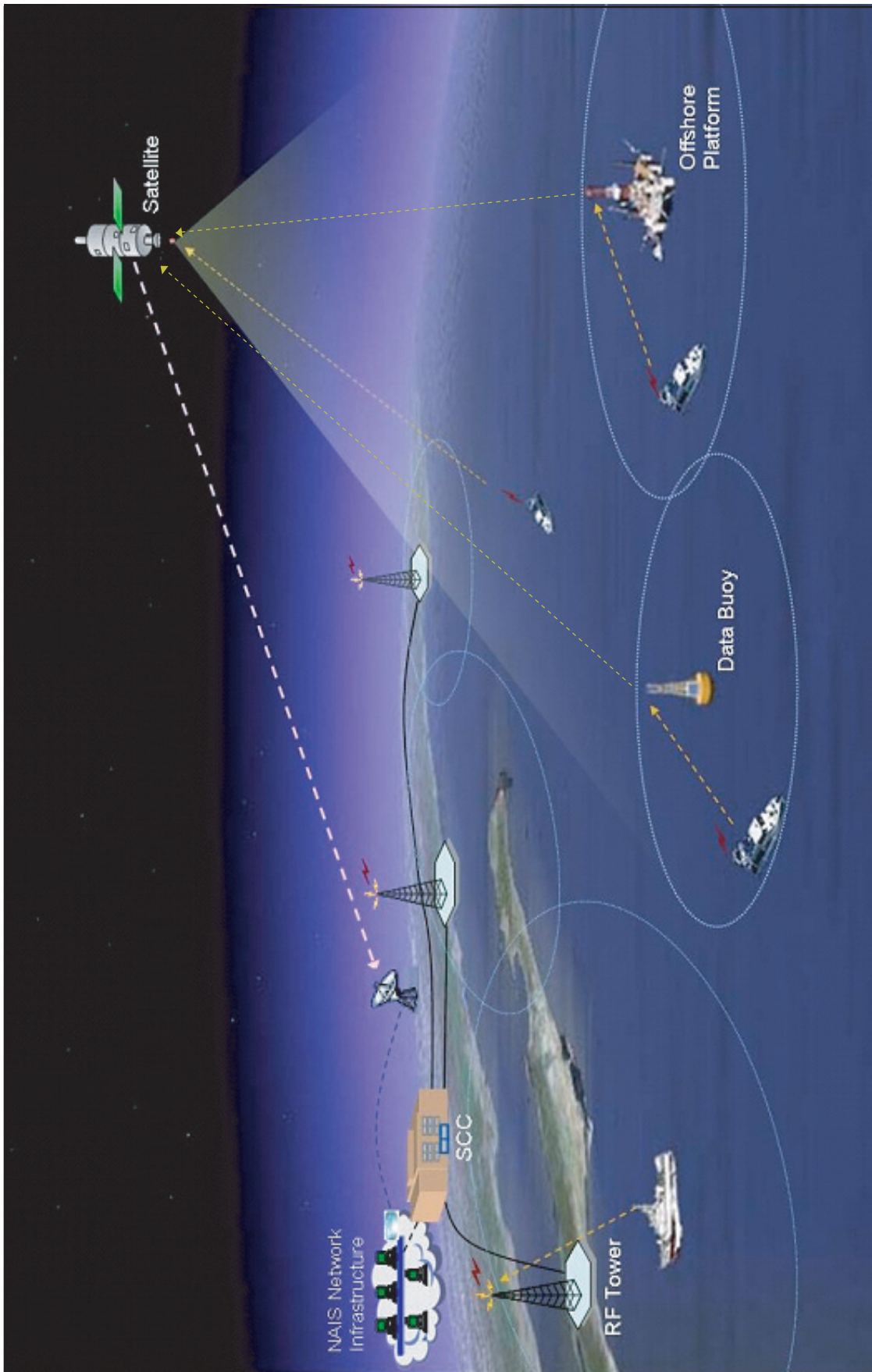


Figure 2-1. Conceptual Overview of the Proposed Action

2.4 Summary Comparison of Environmental Effects of Alternatives

Table 2-2 provides an overview of impacts anticipated under each of the alternatives considered, broken down by the resource area. Section 4 evaluates the impacts. It can be assumed that potential short-term impacts would occur from construction and long-term impacts would occur from operations of a site. For each alternative (see Section 4.1.2), a set of assumptions was developed to describe possible requirements for installation of communication equipment; and NAIS tower, equipment building, and access road construction. The USCG would have some flexibility in the exact siting of NAIS towers and equipment and would seek to avoid impacts to the greatest extent possible. In addition, under each of the alternatives considered, locations selected as NAIS sites might already possess attributes that eliminate the need for a portion, or in some cases all, of the construction. In such a case, no impacts or negligible impacts would be expected at that particular location.

Table 2-2. Summary of Anticipated Environmental Impacts by Alternative

Resource Area	No Action	All New Tower Builds	Combination of Collocations and New Tower Builds	All Collocations
Noise	No impacts would be expected.	Short-term negligible adverse impacts would be expected.	Short-term negligible adverse impacts would be expected.	Short-term negligible adverse impacts would be expected.
Air Quality	No impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected.
Earth Resources	No impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	Negligible impacts would be expected
Water Resources	No impacts would be expected.	Short-term and long-term negligible to minor adverse impacts on surface water and groundwater resources would be expected.	Short-term and long-term negligible to minor adverse impacts on surface water and groundwater resources would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	Short-term and long-term negligible to minor adverse impacts on surface water and groundwater resources would be expected.
Biological Resources	No impacts would be expected.	Short-term and long-term negligible to moderate adverse impacts would be expected.	Short-term and long-term negligible to moderate adverse impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	Short-term and long-term negligible to minor adverse impacts would be expected.

Table 2-2. Summary of Anticipated Environmental Impacts by Alternative (continued)

Resource Area	No Action	All New Tower Builds	Combination of Collocations and New Tower Builds	All Collocations
Cultural Resources	No impacts would be expected.	Short-term and long-term negligible to major adverse impacts would be expected depending on the proposed tower site proximity to archaeological resources, historic buildings or structures, or Traditional Cultural Properties.	Short-term and long-term negligible to major adverse impacts would be expected depending on the proposed tower site proximity to archaeological resources, historic buildings or structures, or Traditional Cultural Properties. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	Long-term negligible to moderate adverse impacts would be expected.
Visual Resources	No impacts would be expected.	Short-term and long-term minor to moderate impacts would be expected.	Short-term and long-term minor to moderate impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	Long-term negligible to minor adverse impacts would be expected.
Land Use	No impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected.	Short-term and long-term negligible to minor adverse impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	No impacts would be expected.
Infrastructure	No impacts would be expected.	Short-term minor adverse impacts would be expected.	Short-term minor adverse impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative.	No impacts would be expected.
Hazardous Substances	No impacts would be expected.	No impacts would be expected.	No impacts would be expected.	No impacts would be expected.
Socioeconomics and Environmental Justice	No impacts would be expected.	Long-term negligible to minor adverse impacts would be expected.	Long-term negligible to minor adverse impacts would occur at fewer sites than under the All New Tower Builds Alternative.	No impacts would be expected.
Human Health and Safety	No impacts would be expected. However, the beneficial impacts of the Proposed Action would not be realized.	Short-term minor adverse impacts would be expected. Long-term beneficial impacts would be expected.	Short-term minor adverse impacts would be expected. Such impacts would occur at fewer sites than under the All New Tower Builds Alternative. Long-term beneficial impacts would be expected.	Long-term beneficial impacts would be expected.

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3. Affected Environment

3.1 Introduction

This section describes the existing environmental and socioeconomic conditions that would most likely be affected by the Proposed Action of implementing the NAIS project and serves as a baseline from which to identify and evaluate potential impacts. In compliance with NEPA, CEQ guidelines, and Commandant's Instruction (COMDTINST) M16475.1D, *USCG Implementing Procedures and Policy for Considering Environmental Impacts*, the description of the affected environment focuses on those conditions and resource areas that are potentially subject to impacts. The affected environment is presented in 12 environmental and human resource areas.

This PEIS is a broad program-level planning document that assumes subsequent follow-on, or tiered environmental studies to address future site-specific implementation actions, such as the siting of individual shore-based RF towers. At the program level, it is not possible to provide a detailed comprehensive description of the affected environment for most resource areas because of the broad geographic and temporal scope of the proposed implementation of the NAIS project. Regional discussions of the affected environment, where possible, are provided for some resource categories that are better suited to such discussion at this level. Otherwise, the affected environment for individual resource categories is presented by providing a definition of the resource, followed by a generalized categorization of existing conditions that are likely to be encountered.

A table that provides a listing of regulations, laws, and EOs that can reasonably be expected to apply to the Proposed Action is included in **Appendix C**. This presentation is not intended to be a complete description of the entire legal framework under which the USCG conducts its missions.

3.2 Noise

3.2.1 Definition of Resource

Sound is defined as a particular auditory effect produced by a given source, for example the sound of rain on the roof. Sound is measured with instruments that record instantaneous sound levels in decibels (dB). A-weighted sound level measurements (dBA) are used to characterize sound levels that can be sensed by the human ear. "A-weighted" denotes the adjustment of the frequency content of a sound-producing event to represent the way in which the average human ear responds to the audible event. All sound levels presented in this PEIS are A-weighted.

Noise and sound share the same physical aspects, but noise is considered a disturbance while sound is defined as an auditory effect. Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise annoying. Noise can be intermittent or continuous, steady or impulsive, and can involve any number of sources and frequencies. It can be readily identifiable or generally nondescript. Human response to increased sound levels varies according to the source type, characteristics of the sound source, distance between source and receptor, receptor sensitivity, and time of day. How an individual responds to the sound source will determine if the sound is viewed as music to ones ears or an annoying noise. Affected receptors are specific (e.g., schools, churches, or hospitals) or broad areas (e.g., nature preserves or designated districts) in which occasional or persistent sensitivity to noise above ambient levels exists.

3.2.2 Existing Conditions

Ambient Sound Levels. Most people are exposed to sound levels of 50 to 55 dBA or higher on a daily basis. Noise levels in residential areas vary depending on the housing density and location. As shown in **Table 3-1**, typical outdoor noise levels in a normal suburban residential area are about 55 dBA, which increases to 60 dBA for an urban residential area, and 80 dBA in the downtown section of a city.

Table 3-1. Typical Outdoor Noise Levels

A-weighted Sound Levels (dBA)	Location
50	Residential area in a small town or quiet suburban area
55	Suburban residential area
60	Urban residential area
65	Noisy urban residential area
70	Very noisy urban residential area
80	City noise (downtown of major metropolitan area)

Source: FHWA 1980

The existing noise conditions for the affected environment is not described in detail because of the broad geographic scope of the project and because specific site locations have not been determined. Published Federal, state, and local laws, ordinances, regulations, and standards can be obtained for comparison with anticipated noise levels. Construction sound levels are discussed below.

Construction Sound Levels. Operation of equipment used for building construction, modification, and demolition work can generate sound levels that exceed ambient sound levels. A variety of sounds can come from trucks, graders, pavers, welders, and other construction processes. **Table 3-2** lists noise levels associated with common types of construction equipment. Operation of construction equipment usually exceeds the ambient sound levels by 20 to 25 dBA in an urban environment and up to 30 to 35 dBA in a quiet suburban area.

3.3 Air Quality

3.3.1 Definition of the Resource

In accordance with Federal Clean Air Act (CAA) requirements (42 United States Code [U.S.C.] 7401–7671q, as amended) the air quality in a given region or area is measured by the concentration of various pollutants in the atmosphere. The measurements of these “criteria pollutants” in ambient air are expressed in units of parts per million (ppm), milligrams per cubic meter (mg/m^3), or micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The air quality in a region is a result not only of the types and quantities of atmospheric pollutants and pollutant sources in an area, but also surface topography, the size of the topological “air basin,” and the prevailing meteorological conditions.

Table 3-2. Predicted Sound Levels for Construction Equipment

Construction Category and Equipment	Predicted A-weighted Sound Levels at 50 feet (dBA)
Grading	
Bulldozer	87
Grader	85
Water Truck	88
Paving	
Paver	89
Roller	74
Demolition	
Loader	85
Haul Truck	88
Building Construction	
Generator Saw	81
Industrial Saw	83
Welder	74
Truck	80
Forklift	67
Crane	83

Source: COL 2001

The CAA directed the U.S. Environmental Protection Agency (USEPA) to develop, implement, and enforce strong environmental regulations that would ensure clean and healthy ambient air quality. To protect public health and welfare, USEPA developed numerical concentration-based standards, or National Ambient Air Quality Standards (NAAQS), for pollutants that have been determined to impact human health and the environment. USEPA established both primary and secondary NAAQS under the provisions of the CAA. NAAQS are currently established for six criteria air pollutants: ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable particulate matter (including particulate matter equal to or less than 10 microns in diameter [PM₁₀] and particulate matter equal to or less than 2.5 microns in diameter [PM_{2.5}]), and lead (Pb). The primary NAAQS represent maximum levels of background air pollution that are considered safe, with an adequate margin of safety to protect public health. Secondary NAAQS represent the maximum pollutant concentration necessary to protect vegetation, crops, and other public resources along with maintaining visibility standards. **Table 3-3** presents the primary and secondary NAAQS (USEPA 2004a).

Although O₃ is considered a criteria air pollutant and is measurable in the atmosphere, it is not often considered a regulated air pollutant when calculating emissions because O₃ is typically not emitted directly from most emissions sources. Ozone is formed in the atmosphere by photochemical reactions involving sunlight and previously emitted pollutants or “O₃ precursors.” These O₃ precursors consist primarily of nitrogen oxides (NO_x) and volatile organic compounds (VOCs) that are directly emitted from a wide range of emissions sources. For this reason, regulatory agencies attempt to limit atmospheric O₃ concentrations by controlling VOC pollutants (also identified as reactive organic gases) and NO₂.

Table 3-3. National Ambient Air Quality Standards

Pollutant	Standard Value		Standard Type
CO			
8-hour Average ¹	9 ppm	(10 mg/m ³)	Primary and Secondary
1-hour Average ¹	35 ppm	(40 mg/m ³)	Primary
NO₂			
Annual Arithmetic Mean	0.053 ppm	(100 µg/m ³)	Primary and Secondary
O₃			
8-hour Average ²	0.08 ppm	(157 µg/m ³)	Primary and Secondary
Pb			
Quarterly Average		1.5 µg/m ³	Primary and Secondary
PM₁₀			
Annual Arithmetic Mean ³		50 µg/m ³	Primary and Secondary
24-hour Average ¹		150 µg/m ³	Primary and Secondary
PM_{2.5}			
Annual Arithmetic Mean ⁴		15 µg/m ³	Primary and Secondary
24-hour Average ⁶		65 µg/m ³	Primary and Secondary
SO₂			
Annual Arithmetic Mean	0.03 ppm	(80 µg/m ³)	Primary
24-hour Average ¹	0.14 ppm	(365 µg/m ³)	Primary
3-hour Average ¹	0.5 ppm	(1,300 µg/m ³)	Secondary

Source: USEPA 2004a

Notes: Parenthetical values are approximate equivalent concentrations.

¹ Not to be exceeded more than once per year.

² To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm.

³ To attain this standard, the expected annual arithmetic mean PM₁₀ concentration at each monitor within an area must not exceed 50 µg/m³.

⁴ To attain this standard, the 3-year average of the annual arithmetic mean PM_{2.5} concentrations from single or multiple community-oriented monitors must not exceed 15.0 µg/m³.

⁵ To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 65 µg/m³.

As authorized by the CAA, USEPA has delegated responsibility for ensuring compliance with NAAQS to the states and local agencies. As such, each state must develop air pollutant control programs and promulgate regulations and rules that focus on meeting NAAQS and maintaining healthy ambient air quality levels. These programs are detailed in State Implementation Plans (SIPs) that must be developed by each state or local regulatory agency and approved by USEPA. A SIP is a compilation of regulations, strategies, schedules, and enforcement actions designed to move the state into compliance with all NAAQS. Any changes to the compliance schedule or plan (e.g., new regulations, emissions budgets, controls) must be incorporated into the SIP and approved by USEPA.

In 1997, USEPA initiated work on new General Conformity rules and guidance to reflect the new 8-hour O₃, PM_{2.5}, and regional haze standards that were promulgated in that year. The 1-hour O₃ standard will no longer apply to an area 1 year after the effective date of the designation of that area for the 8-hour O₃ NAAQS. USEPA designated PM_{2.5} nonattainment areas in December 2004.

The General Conformity Rule and the promulgated regulations found in 40 CFR Part 93 exempt certain Federal actions from conformity determinations (e.g., contaminated site cleanup and natural emergency response activities). Other Federal actions are assumed to conform if total indirect and direct project emissions are below *de minimis* levels presented in 40 CFR 93.153. The threshold levels (in tons of pollutant per year) depend upon the nonattainment status that USEPA has assigned to a nonattainment area. Once the net change in nonattainment pollutants is calculated, the Federal agency must compare them to the *de minimis* thresholds.

Title V of the CAA Amendments of 1990 requires states and local agencies to permit major stationary sources. A major stationary source is a facility (i.e., plant, base, or activity) that has the potential to emit more than 100 tons per year (tpy) of any one criteria air pollutant, 10 tpy of a hazardous air pollutant, or 25 tpy of any combination of hazardous air pollutants. However, lower pollutant-specific “major source” permitting thresholds apply in nonattainment areas. For example, the Title V permitting threshold for an “extreme” O₃ nonattainment area is 10 tpy of potential VOC or NO_x emissions. The purpose of the permitting rule is to establish regulatory control over large, industrial-type activities and monitor their impact on air quality. Synthetic minor sources are those facilities that would be regulated under the air operating permit program but have opted to keep their emissions limits lower than the threshold for the program.

Federal Prevention of Significant Deterioration (PSD) regulations also define air pollutant emissions from proposed major stationary sources or modifications to be “significant” if (1) a proposed project is within 10 kilometers of any Class I area, and (2) regulated pollutant emissions would cause an increase in the 24-hour average concentration of any regulated pollutant in the Class I area of 1 µg/m³ or more [40 CFR 52.21(b)(23)(iii)]. PSD regulations also define ambient air increments, limiting the allowable increases to any area’s baseline air contaminant concentrations, based on the area’s designation as Class I, II, or III [40 CFR 52.21(c)].

3.3.2 Existing Conditions

It is not possible to describe in detail the entire affected environment of the broad geographic scope for air quality as assessed in this PEIS. Site-specific air quality will be addressed in follow-on NEPA documentation, as necessary, during the siting of NAIS shore-based RF equipment as the USCG determines where such equipment would be located. A discussion of how air quality would be considered in siting NAIS shore-based RF equipment follows.

Since the exact location of each site is not known at this time, the site could be constructed within either an attainment or nonattainment area or within the vicinity of a Class I area. Each site-specific NEPA analysis would determine whether a chosen shore-based RF site is in compliance with General Conformity, Title V, and PSD requirements. This determination would be based on USEPA air quality standards and coordinated with each site’s state and regional air pollution control agencies and air quality management district offices. However, based on emissions using the assumptions discussed in **Section 2**, construction and operation of individual NAIS sites would be well below criteria pollutant emissions thresholds and would be well below 10 percent of an area’s total emissions for each pollutant. For each chosen shore-based RF site location, the USCG would coordinate with the appropriate air quality control region to determine whether an air quality permit is required for the backup generator.

3.4 Earth Resources

3.4.1 Definition of the Resource

Earth resources are defined as the geology, soils, and topography that characterize an area. Geological resources consist of the surface and near-surface materials of the earth and the regional or local forces by which they have formed. These resources are typically described in terms of regional and local geology, mineral or paleontological resources (if applicable), and geologic hazards. Regional and local geologic resources comprise earth materials within a specified region and the forces that have shaped them. These include bedrock or sediment type and structure, unique geologic features, depositional or erosional environment, and age or history. Mineral and paleontological resources include usable geological materials that have some economic or academic value. Soil resources include the unconsolidated, terrestrial materials overlying the bedrock or parent material and are typically described in terms of their complex type, slope, and physical characteristics (i.e., strength, expansion potential, cohesion, and grain size). Topography consists of the geomorphic characteristics of the land or sea floor surface, including the change in vertical elevation of the earth's surface across a given area, relationship with adjacent land features, and geographic location.

Prime farmland is protected under the Farmland Protection Policy Act of 1981. The intent of the Act is to minimize the extent to which Federal programs contribute to the unnecessary or irreversible conversion of farmland to nonagricultural uses. The Act also ensures that Federal programs are administered in a manner that, to the extent practicable, will be compatible with private, state, and local government programs and policies to protect farmland. The Natural Resources Conservation Service (NRCS) is responsible for overseeing compliance with the Act and has developed the rules and regulations for implementation of the Act. The implementing procedures of the Farmland Protection Policy Act and NRCS programs require Federal agencies to evaluate the adverse effects (direct and indirect) of their activities on prime and unique farmland, as well as farmland of statewide and local importance, and to consider alternative actions that could avoid adverse effects. Determination of whether an area is considered prime or unique farmland and potential impacts associated with a proposed action are based on preparation of the farmland conversion impact rating form AD-1006 for areas where prime farmland soils occur and by applying criteria established at Section 658.5 of the Farmland Protection Policy Act (7 CFR 658, July 5, 1984).

Implementation of erosion and sediment controls and storm water best management practices during and following construction activities are typically required by state or local ordinances. Requirements vary by state and in some cases, by municipality. Specific requirements applicable to the NAIS project would be determined on a site-specific basis once the locations of proposed NAIS towers are determined. The USCG also has established storm water management guidelines in the *Draft Phase II Stormwater Management Guide* (Commandant Publication [COMDTPUB] 11300.3). The guide applies to construction disturbances between 1 and 5 acres. Section 402 of the Clean Water Act (CWA) also addresses storm water runoff from construction sites and requires Phase II National Pollutant Discharge Elimination System (NPDES) permits for disturbances between 1 and 5 acres, and Phase I permits for disturbances of more than 5 acres. **Section 3.5** (Water Resources) provides a more detailed discussion of Section 402 requirements.

3.4.2 Existing Conditions

Earth resources and associated features are not described in detail in this PEIS because of the broad geographic scope of the project and because specific site locations have not been determined. Geologic characteristics and potential uses and limitations associated with the resource will vary depending on

geographic location. Limitations associated with geology might include shallow rock, structural instability, or geologic hazards. Geologic hazards comprise the regional or local forces or conditions that could affect a proposed development or land use (e.g., seismicity, slope stability, and subsidence or solution weathering). The characteristics of soils that develop in an area are the result of the geology, parent material, landscape position, climate, and age of the soil. Site-specific characterization is necessary to determine potential uses and limitations associated with soils. Examples of soil characteristics that can limit use include poor drainage, excessive wetness, excessive erodibility, the presence of shrink-swell clays, or the occurrence of prime farmland. Soil characteristics can preclude proposed uses, require the application of special engineering designs, or require coordination with Federal or state agencies. Topographic characteristics might limit use as a result of steep slopes and instability.

Site-specific characteristics associated with geology, soils, and topography will be addressed in follow-on NEPA documentation, as necessary, during the siting of NAIS shore-based RF equipment as the USCG determines where such equipment would be located.

3.5 Water Resources

3.5.1 Definition of the Resource

Water resources include surface water, groundwater, and floodplains. The quantity and quality of available water and the demand for potable, agricultural, and industrial water affect its value. The following discusses Federal laws pertinent to protecting the quality and use of water resources. The term “waters of the United States” includes interstate and intrastate lakes, rivers, streams, and wetlands that are used for commerce, recreation, industry, sources of fish, and other purposes. Wetland resources are discussed in Section 3.6.

The CWA of 1977 is an amendment to the Federal Water Pollution Control Act of 1948 and Amendments (1972) (33 U.S.C. 1251–1387). The CWA, administered by USEPA, uses both water quality standards and technology-based effluent limitations to protect and restore water quality. Technology-based effluent limitations are specific numerical limitations placed on certain pollutants from certain sources and applied to industrial and municipal sources. Water quality standards consist of a designated beneficial use of a waterbody (e.g., contact recreation, fishing, water supply), and the numerical or quantitative statement that identifies at what point the waterbody does not meet its designated use.

The CWA requires states to establish water quality standards for waterbodies inside their borders and then identify waters not meeting the standards. USEPA has delegated permitting responsibilities to qualified states under Sections 401 and 402 of the CWA. Section 401 requires a permit for any activity (including construction and operation of facilities) that can result in any discharge into navigable waters. Section 402 authorizes the NPDES permitting program to regulate and enforce discharges into U.S. waters. The NPDES permitting program targets point-source outfalls associated with industrial wastewater and municipal sewage discharges. Storm water runoff is also regulated under NPDES to include storm water discharges from large construction projects, usually larger than 1 acre in size. USEPA administers NPDES permits for five states (Alaska, Idaho, Massachusetts, New Hampshire, and New Mexico), the District of Columbia, and U.S. territories (except the Virgin Islands), while the remaining 45 states and the Virgin Islands have partial or full State Pollutant Discharge Elimination System (SPDES) permitting authority (USEPA 2003). Section 404 of the CWA establishes a Federal program to regulate the discharge of dredge and fill material into waters of the United States. Section 404 permits are issued by the U.S. Army Corps of Engineers (USACE), subject to and using USEPA’s environmental guidance. USEPA has authorized two states (Michigan and New Jersey) certain Section 404 permitting responsibilities (Copeland 2002). Applicability of Section 401 and 404 permitting to wetlands is discussed in **Section 3.6**.

The Wild and Scenic Rivers Act (WSRA) of 1968 (16 U.S.C. 1271–1287), administered by the DOI, provides for a wild and scenic river system by recognizing the remarkable values (scenic, recreational, geologic, fish and wildlife, historic, cultural, or other values) of specific rivers of the United States. The policy not only protects the water quality of the selected rivers but also provides for the enjoyment of present and future generations. Any river in a free-flowing condition is eligible for inclusion, and can be authorized as such by Congress, a state legislature, or by the Secretary of the Interior upon the recommendation of the governor of the state(s) through which the river flows. Under the WSRA, Federal agencies are required to consider the potential national wild, scenic, and recreational river areas for the use and development of water and related land resources.

The Coastal Zone Management Act (CZMA) of 1972 (16 U.S.C. 1451 et seq) declares a national policy to preserve, protect, develop, and, where possible, restore or enhance the resources of the nation's coastal zone. Applicability of the CZMA to land use is discussed in **Section 3.10**.

The Safe Drinking Water Act (SDWA) was originally passed in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources (i.e., rivers, lakes, reservoirs, springs, and groundwater wells). The Sole Source Aquifer Protection Program is authorized under Section 1424(e) of the SDWA. A sole source aquifer is defined as supplying at least 50 percent of the drinking water consumed in an area overlying the aquifer. There are 73 designated sole source aquifers in the United States and U.S. territories (USEPA 2006). Any federally funded proposed project (including those that are partially federally funded) with the potential to contaminate a designated sole source aquifer is subject to USEPA review.

EO 11988, *Floodplain Management* (May 24, 1977), requires Federal agencies to determine whether a proposed action would occur within a floodplain and consider alternatives to avoid adverse effects and incompatible development in floodplains. EO 11988 directs Federal agencies to avoid floodplains unless the agency determines that there is no practicable alternative. The Federal Emergency Management Agency (FEMA) oversees and regulates floodplain management. Regulatory floodplains are delineated in FEMA Flood Insurance Rate Maps.

3.5.2 Existing Conditions

Surface Water. For the purposes of this PEIS, surface water categories are divided into freshwater streams and rivers, freshwater lakes and reservoirs, and estuaries. USEPA has identified beneficial uses for surface water under the CWA, including aquatic life support, fish consumption, shellfish harvesting, drinking water supply, primary contact recreation, secondary contact recreation, and agriculture. States set their own water quality standards to accomplish these beneficial uses.

Freshwater Streams and Rivers. Freshwater streams and rivers are the dynamic interconnected systems of moving water. Streams can be perennial (flow year-round), intermittent (flow during storm events or snowmelt), or interrupted (perennial flows that goes underground in karst terrain). Without human interferences, stream and river courses “meander” over time in response to natural occurrences that alter the landscape (e.g., landslides, tropical typhoons, earthquakes). Humans frequently modify stream channels to develop land, protect existing infrastructure, or supply potable water.

Smaller streams join together to form larger streams, and the coming together of streams eventually form rivers. Ultimately, rivers flow into lakes or estuaries. The interconnected system of moving waterbodies is a watershed. Watersheds are defined by the highest elevations that divide two drainage basins (called drainage divides), but watersheds can be discussed on small, local scales (e.g., New River Watershed in

Virginia) or large scales (e.g., Mississippi River Watershed). One watershed can be composed of many subwatersheds.

Freshwater Lakes and Reservoirs. Lakes are bodies of relatively still water, which can be formed from many processes, including glaciation, tectonic movements, volcanic activity, and rivers. Reservoirs are rivers that have been dammed for human uses (e.g., water supply, power generation, recreation). The water in lakes can be supplied by streams and rivers, groundwater, or melting glaciers.

Estuaries and Shorelines. Estuaries (including bays and tidal rivers) are bodies of water that provide transition zones between fresh river water and saline ocean water. This interaction produces an environment suited to unique wildlife and fisheries and contributes substantially to the U.S. economy. Critical coastal habitats, such as estuaries, provide spawning grounds, nurseries, shelter, and food for finfish, shellfish, birds, and other wildlife (USEPA 2004b). Ocean shorelines provide habitat for fish, shellfish, and other animals, and support recreational activities.

Surface Water Quality. Water quality is evaluated by direct measurement of factors that are considered important to the health of the ecosystem and the existing or intended water use. Baseline water quality constituents include temperature, total dissolved solids (salinity and hardness), dissolved oxygen, nutrients, pH, suspended solids (turbidity), and other contaminants. Trace constituents such as metals and organic compounds, as well as pathogens, also affect water quality.

Based on USEPA's *The Quality of Our Nation's Waters* (2000a), types of pollutants vary nationwide, but the principal pollutants causing water impairments include nutrients, siltation, metals, and pathogens, all of which contribute to low levels of dissolved oxygen and other impairments. Major sources of pollutants include agriculture runoff, hydromodification, storm water runoff, municipal point sources, atmospheric deposition, and chemical leaks or discharges (USEPA 2000a). The Proposed Action as set forth in **Section 2** has the potential to generate pollutants from storm water runoff and chemical leaks or discharges, so these potential sources are discussed in more detail.

Storm water runoff is a widespread problem affecting surface water quantity and quality. Storm water in rural areas is largely absorbed by grass, trees, and soil where drainage features have not been extensively modified. However, urban areas have considerably more impervious surface (which increases flash flooding). For instance, a large, sudden flow could scour a streambed and harm biological resources, or threaten human safety and infrastructure downstream. Engineered storm water systems convey precipitation away from developed sites to receiving surface waters. Appropriately designed storm water management systems employ a variety of devices to slow the movement of water.

Storm water also carries a multitude of pollutants that it picks up while flowing over land. In rural areas, pollutants can include nutrients and sediment from agriculture and livestock operations, which can result in algal blooms and fish kills in lakes or estuaries. In urban areas, pollutants include nutrients, sediments, petroleum, and other organic and inorganic chemicals.

Storm water runoff is generally considered a nonpoint source pollutant. However, it can be quantified as a point source when buildings or municipalities (including USCG Stations, Air Stations, or Integrated Support Commands) have storm water systems that collect, convey, and discharge at an outfall into waters of the United States. Facilities and municipalities with storm systems and construction sites are required to obtain an NPDES permit under the CWA. The USCG has Storm Water Management Guides for both Phase I and Phase II NPDES permits (COMDTPUB 11300.3 Phase I and Phase II). NPDES storm water permits are not intended to cover individual Federal buildings (unless a state determines that it requires a NPDES permit). Construction projects would require a NPDES construction permit if the

area disturbed is greater than 1 acre (would require Phase II permit) or 5 acres (would require Phase I permit).

Chemical leaks or discharges can have long-lasting effects on a surface waterbody. Chemical leaks could include a variety of organic and inorganic compounds. Common sources of these sorts of compounds include fuel spills, or leaking storage tanks. Most pipes and other discharges into waterbodies are regulated under the CWA. As described above, organic and inorganic compounds can have long-lasting effects when metals or toxic chemicals contaminate a waterbody, resulting in human health hazards and fish kills.

Groundwater. Groundwater is the subsurface water that fully saturates pores or cracks in soils and rock. It replenishes streams, rivers, and habitats and provides fresh water for irrigation, industry, and potable water consumption.

Groundwater Systems. An aquifer is the geologic layer that transmits groundwater. Aquifers can be unconfined (no layer to restrict the vertical movement of groundwater) or confined (bounded by clays or nonporous bedrock). Aquifers can comprise unconsolidated, semiconsolidated, or consolidated materials. They can be further discussed in terms of origin, thickness, or hydraulic conductivity (the rate at which water can transmit through an aquifer). These characteristics are inherently dependent on regional and local geology.

Principal aquifers by material include sand and gravel and sandstone, carbonate, and igneous and metamorphic rock (or sometimes two adjoining rock types). Other rock types that are not considered “principal” or major aquifers are also important constituents of groundwater systems. Sand and gravel aquifers, which are typically unconfined, are composed of unconsolidated and semiconsolidated materials. Water is held between the particles of sand and gravel, so hydraulic conductivity is usually rapid. Sandstone and igneous and metamorphic (volcanic) rock are inherently nonporous and do not transmit water; however, fractures and faulting within these rocks can create highly productive aquifers. The most common kind of carbonate rock is limestone, which originates from a sedimentary deposit from a marine environment. Carbonate aquifers are unique because limestone becomes dissolutioned in contact with water over time and creates open cavities. Solution cavities can be small tubular cracks to large interconnected caverns. Karst topography refers to the areas where carbonate rocks are exposed at the surface of the land; karst regions are highly susceptible to groundwater contamination because water moves rapidly through the dissolutioned rock. Other rocks can comprise a minor aquifer or confining bed (USGS 2005).

Groundwater Quality. Water quality parameters and sources of contamination discussed under *Surface Water* are also applicable to groundwater. It is estimated that, on average, streams receive 52 percent of their base flow from groundwater, so the same factors that affect surface water affect groundwater, and vice versa (USEPA 2000b). Most aquifers are more protected than surface water from quick contamination because as water migrates down through soil and rock layers, many chemicals and solid particles become somewhat “filtered” before entering an aquifer by forming attractive bonds with soil particles. Confining units (clay or nonporous rock) also act as barriers to pollution for confined aquifers, whereas unconfined aquifers in urban or industrial areas are commonly contaminated with various pollutants. For example, a small fuel spill would be more likely to adversely affect a surface waterbody or shallow, unconfined aquifer than a deep, regional, confined aquifer. The potential of a contaminant to affect groundwater quality is dependent on its ability to migrate through the overlying soils to the underlying groundwater resource (USEPA 2000b).

Some confined aquifers, such as carbonate aquifers, are inherently more susceptible to contamination because they consist of open channels that allow water to move quickly and unimpeded. Chronic

pollution could also eventually contaminate an aquifer. For example, petroleum from a chronic leaking underground storage tank will likely eventually migrate some distance into the soil and then groundwater, though the extent of the contamination (referred to as the plume) would depend on both the rate at which the substance leaks over time and the composition of the geologic material. Contamination can also occur as gradual deterioration of groundwater quality over a large area of land as a result of nonpoint sources of pollution (e.g., fertilizers, pesticides).

Floodplains. Natural flooding by streams is the most common type of flooding. This type of flooding occurs when heavy rain or snowmelt results in water overflowing the normal stream channel and into the floodplain. Marine coasts also experience flooding from wind-driven storm surges and excessive rain from tropical cyclones (i.e., typhoons and hurricanes). Large inland lakes can also flood the surrounding area. The risk of flooding typically hinges on local topography, the frequency of precipitation events, and the size of the watershed above the floodplain.

FEMA delineates the floodplain for 100-year and 500-year flood events. The 100-year floodplain is the area that has a 1 percent chance of inundation by a flood event in a given year. The 500-year floodplain is the area that has a 0.2 percent chance of inundation in a given year. The probability of a flood event is not equivalent to the frequency at which a 100- or 500-year flood event will actually occur in a given locality. Water flow is dependent on many factors in a watershed and can change from year to year. The frequency and magnitude of large flood events changes over time and with development, for example, as upstream channels are altered, or as overall impervious surfaces increase in the watershed.

Certain facilities inherently pose too great a risk to be in either the 100- or 500-year floodplain, such as hospitals, schools, or storage buildings for irreplaceable records. Federal, state, and local regulations often limit floodplain development to passive uses, such as recreational and preservation activities, to reduce the risks to human health and safety. Federal agencies are prohibited from developing in the 100-year floodplain unless the appropriate agency official can demonstrate that there is no practicable alternative in accordance with EO 11988.

3.6 Biological Resources

3.6.1 Definition of the Resource

Biological resources include native or naturalized vegetation and wildlife, and the habitats, such as forests, grasslands, wetlands, or aquatic resources in which they exist. Sensitive and protected biological resources include plant and animal species listed as threatened or endangered by the United States Fish and Wildlife Service (USFWS) or a state.

Categories of biological resources evaluated in this PEIS include vegetation and associated habitats, wildlife, threatened and endangered species, and wetlands. Biological resources of particular concern in this assessment, in addition to threatened and endangered species, include neotropical migratory birds, due to the potential for impacts associated with tower structures. Wetlands are evaluated as a distinct habitat category because they are important natural systems that can provide diverse biologic and hydrologic functions such as water quality improvement, groundwater recharge and discharge, wildlife habitat provision, unique flora and fauna niche provision, pollution mitigation, nutrient cycling, storm water attenuation and storage, sediment detention, and erosion protection.

Biological resources are protected through Federal and state laws, regulations, programs, and EOs. Proposed activities must comply with criteria and requirements of regulations applicable to the potentially affected resources. The following text provides a summary of the Federal regulatory framework applicable to biological resources potentially affected by the alternatives evaluated in this assessment.

State regulatory criteria applicable to biological resources, such the protection of state-listed sensitive species or habitats, or state level protection of wetlands, would be addressed during site-specific tiered analysis of considered alternatives.

The Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.) mandates that all Federal agencies consider the potential effects of their actions on species listed as threatened or endangered. Under the ESA, an endangered species is defined as any species in danger of extinction throughout all or a significant area of its range. A threatened species is defined as any species likely to become endangered in the foreseeable future. Under the act, the USFWS and the NMFS are responsible for compiling the lists of threatened and endangered species. Section 7 (a)(1) of the ESA requires Federal agencies to use their operating authorities to carry out conservation programs for listed species. Section 7 (a)(2) also requires Federal agencies to ensure that all federally associated activities within the United States or its territories do not have adverse impacts on the continued existence of threatened or endangered species or on habitats that are important in conserving those species. Section 7 (a)(4) of the ESA requires Federal agencies to confer with the USFWS or NMFS on any agency action which is likely to jeopardize the continued existence of any listed species (including plant species), or result in the destruction or adverse modification of designated critical habitat. If an agency determines that an action might adversely affect a federally listed species or its designated critical habitat, then preparation of a Biological Assessment is required. Formal consultation is initiated once the Biological Assessment is submitted to USFWS or NMFS. The USFWS or NMFS will prepare a Biological Opinion stating whether the action is likely to jeopardize the continued existence of a listed species or cause the destruction or adverse modification of critical habitat. The purpose of the process is to ensure avoidance and minimization of potential adverse impacts on a listed species, or its designated critical habitat.

The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States. Section 404 of the act regulates dredging and the placement of fill into waters of the United States, including wetlands. A permit is required from the USACE before conducting projects that will result in dredging or the placement of fill into wetlands or other waters of the United States. Permits for dredge or fill activities also require compliance with other applicable state and Federal regulations. Section 401 of the CWA provides authority for states to require that a water quality certification be obtained prior to issuance of a Section 404 permit. Section 402 of the CWA provides additional protection to surface water and aquatic biological resources from impacts associated with storm water runoff by requiring obtainment of a NPDES for various land development activities.

EO 11990, *Protection of Wetlands*, directs Federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the destruction or modification of wetlands, and to avoid direct or indirect support of new construction in wetlands whenever there is a practicable alternative.

The Fish and Wildlife Conservation Act (16 U.S.C. 2901–2911; 94 Stat. 1322) authorizes financial and technical assistance to the states for the development, revision, and implementation of conservation plans and programs for nongame fish and wildlife. Federally sponsored projects are required to be in compliance with the provisions of developed conservation plans and programs.

The Migratory Bird Treaty Act (MBTA) of 1918, as amended, establishes that all migratory birds and their parts (including eggs, nests, and feathers) are fully protected. The act establishes a prohibition, unless permitted by regulations, to pursue, hunt, take, capture, or kill; attempt to take, capture, or kill; possess; offer for sale; sell; offer to purchase; purchase; deliver for shipment; ship; cause to be shipped; deliver for transportation; transport; cause to be transported; carry; or cause to be carried by any means whatever; receive for shipment, transportation, or carriage; or export, at any time, or in any manner, any migratory bird; or any part, nest, or egg of any such bird. The act also provides the Secretary of the Interior with authority to determine when any of the prohibited actions could be undertaken, and to adopt

regulations for this purpose. Resident birds that do not migrate, such as quail, turkey, and pheasant, are managed solely through state fish and wildlife agencies, and are not protected under the MBTA (USFWS 2005).

The National Wildlife Refuge System Improvement Act of 1997 (Public Law [P.L.] 105–57) was passed to ensure that the Refuge System is managed as a national system of related lands, waters, and interests for the protection and conservation of the nation’s wildlife resources. The National Wildlife Refuge System is the only network of Federal lands devoted specifically to wildlife and includes more than 500 refuges and thousands of waterfowl production areas across the United States. Many of the refuges are near the coast and provide habitat for migratory birds during their seasonal migrations. Activities that can affect the biological resources in a refuge must comply with a Special Use Permit based on a compatibility determination from the USFWS.

The Federal Communication Commission (FCC) regulations established at Title 47, Chapter 1, Part 47, requires the Federal Aviation Administration (FAA) to conduct an aeronautical study of the navigation air space (which begins at 200 feet and extends to 60,000 feet above the ground) to determine appropriate tower marking and lighting requirements to achieve safe air space when a tower is proposed for FCC registration. The FAA can vary marking and lighting recommendations when requested, provided that aviation safety is not compromised. For example, the FAA can recommend using red lights and painting instead of high-intensity white strobe lighting when a tower is located near a residential community. In all cases, safe aviation conditions around the tower are the FCC’s primary concern and direct the marking and lighting requirements. Navigation air space, which starts at 200 feet above the ground, decreases in elevation in close proximity to airports, so the minimum height for required marking or lighting would decrease in these areas.

The USFWS, Office of Migratory Bird Management, which is the lead division for protection of migratory birds at the Federal level, established the Communication Tower Working Group. The purpose of the group, which is composed of government, industry, and academic groups, is to study and determine tower construction approaches that prevent bird strikes.

There are several independent migratory bird and habitat protection groups and programs that focus on the preservation of migratory birds and their habitats. Most of the programs work together and usually involve state and Federal agencies with similar research and protection goals. The following text provides a summary of the primary programs and their goals:

Partners in Flight (PIF) is an international coalition of volunteer government, academic, conservation, and private industry agencies dedicated to preserving avian species. The group primarily focuses on maintaining populations of common bird species. The Audubon Society, Nature Conservancy, and USFWS are members of the coalition. The group developed Bird Conservation Plans for each of the physiographic regions of the United States. Each Bird Conservation Plan is part of the overall Landbird Conservation Strategy developed by PIF (URS 2004).

The Audubon Society operates the Important Bird Areas Program, which evaluates and categorizes geographic locations based on their importance for supporting significant bird populations during breeding, wintering, or migration seasons. The Audubon Society also maintains the PIF Watchlist, which monitors common avian species to determine population fluxes and management needs (URS 2004).

The American Bird Conservancy is dedicated to the conservation of birds and their habitats and conducts studies relating to birds, including avian deaths at towers. The American Bird Conservancy is a partner in PIF and the Communication Tower Working Group (URS 2004).

EO 13186, *Responsibility of Federal Agencies to Protect Migratory Birds*, requires each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations to develop and implement a Memorandum of Understanding (MOU) with the USFWS to promote the conservation of migratory bird populations.

3.6.2 Existing Conditions

Vegetation. Vegetation and associated habitats are not described in detail because of the broad geographic scope of the project and because specific site locations have not been determined. Site-specific characterization of vegetation and associated habitats will be addressed in follow-on NEPA documentation, as necessary, during the siting of NAIS shore-based RF equipment as the USCG determines where such equipment would be located.

Vegetation potentially affected by the NAIS project would vary by location. A variety of plant communities are associated with coastal, riverine, and aquatic habitats. There are several habitat characteristics and associated plant communities that are unique to coastal areas, some of which include sand dune and interdunal habitats, rocky intertidal habitats, coastal bluffs, and tidal and nontidal wetlands including mangrove habitats. Examples of vegetative communities and habitats associated with riverine systems include riparian forests, floodplain habitats including bottomland hardwood forests, riverine and palustrine wetlands, and scrub-shrub habitats. Submerged aquatic vegetation might be found in both marine and riverine habitats and emergent wetland vegetation can be found in both marine and freshwater wetland habitats.

Plant communities found in coastal environments and in association with riverine systems are important for wildlife habitat and for stabilizing shorelines and other coastal land forms frequently subjected to erosion. These plant communities are also important in maintaining the water quality of coastal and inland waters.

Wildlife. As with vegetation, it is not possible to describe in detail the species of wildlife or variability in wildlife habitat that might affect the occurrence, type, and abundance of species that could occur in the vicinity of an existing or proposed RF tower. The potential for an area to provide and be used as wildlife habitat is based on several factors including topography, vegetative cover and type, water availability, aerial extent, connectedness, and interferences attributable to human activity. Site-specific characterization of wildlife habitat and associated species will be addressed in follow-on NEPA documentation, if necessary, during the siting of NAIS shore-based RF equipment when the USCG determines where such equipment would be located.

Migratory Birds. There are 836 species of migratory birds that are identified and protected through the MBTA, as amended, or various other laws and acts implemented by the USFWS. Most migratory birds that occur in the United States fly south each fall from rather well-defined breeding grounds to their wintering grounds. Many species winter in habitats throughout the southeast, or farther south in Mexico, Central and South America, and the Caribbean. In the spring they return north to their breeding grounds, where young are produced and the cycle repeats (USFWS 2005).

Fifty-nine of the 836 protected migratory bird species are game birds. These include ducks, geese, swan, various pigeons, woodcock, rails, snipes, gallinules, and some sea birds. There are 777 species (93 percent) considered nongame birds. The nongame birds are represented by groups including marsh and wading birds (6 percent), birds of prey such as hawks, owls, and eagles (9 percent); shorebirds (10 percent); sea birds (16 percent); and perching birds (59 percent). Perching birds include song birds and neotropical migratory birds. Neotropical migratory birds include warblers, vireos, flycatchers,

hummingbirds, swallows, and other birds that migrate to wintering grounds south of the United States, in Mexico, Central and South America, and in the Caribbean (USFWS 2005).

In general, bird migration in the United States is in a north and south direction and is concentrated along major topographic features such as mountain ridges, coastlines, and major rivers. While each species of bird might have their own route, many birds use the same general routes. **Figure 3-1** shows the general locations of major migratory bird flyways in continental North America. These migration routes are grouped into four major flyways that are generally recognized in North America: the Atlantic, the Mississippi, the Central, and the Pacific. Birds typically move along these routes between their breeding grounds in Canada and the northern United States, and their wintering grounds in Central and South America.

The Atlantic coast is a regular avenue of travel for about 50 species of landbirds that breed in New England, then follow the coast southward to Florida and travel from there by island and mainland to South America. From Florida the route passes through the Bahamas, Cuba, Hispaniola, Puerto Rico, and the Lesser Antilles before reaching the South American coast. The route is in sight of land along its entire length. About 25 species of birds go beyond Cuba to Puerto Rico along this route. Only six species are known to travel to South America by way of the Lesser Antilles. Many thousands of American coots and American wigeons, northern pintails, blue-winged teals, other waterfowl, and shorebirds regularly spend the winter season in the coastal wetlands, inland lakes, and ponds of Cuba, Hispaniola, and Puerto Rico (Lincoln et al. 1998).

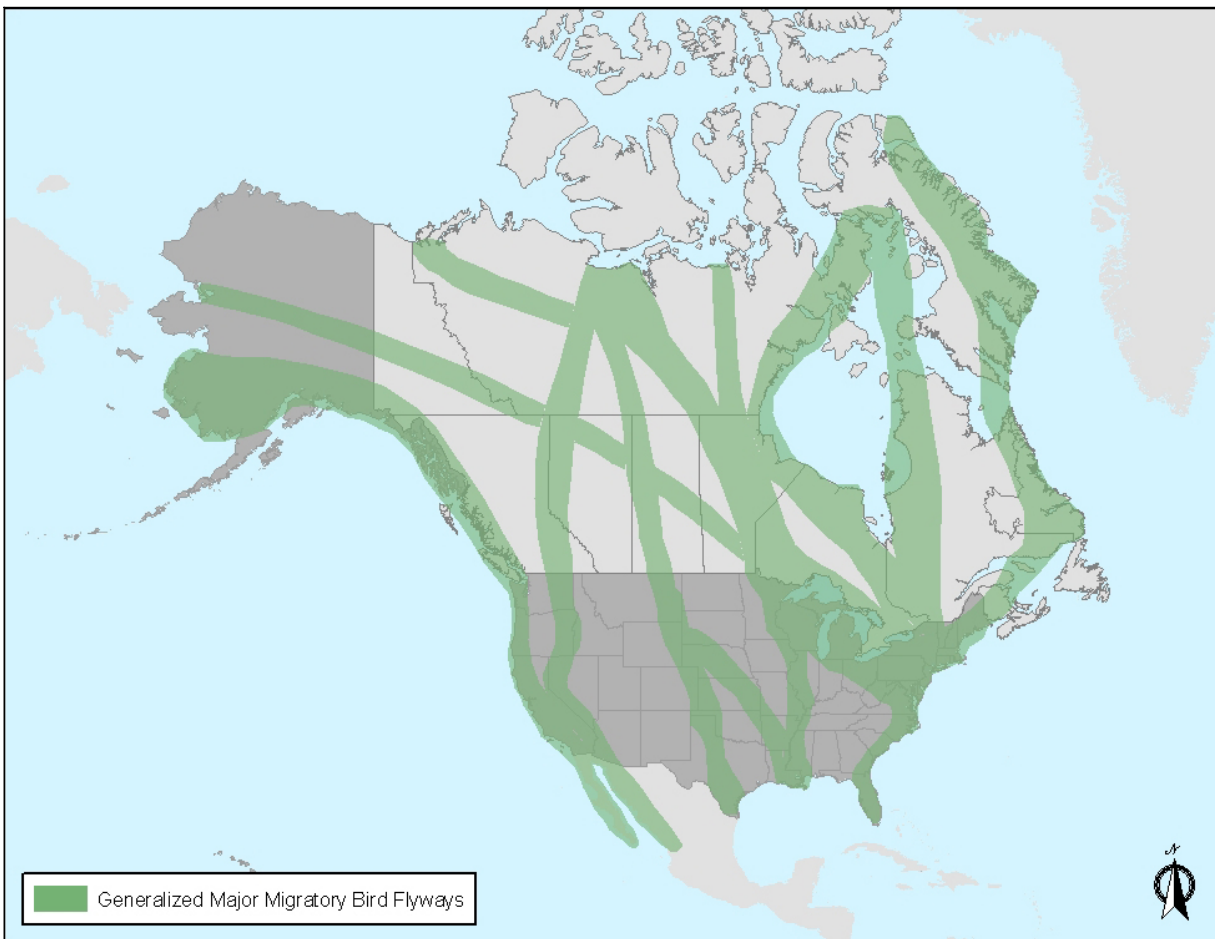


Figure 3-1. General Location of Migratory Bird Flyways in Continental North America

A second, more used line of travel for Atlantic coast migratory birds follows a direct route from Florida to South America. The route which is used almost entirely by landbirds, crosses over only two intermediate land masses between Florida and South America. Tens of thousands of birds of about 60 species cross the 150 miles from Florida to Cuba where many remain for the winter months. The others negotiate the 90 miles between Cuba and Jamaica. The route crosses more than 500 miles of open water from Jamaica to the coast of South America. In the fall, many of the birds breeding east of the Appalachian Mountains travel parallel to the Atlantic coast in a more or less southwesterly direction and then follow the same general direction from northwestern Florida across the Gulf of Mexico to the coastal regions of eastern Mexico (Lincoln et al. 1998).

The Atlantic coast wintering area receives waterfowl from three or four interior migration paths, one of which is of primary importance because it includes large flocks of canvasbacks, redheads, greater and lesser scaup, Canada geese, and many American black ducks that winter in the waters and wetlands in the coastal region south of Delaware Bay. The canvasbacks, redheads, and scaup come from breeding grounds on the great northern plains of central Canada. They follow the general southeasterly trend of the Great Lakes, then cross Pennsylvania over the mountains, and reach the Atlantic coast in the vicinity of the Delaware and Chesapeake Bays. American black ducks, mallards, and blue-winged teals gather in southern Ontario during the fall then leave these feeding grounds and proceed southwest. Many of the birds continue to follow a route down the Ohio Valley, but others swing abruptly to the southeast in vicinity of the St. Clair Flats between Michigan and Ontario, and cross the Appalachian Mountains before reaching the Atlantic coast south of New Jersey (Lincoln et al. 1998).

The Mississippi migration route extends from the Mackenzie Valley past the Great Lakes and down the Mississippi Valley. It is the longest migration route in the Western Hemisphere. Its northern terminus is on the arctic coast in the regions of Kotzebue Sound, Alaska, and the mouth of the Mackenzie River. The southern end of the route is in Argentina. The route is followed by vast numbers of ducks, geese, shorebirds, blackbirds, sparrows, warblers, and thrushes. Many of the species that follow the route spread out to the east and west towards their wintering areas after arriving at the Gulf coast. Others fly across the Gulf of Mexico and straight for Central and South America. This part of the flyway is characterized by a broad route extending from northwestern Florida to eastern Texas and southward across the Gulf of Mexico to Yucatan and the Isthmus of Tehuantepec. During the height of migration some of the islands off the coast of Louisiana are swarmed by large numbers of migrating birds (Lincoln et al. 1998)

The Central route, also referred to as the Great Plains-Rocky Mountain Route, also has its origin in the Mackenzie River Delta and Alaska. The route includes all of the region between the valley of the Mississippi River and the Rocky Mountains. Sandhill cranes, white-fronted geese, and smaller races of the Canada goose follow this route through the Great Plains from breeding areas in Alaska and western Canada. The route is used primarily by the northern pintails and American wigeons that fly southward through eastern Alberta to western Montana (Lincoln et al. 1998).

The Pacific coast route is not as long or heavily traveled as some of the other routes, because many species of birds that breed along the coast from the northwestern states to southeastern Alaska either do not migrate, or make relatively short journeys. The origin of the route is primarily in western Alaska, around the Yukon River Delta. Some of the scoters and other sea ducks of the north Pacific region and the cackling Canada goose of the Yukon River Delta use the coastal sea route for all or most of their southward flight. Large numbers of arctic-breeding shorebirds also use this route (Lincoln et al. 1998).

The Atlantic oceanic route, Pacific oceanic route, and the Arctic route are also followed by migratory birds that might pass through, or in close proximity to, the United States and its territories. The Atlantic route is primarily oceanic and passes directly over the Atlantic Ocean from Labrador and Nova Scotia to the Lesser Antilles, and then to the mainland of South America. Most of the adult American golden

plovers and some other shorebirds use this as their fall route. Strong fall movements of warblers travel from the New England coast out over the Atlantic to points south along the route. Some of the shorebirds that breed on the arctic tundra of the District of Mackenzie (Northwest Territories) and Alaska fly southeastward across Canada to the Atlantic coast and finally follow this oceanic route to the mainland of South America. Although most birds make their migratory flights either by day or by night, birds using this route fly both day and night (Lincoln et al. 1998).

The Pacific oceanic route is used by Pacific golden plovers, bristle-thighed curlews, ruddy turnstones, wandering tattlers, and other shorebirds. The ruddy turnstones, migrating from the islands in the Bering Sea, have an elliptical route that takes them southward through the islands of the central Pacific and northward along the Asiatic coast. In addition, many seabirds that breed in the far northern coasts as well as on southern coasts and islands migrate across the Pacific well away from land. Some of the birds probably migrate south through Asia to winter quarters in Japan, China, India, Australia, New Zealand, and the islands of Oceania. Others go south across the Pacific to Hawaii and other islands in the central and southern Pacific (Lincoln et al. 1998).

Many of the Arctic nesting birds travel only a short distance south in winter. These species include the red-legged kittiwake, Ross' gull, emperor goose, and eiders. The routes followed by these birds are chiefly parallel to the coast and can be considered tributary either to the Atlantic or Pacific coast routes. The best defined arctic route in North America follows the coast of Alaska (Lincoln et al. 1998).

Migratory birds, and birds in general, are discussed in more detail due to the potential for adverse effects on avian species associated with tower structures. Birds are potentially directly impacted by loss due to collision with towers or other birds concentrating in the vicinity of lighted towers, or indirectly due to disruption of flight associated with tower lighting. Thrushes, vireos, and warblers seem to be the most vulnerable to collisions with towers. These songbirds breed in North America in the spring and summer and migrate to the southern United States, the Caribbean, or Latin America during the fall and winter. They generally migrate at night and appear to be most susceptible to collisions with lit towers on foggy, misty, low-cloud-ceiling nights during their migrations (Manville 2000).

Many studies have been conducted to try to determine why avian impacts occur at towers, the overall impact of avian collisions, and how to best mitigate the impacts (URS 2004). Woodlot Alternatives, Inc. (Woodlot 2003) conducted a review of available journal studies addressing avian mortality at communication towers in response to a Notice of Inquiry issued by the FCC. Based on review of the studies, it was determined that most tower collisions involve neotropical migratory birds and occur during spring and fall when the birds are migrating. Most strikes occur during the fall migrations. Weather might be the most important factor in more concentrated collisions with the highest rates occurring on cloudy and foggy nights with a low cloud ceiling (Woodlot 2003). The higher rate of collision might be due to the effects of lighting on a bird's ability to accurately navigate. When low cloud ceiling or foggy conditions occur, tower lights refract off water particles in the air, creating an illuminated area around the tower. Migrating flocks of birds can lose stellar cues for nocturnal migration in these conditions. The birds that enter the lighted area around the tower are reluctant to leave. Mortality occurs when the birds hit the tower structure, guy wires, the ground, or each other, as more and more passing birds become trapped in the lighted space (URS 2004). Navigation appears to be generally uncomplicated on clear nights, but some collisions with towers still occur.

Tower height plays a role in avian mortality, but the exact height threshold for increased effects has not been determined. Studies indicate that towers shorter than 400 to 500 feet do not pose as much of a risk to migrating birds as the taller towers (Woodlot 2003). Most studies have monitored taller towers, so the potential level of impacts associated with shorter towers is not well-documented (URS 2004). Towers less than 200 feet in height would not require lighting unless they were within the takeoff or landing arcs

associated with airports. In addition, the shorter towers would not typically require guy wires for support. Elimination of the requirements for lighting or guy wires would be expected to reduce potential impacts on avian species associated with these tower features.

Threatened and Endangered Species. The ESA mandates that all Federal agencies consider the potential effects of their actions on listed threatened or endangered species or designated critical habitats. The USFWS currently lists 937 vertebrates, 192 invertebrates, 715 flowering plants, and 33 nonflowering plants as threatened or endangered in the United States and its territories. Species listed for coastal states range from 13 species listed in Alaska to 317 species listed in Hawaii. There are 75 federally listed species in Puerto Rico, and 62 associated with the remaining territories and outlying islands. In addition, the NMFS lists 46 species, or populations of species, within their jurisdiction as threatened or endangered. The USFWS has designated critical habitat for 475 of the listed species (USFWS 2006a).

Individual states and territories also provide protection to species considered to be threatened or endangered within their jurisdictions. State and territorially listed species typically include the federally listed species known to occur in the region and additional species considered to be sensitive within the jurisdiction.

Maritime, coastal, estuarine, and riverine ecosystems along with associated riparian and wetland systems have the potential to provide habitat, and in some cases critical habitat, for both Federal- and state-listed threatened or endangered species. Impacts on Federal- or state-listed species could occur in association with loss of habitat, or critical habitat associated with the placement of a new shore-based RF tower or access roads and utility lines, collision during construction, and, in the case of listed birds, collision with towers.

Wetlands. Determination of the presence of wetlands is based on procedures prescribed in the USACE Wetlands Delineation Manual (USACE 1987). Wetlands, as defined in the Federal manual are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions (USACE 1987). Three criteria are used to determine the occurrence of jurisdictional wetlands: (1) hydric soils, (2) wetland hydrology, and (3) hydrophytic vegetation.

The Cowardin wetland classification system, developed for the USFWS (Cowardin et al. 1979), uses a hierarchical approach to characterize wetlands. Wetland habitats are characterized based on Systems, Subsystems, Classes, and Subclasses. A wetland System is characterized by a complex of wetlands and deepwater habitats that share the influence of similar hydrologic, geomorphic, chemical, or biological factors (Cowardin et al. 1979). There are five Systems in the Cowardin classification scheme: Marine, Estuarine, Riverine, Lacustrine (lake), and Palustrine. The Marine and Estuarine Systems each have two Subsystems, Subtidal and Intertidal; the Riverine System has four Subsystems, Tidal, Lower Perennial, Upper Perennial, and Intermittent; the Lacustrine has two Subsystems, Littoral and Limnetic; and the Palustrine has no Subsystems. The wetland classes are based on substrate material and flooding regime, or on vegetative life form. For example the palustrine system includes all nontidal wetlands dominated by trees, shrubs, persistent emergent plants, or emergent mosses or lichens, and all wetlands that occur in tidal areas where the salinity is below 5 percent. The Subclasses further characterize the habitats based on the type and duration of flooding, water chemistry, soil or substrate characteristics, and other specific modifiers where appropriate.

It is not possible to describe in detail the type and extent of wetland habitats that could occur in the vicinity of an existing or proposed RF tower. Site-specific characterization of proposed project sites will be necessary to determine the potential for the occurrence of wetlands in proximity to a proposed or existing tower site. Site-specific characterization to determine the presence of wetlands will be addressed

in follow-on NEPA documentation, as necessary, during the siting of NAIS shore-based RF equipment when the USCG determines where such equipment would be located.

3.7 Cultural Resources

3.7.1 Definition of the Resource

Cultural resources can include archaeological sites, structures, districts, or any other physical evidence of human activity considered important to a culture, a subculture, or a community for scientific, traditional, religious, or any other reason. Depending on their condition and historic use, such resources can provide insight into living conditions of previous existing civilizations, or might retain cultural and religious significance to modern groups. Typically, cultural resources are subdivided into archaeological resources (prehistoric or historic sites where human activity has left physical evidence of that activity but no above-ground structures remain standing); architectural resources (buildings or other structures or groups of structures that are of historic or aesthetic significance); or resources of traditional, cultural, or religious significance to an American Indian tribe, or Native Hawaiian or Native Alaskan organization. Finally, traditional cultural properties (TCPs), as defined in National Register Bulletin 38, can include archaeological resources, structures, neighborhoods, prominent topographic features, habitats, or areas where particular plants, animals, or minerals exist that any cultural group considers to be essential for the preservation of traditional cultural practices.

NEPA instructs Federal agencies to assess the probable impacts of their actions on the “human environment” – defined as “the natural and physical environment and the relationship of people with that environment” (40 CFR 1508.1). Procedurally, Federal agencies conducting an analysis of impacts under NEPA must examine whether their actions are likely to have physical, visual, or other effects on

- Districts, sites, buildings, structures, and objects that are included in the National Register of Historic Places (NRHP), or a state or local register of historic places
- A building or structure that is more than 50 years old
- A neighborhood or commercial area that might be important in the history or cultural of the community
- A neighborhood, industrial, or rural area that might be eligible for listing in the NRHP as a historic district
- A known or probable cemetery, through physical alteration or by altering its visual, social, or other characteristics
- A rural landscape that might have cultural or aesthetic value
- A well-established rural community or rural land use
- A place of traditional cultural value in the eyes of a Native group (American Indian tribe or Native Hawaiian or Alaskan organization) or other community
- A known archaeological site, or land identified by archeologists as having high potential to contain archaeological resources
- An area identified by archeologists or through consultation with a Native group as having high potential to contain Native cultural items.

If a proposed action would have a significant adverse effect, the Federal agency is responsible for consulting with the State Historic Preservation Office (SHPO) or Tribal Historic Preservation Office (THPO), and other consulting parties, including Indian tribes and Native Hawaiian organizations, to

develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on historic properties.

The National Historic Preservation Act of 1966, as amended (P.L. 102-575, 16 U.S.C. 470) (NHPA) directs Federal agencies to take a leadership role in the nation's preservation efforts, and to make informed decisions about the administration of federally owned or controlled historic properties. The NHPA created the Advisory Council on Historic Preservation (ACHP), which advises the President and Congress and reviews Federal and federally assisted actions affecting historic properties; provided for each state governor to designate a SHPO to participate in the Federal program; and established the NRHP to recognize historic properties important to the nation, the states, and local communities.

Section 110 lays out affirmative agency responsibilities with respect to historic properties under the agency's stewardship. These responsibilities must be balanced with the agency's mission. They include:

- Establishing a historic preservation program to include the identification, evaluation, and nomination or determination of eligibility of historic properties to the NRHP in consultation with the ACHP, SHPO, local governments, Native American tribes, and the interested public as appropriate.
- Prior to acquiring, constructing, or leasing buildings, agencies must use available historic properties to the maximum extent feasible.
- The agency must document historic properties that will be altered or destroyed as a result of agency actions; such actions must be reviewed in accordance with NHPA Section 106.
- In transferring historic properties, the agency must ensure that the significant historic values of the property are appropriately preserved.
- The head of the agency must document decisions to proceed with agency undertakings that adversely affect historic properties when the agency has been unable to reach agreement through the execution of a Memorandum of Agreement (MOA) or Programmatic Agreement (PA) with the ACHP and SHPO and desires to terminate such consultation.

The 1992 NHPA amendments added significant new provisions concerning Native American tribal participation in historic preservation. Specifically, Sec. 110(a)(2)(D) directs federal agencies' programs to ensure "that the agency's preservation-related activities are carried out in consultation with other Federal, State, and local agencies, Indian tribes, [and others] carrying out historic preservation planning activities."

Section 106 of the NHPA (16 U.S.C. 470f), as codified under 36 CFR Part 800, requires Federal agencies to consider the effects of their undertakings on historic properties prior to implementation. The regulations state that an undertaking does not have to be reviewed unless it is the "type of activity that has the potential to cause effects on historic properties" (36 CFR 800.3[a]). The NHPA defines "historic property" as any prehistoric or historic district, site, building, or structure included or eligible for inclusion in, the NRHP, including related artifacts, records, and material remains. Traditional, religious, and cultural properties holding significance for American Indian tribes, Alaska Native, and Native Hawaiian organizations may also be considered NRHP eligible.

In general, undertakings that have the potential to affect historic properties are those that involve modifications to land or buildings/structures, including everything from construction, grading, excavation, maintenance, rehabilitation, and renovation, to the sale or lease of a historic property.

The Section 106 process is designed to identify possible conflicts between historic preservation objectives and the proposed activity, and to resolve those conflicts in the public interest through consultation. The 1999–2000 revisions to the Section 106 regulations (36 CFR Part 800) discuss in detail the process that

agencies should follow to initiate the Section 106 review process. Specifically, once the Federal agency has determined that their undertaking is the type of action that has the potential to affect historic properties, the agency should

- Coordinate the Section 106 review with other review processes such as the NEPA review process
- Identify with which SHPO, THPO, federally recognized tribes or Native Hawaiian or Native Alaskan organizations they must consult (consultation with federally recognized tribes is not limited to projects undertaken on reservation lands, but includes projects that will occur on lands to which the tribe(s)/organizations have ancestral claims or treaty rights)
- Plan to involve the public
- Identify other consulting parties.

At the heart of the Section 106 review process is the assessment of effects on historic properties and avoidance or minimization of effects that are adverse. Although it is possible to make general statements regarding potential effects associated with the various alternatives discussed in this PEIS, the USCG will need to consult with the relevant SHPO and representatives of the appropriate federally recognized American Indian tribes or Native Hawaiian or Native Alaskan organizations with respect to the siting of specific shore-based locations. Depending upon the complexity of the issues involved, a Section 106 review can require a minimum of 30 days to get concurrence on a “no effect” determination from the SHPO to 6 to 12 months to negotiate a Memorandum of Agreement (MOA) and complete mitigation measures.

The Native American Graves Protection and Repatriation Act (NAGPRA) places affirmative duties on Federal agencies to protect, inventory, and rightfully dispose of Native American cultural items, both in existing collections and those that might be discovered in the future. The purpose of NAGPRA is to ensure the protection and rightful disposition of Native American cultural items found on Federal or Native American lands in the Federal government’s possession or control. Section 2 of NAGPRA and 43 CFR Part 10, the implementing regulations, provide a detailed definition of cultural items regulated under the act. For the USCG, responsibilities under NAGPRA include to identify whether a facility has actual possession or control of existing collections of Native American cultural items, to determine what and where those items are, to determine if a planned activity will result in the excavation of cultural items, to notify tribal groups of proposed activities before issuing approvals or permits, and to develop procedures for the inadvertent discovery of cultural items. For the purposes of NAGPRA, “Native American” includes American Indian tribes and Native Hawaiian and Native Alaskan organizations. Repatriation of items to lineal Native American descendants (or to the tribe or organization with the closest cultural affiliation, if descendants cannot be determined) is regulated by 43 CFR 10.8 and 10.10.

The purpose of consultation under NAGPRA is to reach agreement as to the treatment and disposition of the specific kinds of “cultural items” defined in the act: Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony. The USCG is required to consult with the appropriate American Indian tribe, Native Hawaiian or Native Alaskan organization, or lineal descendant under four circumstances:

1. A summary of USCG holdings, dating from before the act, indicates that unassociated funerary objects, sacred objects, or objects of cultural patrimony are present.
2. An inventory of USCG holdings, dating from before the act, finds human remains or associated funerary objects.

3. The USCG is processing an application for a permit that would allow the excavation and removal of human remains and associated funerary objects from Federal lands.
4. Items covered by NAGPRA have been disturbed unintentionally.

Only the last two of these circumstances are relevant for this PEIS. Under NAGPRA, the USCG must consult with appropriate American Indian tribes, Native Hawaiian or Native Alaskan organizations, or individuals prior to authorizing the intentional removal of Native human remains and funerary objects found with them. The USCG must prepare documentation to show that consultation pursuant to Sec. 3(c) of NAGPRA has occurred; this documentation must be included and maintained in the decision record. A cultural resource use permit or equivalent documentation is generally required before human remains and artifacts covered by the act may be excavated or removed from Federal lands. Permit-related notification and consultation, if requested, are required by Section 4 of the Archaeological Resources Protection Act (ARPA) and 43 CFR 7.7. Consultation for NAGPRA purposes must occur before the excavation or removal of human remains and cultural items may be authorized.

Human remains or cultural items subject to NAGPRA discovered as a result of a USCG or USCG-authorized activity, such as the construction of new towers discussed in this PEIS, are to be handled in the manner described in the “inadvertent discovery” procedures found at Section 3 (d) of NAGPRA. Where there is a reasonable likelihood of encountering undetected cultural items during a proposed land use, agreements may be negotiated with tribes or groups before the project is authorized to provide general guidance on treatment of any cultural items that might be exposed. Having these agreements in place could save time and confusion during implementation.

It should be noted; however, that NAGPRA only applies to Federal lands. In the event that human remains or cultural items related to burials are inadvertently discovered during construction activities or, if there is a reasonable expectation that human remains or burial-associated cultural items may be present, the USCG should consult with potentially affiliated federally recognized Native American tribes in advance of the project, and should review state laws and regulations regarding unmarked burials or permits required for investigations in areas where there is potential for discovery of human remains, burial-associated cultural items, or archeological materials. Many states have such laws. Similarly, in the event that an archaeological investigation is warranted in advance of construction, the USCG should review the requirements of the Archaeological Resource Protection Act (ARPA) to obtain the appropriate permits for projects on Federal land, and the requirements of state regulations for permits to conduct investigations on state lands. In all instances, the archaeologist conducting the investigation should complete a review of previous investigations conducted in the vicinity of the proposed project area to ensure that sensitivity assessments or predictive models are sufficiently informed and detailed. All archaeological work should be conducted by an individual(s) meeting the National Park Service Professional Qualification Standards (48 Federal Register [FR] 44716, September 1983).

3.7.2 Existing Conditions

Archaeological Resources. Archaeological resources in coastal and riverine settings can relate to pre-contact indigenous (American Indian, Native Hawaiian, or Native Alaskan) activity; European exploration and settlement; or post-contact settlement, warfare, and land use. Resource types can include habitation sites (e.g., ephemeral camps, base camps, villages, latte sets, palisaded villages, farmsteads), procurement sites (e.g., fish weirs and ponds, shellfish middens, wetland agricultural and aquaculture fields, bait cups, logging sites, and trading posts), manufacturing sites (e.g., kilns, mills, quarries), transportation sites (e.g., trail systems, landings, anchor holes), ceremonial sites (e.g., burial sites, shrines, petroglyphs, mounds, cemeteries), ruins of coastal and inland forts from the period of early European exploration and settlement; and battlefield sites and features associated with the Revolutionary and Civil

Wars. Archaeological resources can be present in a variety of habitats, including low and high dunes, sandy flats, beaches, intertidal zones, marshes/estuaries, coastal cliffs, floodplains, terraces, islands or bars within rivers, bars or spits along the coast, the shores of coastal islands, and along rocky and clay shorelines. Resources can also include deeply buried archaeological sites on river floodplains and lower terraces, or within dunes or estuaries near the coast; these sites have been progressively buried as wind and water circulation patterns change, river patterns change, or floods move large quantities of sediment to downstream locations. There could be no indications of these sites on the surface with discovery occurring during construction.

Construction of new towers in coastal areas, along inland waterways, or on the floodplains or terraces of major rivers has a high likelihood of impacting archaeological resources, as these areas were attractive locations for settlement throughout history. The archaeological potential of any given Area of Potential Effect (APE) will need to be determined through research and, if warranted, fieldwork. Research would primarily consist of reviewing information regarding previously recorded sites within or in the vicinity of the project area, reviewing the results of previous archaeological investigations conducted within or in the vicinity of the project area, including any archaeological sensitivity assessments or predictive models that may apply to the project area, and reviewing geological, soils, and geomorphological data for the APE to determine the potential for deeply buried site deposits. Fieldwork could include a walkover survey to document previous disturbance, pedestrian survey to identify surface artifact scatters, hand excavation of test pits, or mechanical excavation of trenches to identify deeply buried site deposits. As noted above, the USCG may need to obtain an ARPA permit for investigations conducted on non-USCG Federal lands, or state permits for investigations on non-Federal lands.

Historic Buildings and Structures. Historic buildings and structures on the coast and inland waterways could include private residences, hotels, commercial buildings, canneries, shipyards, coastal fortifications, piers, ports, wharves, power plants, seawalls, jetties, bridges, or causeways at the confluences of major rivers or between islands; locks and dams, lighthouses, and other navigation aids, some of which are protected by bulwarks or other barriers; historic districts (local, regional, or national); and National Historic Landmarks. Many of these types of resources are eligible for, or listed on, the NRHP and state registers of historic places. These resources are protected by both Federal and state laws.

Traditional Cultural Properties. The habitation patterns of Native peoples (American Indian tribes and Native Hawaiian and Native Alaskan organizations) have long focused on coastal areas and inland waterways. Native people used, and in some instances still use, the resources found there for a variety of traditional and sacred activities. Native peoples have relied on the inland waterways as transportation routes; water sources; sources of plants and animals for food, medicines, and raw materials (e.g., bird feathers, shells, turtle carapaces, reeds and water plants for basket weaving, clay for pottery); sources of cobbles used for tool making; and as cornerstones of oral traditions about their history. Most Native peoples are reluctant to identify such locations to outsiders, but resources of traditional, cultural, or religious significance to Native peoples are common throughout coastal areas and inland waterways and are likely to be encountered. The number of identified areas already is substantial—Hawaii alone has 20,000 to 30,000 known sites—and it would be a considerable effort to match proposed NAIS sites to known lists of such sites (USCG 1999).

TCPs can also include places or resources of traditional significance to other cultural groups, for example a town green area used for traditional gatherings by the local residents, or a neighborhood community center used by a specific ethnic group.

Construction of new towers in coastal areas, along inland waterways, or on the floodplains or terraces of major rivers has a high likelihood of impacting properties of traditional, cultural, or religious significance, as these areas were attractive locations for traditional and ceremonial use throughout history. The

presence/absence of properties of traditional, cultural, or religious significance will need to be determined through consultation with federally recognized American Indian tribes, or Native Hawaiian or Native Alaskan organizations. Such consultation needs to be initiated on a government-to-government basis by the USCG, as early as possible in the planning stage for any specific tower location. In the case of resources important to another ethnic group, the USCG should consult with the appropriate SHPO and local historic commission to determine the presence/absence and significance of any such resources within the project APE.

3.8 Visual Resources

3.8.1 Definition of the Resource

Visual resources are defined as the natural and man-made features that give a particular setting or area its aesthetic qualities. These features define the landscape character of an area and form the overall impression that an observer receives of that area. Evaluating the aesthetic qualities of an area is a subjective process because the value that an observer places on a specific feature varies depending on his/her perspective. For example, an engineer might appreciate the span of a bridge or causeway, while a geologist might appreciate the exposure of a particular sequence of strata in a road cut. In general, a feature observed within a landscape can be considered as “characteristic” (or character-defining) if it is inherent to the composition and function of the landscape. This is particularly true if the landscape or area in question is part of a scenic byway, a state or national scenic river, a state or national park, a state or national recreation area, a state or national landmark, a national seashore, or a cultural landscape. Landscapes do change over time, so the assessment of the environmental impacts of a proposed action on a given landscape or area must be made relative to the “characteristic” features currently comprising the landscape or area.

Visual resources within the coastal and inland waterway environment can include both man-made and natural features. In urban settings, man-made features dominate the landscape; while in rural settings, natural features dominate. Examples of natural visual resources that might occur along coastal areas and inland waterways would include landforms such as beaches, marshes, estuaries, wetlands, coastal cliffs, dunes, islands, water channels, spits, floodplains, terraces, tributary streams, channel islands, bars, cut-off loops in meander systems, deltas, beaver dams and bird nests, and native vegetation on those landforms. Within more urban settings, natural features might include parks and other green spaces, or waterfalls and ponds associated with milling operations. Examples of man-made features within dominantly natural landscapes might include farmsteads (houses and outbuildings), bridges, causeways, jetties, ports, wharves, piers, paths, lighthouses, canals, docks, and historic forts or fortifications (intact or in ruins).

Legal Authorities and Regulatory Programs

In addition to assessment of effects under NEPA, impacts on visual resources such as landscapes would need to be reviewed under Section 106 of the NHPA if the landscape is a cultural or historic landscape, or part of a National Historic Landmark. As noted in National Park Service Preservation Brief 36 “Protecting Cultural Landscapes,” a cultural landscape is defined as “a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.” A historic landscape can include “residential gardens and community parks, scenic highways, rural communities, institutional grounds, cemeteries, battlefields and zoological gardens; and are composed of a number of character-defining features which, individually or collectively contribute to the landscape's physical appearance as they have evolved over time.”

Similarly, visual impacts on battlefields would need to be assessed under the American Battlefield Protection Act of 1996 (P.L. 104-333; 16 U.S.C. 469k); visual impacts on scenic byways would need to be assessed under the National Scenic Byways Program (P.L. 105-178; 23 U.S.C. 162) and appropriate state laws regarding state-designated scenic byways; and visual impacts on scenic rivers would need to be assessed under the WSRA and appropriate state laws regarding state-designated scenic rivers. Impacts on the visual resources within state and national parks, including national seashores and national marine preserves, would need to be assessed in consultation with the National Park Service.

3.8.2 Existing Conditions

Mounting AIS equipment on existing buildings, bridges, or other structures could have an effect on visual resources if no such equipment was previously located on these structures. Addition of new equipment to an array of similar equipment already present within a landscape (collocation) would be unlikely to have an effect on visual resources on its own, but might have a cumulative effect.

It is not possible to describe in detail the entire affected environment of the broad geographic scope for visual resources as assessed in this PEIS. Construction of new towers in coastal areas, along inland waterways, or on the floodplains or terraces of major rivers has a high likelihood of impacting visual resources. Site-specific visual resources will be addressed in follow-on NEPA documentation, as necessary, during the siting of NAIS shore-based RF equipment as the USCG determines where such equipment would be located. Siting of new towers should be coordinated through public comment, and with state and Federal agencies, as appropriate, depending on the nature of the visual resource being impacted (e.g., coordination with National Park Service for national parks, national landmarks, cultural landscapes, national seashores).

3.9 Land Use

3.9.1 Definition of the Resource

The term “land use” refers to real property classifications that indicate either natural conditions or the types of human activity occurring or permitted on a parcel. In many cases, land use descriptions are codified in local zoning laws. There is, however, no nationally recognized convention or uniform terminology for describing land use categories. As a result, the meanings of various land use descriptions, “labels,” and definitions vary among jurisdictions.

The main objectives of land use planning are to ensure orderly growth and compatible uses among adjacent property parcels or areas. Compatibility among land uses fosters the societal interest of obtaining the highest and best uses of real property. Tools supporting land use planning include written master plans/management plans and zoning regulations. The Proposed Action and alternatives are evaluated for their potential to affect the project sites and adjacent land uses. The foremost factor affecting land use for the Proposed Action and alternatives is compliance with applicable land use or zoning regulations. Other relevant factors include matters such as existing land use at project sites, the types of land uses on adjacent properties and their proximity to a proposed action, the duration of a proposed activity, and its permanence as a change in land use.

General Land Use Categories. The following general land use categories have been identified as being potentially impacted through the proposed implementation of the NAIS project: agricultural lands, low-density residential and rural areas, medium- and high-density residential areas, commercial and industrial areas, military installations, and recreational areas. Land use categories of particular concern in this assessment include recreational areas, Coastal Zone Management (CZM) sensitive areas, and coastal

barriers. Due to the potential for impacts associated with tower structures they are assessed as separate subcategories.

Recreation. Recreational resources are both natural and human-made lands designated by Federal, state, and local planning entities to offer visitors and residents diverse opportunities to enjoy leisure activities. Recreational resources are those places or amenities set aside as parklands, beaches, trails (hiking, skiing, bicycling, equestrian), recreation fields, sport or recreational venues, open spaces, aesthetically pleasing landscapes, and a variety of other locales. National, state, and local jurisdictions typically have designated land areas with defined boundaries for recreation. Other less-structured activities—for example, hunting or cross-country skiing—are performed in broad, less-defined locales. A recreational setting might consist of natural or human-made landscapes and can vary in size from a roadside monument to a multimillion-acre wilderness area.

Coastal Zone Management. Coastal zones are areas along U.S. oceans and lakes that are regulated by state or local management plans developed under the authority of the CZMA. The CZMA was enacted in 1972 to encourage coastal states, Great Lake states, and U.S. territories and commonwealths to develop comprehensive programs to manage and balance competing uses of and impacts on coastal resources. Since 1974, with the approval of the first state CZM Program in Washington, 29 coastal states and 5 island territories have developed CZM programs. Together, these programs protect more than 99 percent of the nation's 95,331 miles of oceanic and Great Lakes coastline (NOAA 2006).

The National CZM program is a voluntary partnership between the Federal government and U.S. coastal states and U.S. territories authorized by the CZMA to

- Preserve, protect, develop, and, where possible, restore and enhance the resources of the nation's coastal zone for this and succeeding generations
- Encourage and assist the states to exercise effectively their responsibilities in the coastal zone to achieve wise use of land and water resources there, giving full consideration to ecological, cultural, historic, and aesthetic values, as well as the need for compatible economic development
- Encourage the preparation of special area management plans to provide increased specificity in protecting significant natural resources, reasonable coastal-dependent economic growth, improved protection of life and property in hazardous areas, and improved predictability in governmental decisionmaking
- Encourage the participation, cooperation, and coordination of the public, Federal, state, local, interstate, and regional agencies and governments affecting the coastal zone.

On January 5, 2006, NOAA published a final rule in the *Federal Register* revising certain sections of the CZMA Federal consistency regulations. Federal consistency is the CZMA requirement that Federal agency activities that have reasonably foreseeable effects on any land or water use or natural resource of the coastal zone (also referred to as coastal uses or resources and coastal effects) must be consistent to the maximum extent practicable with the enforceable policies of a coastal state's or territory's federally approved CZM program. Federal agency activities are activities and development projects performed by a Federal agency, or a contractor for the benefit of a Federal agency (NOAA 2006). In addition, USCG COMDTINST M16475.1D specifies that all USCG activities within or outside the coastal zone that affect any land or water use or natural resource within the coastal zone shall be carried out in a manner that is consistent to the maximum extent practicable with the enforceable policies of approved state and U.S. territory CZM programs.

Coastal Barriers. Coastal barriers are unique land forms that provide protection for diverse aquatic habitats and serve as the mainland's first line of defense against the impacts of severe coastal storms and

erosion. Located at the interface of land and sea, the dominant physical factors responsible for shaping coastal land forms are tidal range, wave energy, and sediment supply from rivers and older, pre-existing coastal sand bodies. Relative changes in local sea level also profoundly affect coastal barrier diversity (USFWS 2006b).

The Coastal Barrier Resources Act (CBRA) of 1982, (P.L. 97-348 96 Stat. 1653; 16 U.S.C. 3501 et seq.), established the John H. Chafee Coastal Barrier Resources System (CBRS), comprising undeveloped coastal barriers along the Atlantic, Gulf, and Great Lakes coasts. The law encourages the conservation of hurricane-prone, biologically rich coastal barriers by restricting Federal expenditures that encourage development, such as Federal flood insurance through the National Flood Insurance Program. Approximately 3.1 million acres of land and associated aquatic habitat are part of the CBRS (USFWS 2006b).

The USFWS maintains the repository for CBRA maps enacted by Congress that depict the CBRS, and advises Federal agencies, landowners, and Congress whether properties are a part of the CBRS and what kind of Federal expenditures are allowed in the CBRS. Federal monies can be spent within system units for certain exempted activities, after consultation with USFWS. Examples of such activities include emergency assistance, military activities essential to national security, exploration and extraction of energy resources, and maintenance of existing Federal navigational channels (USFWS 2006b).

3.9.2 Existing Conditions

General Land Use Categories. Cropland, grassland pasture, and range account for most of the land used for agricultural purposes, but land used for agricultural purposes also includes forest land used for grazing and land in farmsteads, farm roads, and farm lanes. Prime farmlands are discussed in **Section 3.4**.

Residential areas are defined by development density. Low-density residential areas would include rural residential areas where single family homes exist on larger lots. A medium- to high-density residential area would be defined by a medium to high ratio of dwellings per land area. A medium-density residential area might include a suburban neighborhood consisting predominantly of single-family homes on average-sized lots. High-density residential areas include areas with a large number of high density dwellings such as condos, apartment complexes, and single-family homes on small lots. Residential areas are normally highly sensitive to commercial and industrial uses that could be incompatible with residential uses.

Commercially zoned areas typically accommodate large lot developments for retail, businesses, industrial, or other mixed uses. Uses in commercial areas can be compatible with either residential or industrial uses, depending on the level of density and type of development. Similar to commercial areas, industrial areas accommodate large lots for businesses and can have light industrial uses which could include distribution to manufacturing. Typically, industrial areas are not compatible with residential uses.

Military installations in the United States include active-duty and reserve Army, Air Force, Navy, USCG, and Marine Corps installations.

Recreation. The types of recreation resources that could potentially be impacted by the Proposed Action would vary depending upon the specific site locations chosen for shore-based RF sites. Recreational resources include designated areas such as national and state parks, national and state recreation areas, national seashores, national monuments, national historic sites, state beaches, and state fishing areas. Other recreational resources potentially affected by construction and operation of the proposed RF sites are regional, county, and municipal parks; reservoirs and beaches; and recreation areas used by the local populace. Potential concerns in these areas include increases in traffic and noise, alteration of scenic

quality, increased access from the installation of new roadways, and conversion of land uses to nonrecreational uses, both individually and cumulatively.

Coastal Zone Management. A total of 34 coastal states and U.S. territories have developed CZM programs. Together, these programs protect more than 99 percent of the nation's 95,331 miles of oceanic and Great Lakes coastline (NOAA 2006). The likelihood is high that siting of NAIS shore-based RF equipment would be within designated CZM areas. In addition, although Federal lands are not considered part of the coastal zone, the consistency requirement applies to activities on Federal lands that have the potential to impact coastal zone resources outside those lands. The USCG will need to determine if each NAIS shore-based RF equipment site is within the jurisdiction of a state or U.S. territory CZM program, if necessary, as the USCG determines where such equipment would be located. Proper coordination with the applicable state or U.S. territory CZM program will occur at that time.

Coastal Barriers. Coastal barriers occur on all the coastlines of the United States. One of the longest and best-defined chains of coastal barriers in the world occurs along the United States shoreline bordering the Atlantic Ocean and the Gulf of Mexico. This chain contains more than 400 barriers and totals about 2,700 miles of shoreline. The coastal barriers from Maine to Texas show a high degree of regional diversity, controlled by differences in climate and in the physical processes shaping barrier shorelines. Long, continuous barriers with small ebb-tidal deltas are produced by longshore currents along wave-dominated coasts. These barriers are typified by the coastal barrier islands along the south Texas coast which are long, generally narrow, and cut by widely separated tidal inlets with large sand accumulations in the back-barrier bays, and small or nonexistent seaward shoals. Similar barrier islands are also found in parts of Louisiana, the Florida panhandle, southeast Florida, North Carolina's Outer Banks, the south shore of Long Island, and the Cape Cod segment of the Massachusetts coast. Tide-dominated coastlines support large ebb-tidal deltas. The Georgia coastal barrier islands typify a tide-dominated coastline; they are relatively short and stubby and are separated by stable tidal inlets with an average spacing of 9 miles. Tide-dominated barriers also occur in northeastern Florida, most of the South and North Carolina coasts, along the Delmarva Peninsula, Massachusetts, and in some areas of Louisiana and Texas (USFWS 2006b).

The likelihood exists that siting of NAIS shore-based RF equipment would be within the CBRS. Although CBRA prohibits most Federal spending in designated CBRS units, the construction, operation, maintenance, and rehabilitation of USCG facilities is exempt from this provision under 16 U.S.C. 3505. This exempted status is not applicable to the acquisition of land within the CBRS. Once the USCG determines where the proposed NAIS shore-based RF equipment sites would be located, proper coordination with the USFWS will be conducted, as necessary, to determine if the sites are within CBRS units and to take the necessary actions to comply with the CBRA.

3.10 Infrastructure

3.10.1 Definition of the Resource

Infrastructure consists of the systems and physical structures that enable a population in a specified area to function. Infrastructure is wholly human-made, with a high correlation between the type and extent of infrastructure and the degree to which an area is characterized as "urban" or developed. The availability of infrastructure and its capacity to support growth are generally regarded as essential to economic growth of an area. The infrastructure components to be discussed in this section include utilities (electricity and communications), solid waste, and the transportation network.

The presence or absence of required infrastructure is an important consideration in selecting sites for renovation or new construction. Having to construct, initiate, or contract such work to support site

operations can greatly impact estimated project costs. With respect to utilities, sites would generally fall into two categories: those in a developed setting (e.g., urban areas, developed suburban areas, and Federal installations) and those in an undeveloped setting (e.g., rural and remote areas).

Solid waste management services are available in nearly all developed areas within the continental United States; however, these services might not be readily available in undeveloped settings. Solid waste management is by Subtitle D of the Resource Conservation and Recovery Act (RCRA), as implemented by requirements specified in 40 CFR Parts 240 through 244, 257, and 258; and other applicable Federal regulations. In general, these regulations establish procedures for the handling, storage, collection, and disposal of solid waste; recordkeeping and reporting; and pollution prevention.

3.10.2 Existing Conditions

It is not possible to describe in detail the entire affected environment for infrastructure considering the broad geographic scope assessed in this PEIS. Site-specific infrastructure will be addressed in follow-on NEPA documentation, as necessary, during the siting of NAIS shore-based RF equipment as the USCG determines where such equipment would be located. A discussion of various elements of infrastructure that would be considered in siting NAIS shore-based RF equipment follows.

Utilities. Sites chosen in developed settings would have higher accessibility to utilities than undeveloped settings. Utilities in undeveloped settings might not exist, or might be far from the project site. Electricity and communications would be the only utilities required to operate the shore-based RF sites.

Solid Waste. Normal operation of each NAIS shore-based RF site does not require municipal solid waste collection and disposal services; however, during construction a small amount of construction and demolition (C&D) waste would be generated. C&D waste generated from specific construction, renovation, and maintenance projects associated with the Proposed Action would be the responsibility of the contractor doing the work. Contractors are required to comply with Federal, state, local, and USCG regulations for the collection and disposal of solid wastes. Some of this material can be recycled or reused, or otherwise diverted from landfills. All nonrecyclable C&D waste is collected in a dumpster until removal. C&D waste contaminated with hazardous waste, asbestos-containing material (ACM), lead-based paint (LBP), or other undesirable components is managed in accordance with Commandant Instructions Manual (CIM) 16478.1B, *Hazardous Waste Management Manual*.

Transportation Network. Since the locations of NAIS shore-based RF sites are not known at this time, the availability of transportation networks and access from such networks to the NAIS shore-based RF sites would vary widely. If a site is located in a developed setting, then transportation networks and access to the sites might be readily available; however, transportation networks or access in undeveloped settings might not exist, or might be located far from the project site. In some cases, future proposed NAIS shore-based RF sites might require easements or other rights of access over private, local, county, state, or Federal property.

3.11 Hazardous Substances

3.11.1 Definition of the Resource

Hazardous material is defined as any substance with physical properties of ignitability, corrosivity, reactivity, or toxicity that could cause an increase in mortality, serious irreversible illness, and incapacitating reversible illness, or that might pose a substantial threat to human health or the environment. In addition to being a threat to humans, the improper release of hazardous materials and wastes can threaten the health and well being of wildlife species, botanical habitats, soil systems, and

water resources. Hazardous waste is defined as any solid, liquid, contained gaseous, or semisolid waste, or any combination of wastes that pose a substantial present or potential hazard to human health or the environment. In the event of release of hazardous materials or wastes, the extent of contamination varies based on type of soil, topography, and water resources.

Special hazards are those substances that might pose a risk to human health, but are not regulated as contaminants under the hazardous waste statutes. Included in this category are ACM, radon, LBP, and polychlorinated biphenyls (PCBs). The presence of special hazards or controls over them might affect, or be affected by, a proposed action. Information on special hazards describing their locations, quantities, and condition assists in determining the significance of a proposed action.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA) and Toxic Substances Control Act (TSCA), define hazardous materials. The Solid Waste Disposal Act, as amended by RCRA, which was further amended by Hazardous and Solid Waste Amendment (HSWA), defines hazardous wastes. In general, both hazardous materials and wastes include substances that, because of their quantity; concentration; or physical, chemical, or infectious characteristics, could present substantial danger to public health or welfare or the environment should they be released or otherwise improperly managed.

3.11.2 Existing Conditions

Hazardous Materials and Waste. CIM 16478.1B, *Hazardous Waste Management Manual*, establishes policies and prescribes responsibilities and procedures for USCG compliance with RCRA and associated regulations found in 40 CFR 260–281, 40 CFR 122–124, and 49 CFR 171–177. It applies to all USCG personnel who authorize, procure, issue, use, or dispose of hazardous materials, and to those who manage, monitor, or track any of those activities. This manual also ensures proper management and disposal of hazardous wastes generated by USCG facilities. In addition, the responsibilities of conditionally exempt, small- and large-quantity generators are addressed in detail.

Asbestos-Containing Materials. CIM 16478.1B and CIM 6260.16A, *Asbestos Exposure Control Manual*, provides the direction for asbestos management at USCG facilities. These instructions incorporate by reference applicable requirements of 29 CFR Part 669 et seq., 29 CFR 1910.1025, 29 CFR 1926.58, 40 CFR 61.3.80, Section 112 of the CAA, and other applicable CIMs and DOD Directives. Asbestos is regulated by USEPA with the authority promulgated under the Occupational Safety and Health Administration (OSHA), 29 U.S.C. 669, et seq. Section 112 of the CAA regulates emissions of asbestos fibers to ambient air. USEPA policy is to leave asbestos in place if disturbance or removal could pose a health threat.

Building materials in older buildings are assumed to contain asbestos. It exists in a variety of forms and can be found in floor tiles, floor tile mastic, roofing materials, joint compound used between two pieces of wallboard, some wallboard thermal system insulation, and boiler gaskets. If asbestos is disturbed, fibers can become friable. Common sense measures, such as avoiding damage to walls, will keep the fibers from becoming airborne and hazardous. The ACMs are removed in conjunction with other building renovation and alteration projects.

Lead-Based Paint. The Residential Lead-Based Paint Hazard Reduction Act of 1992, Subtitle B, Section 408 (commonly called Title X), passed by Congress on October 28, 1992, regulates the use and disposal of LBP on Federal facilities. Federal agencies are required to comply with applicable Federal, state, and local laws relating to LBP activities and hazards. CIM 16478.1B provides the direction for lead and other metal-based paint management at USCG facilities. This policy incorporates by reference the requirements of 29 CFR 1910.120, 29 CFR Part 1926, 40 CFR 50.12, 40 CFR Parts 240 through 280, the

CAA, and other applicable Federal regulations. In addition, the policy requires USCG facilities to identify, evaluate, manage, and abate LBP hazards.

3.12 Socioeconomics and Environmental Justice

3.12.1 Definition of the Resource

Socioeconomics. Socioeconomics is defined as the basic attributes and resources associated with the human environment, particularly characteristics of population and economic activity. Regional birth and death rates and immigration and emigration affect population levels. Economic activity typically encompasses employment, personal income, and industrial or commercial growth. Changes in these two fundamental socioeconomic indicators are typically accompanied by changes in other components, such as housing availability and the provision of public services. Socioeconomic data at county, state, and national levels permit characterization of baseline conditions in the context of regional, state, and national trends.

Data in three areas provide key insights into socioeconomic conditions that might be affected by a proposed action. Data on employment identify gross numbers of employees, employment by industry or trade, and unemployment trends. Data on personal income in a region can be used to compare the “before” and “after” effects of any jobs created or lost as a result of a proposed action or alternatives. Data on industrial or commercial growth or growth in other sectors provide baseline and trend line information about the economic health of a region.

In appropriate cases, data on expenditures associated with a proposed action in the regional economy help to identify the relative importance of a proposed action in terms of its purchasing power and jobs base.

Demographics identify the population levels and changes to population levels of a region. Demographics data might also be obtained to identify, as appropriate to the evaluation of a proposed action, a region’s characteristics in terms of race, ethnicity, poverty status, educational attainment level, and other broad indicators.

Environmental Justice. There are no Federal regulations on socioeconomics, but there is an EO that pertains specifically to environmental justice issues. On February 11, 1994, President Clinton issued EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. This EO requires Federal agencies to identify and address, “as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities, in minority populations and low-income populations...” COMDTINST 5810.3, *Coast Guard Environmental Justice Strategy*, directs the USCG to “conduct its programs, policies and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color or national origin.”

3.12.2 Existing Conditions

It is not possible to describe in detail the entire affected environment considering the broad geographic scope being assessed in this PEIS. Site-specific socioeconomic impacts will be addressed in follow-on NEPA documentation, as necessary, during the siting of NAIS shore-based RF equipment. However, the USCG assumes that total construction costs for collocated sites would range from approximately

\$190,000 to \$345,000 per site in 2006 dollars. The USCG also assumes that new site construction would cost approximately \$805,000 per site in 2006 dollars.

To aid in the evaluation of this resource area, general categories are described to help define and weigh effects on socioeconomics and environmental justice. These categories include low-income areas, medium- to high-density residential areas, rural areas, and areas with a high percentage of minorities.

Low-income areas would be defined as areas where the majority of individuals live below the poverty level. In 2004 (latest data available), the poverty threshold for a family of four with two children was \$19,157 (U.S. Census Bureau 2005). Medium- to high-density residential areas would be defined as areas with high clusters of single-family homes. For the purpose of this PEIS, rural areas will be defined as areas with fewer than 2,500 people as defined in the 1990 Census (U.S. Census Bureau 1995). An area would be considered to have a high percentage of minority individuals if the percentage of minorities was more than 50 percent or was appreciably higher than the county or municipal average.

The potential for effects concerning environmental justice is based on specific demographic data of an area. The potential for the Proposed Action or alternatives to have impacts on demographics characteristics would be based on the significance criteria on a site-by-site basis.

3.13 Human Health and Safety

A safe environment is one in which there is no, or an optimally reduced, potential for death, serious bodily injury or illness, or property damage. Human health and safety addresses (1) workers' health and safety and public safety during demolition activities and facilities construction, and during subsequent operations of those facilities; and (2) potential human exposure to RF radiation.

Construction-site safety is largely a matter of adherence to regulatory requirements imposed for the benefit of employees and implementation of operational practices that reduce risks of illness, injury, death, and property damage. The health and safety of onsite military and civilian workers are safeguarded by numerous regulations designed to comply with standards issued by OSHA and USEPA. These standards specify the amount and type of training required for industrial workers, the use of protective equipment and clothing, engineering controls, and maximum exposure limits for workplace stressors.

Safety and accident hazards can often be identified and reduced or eliminated. Necessary elements for an accident-prone situation or environment include the presence of the hazard itself together with the exposed (and possibly susceptible) population. The degree of exposure depends primarily on the proximity of the hazard to the population. Activities that can be hazardous include transportation, maintenance and repair activities, and the creation of highly noisy environments. The proper operation, maintenance, and repair of vehicles and equipment carry important safety implications. Any facility or human-use area with potential explosive or other rapid oxidation process creates unsafe environments for nearby populations. Extremely noisy environments can also mask verbal or mechanical warning signals such as sirens, bells, or horns.

RF radiation (i.e., radio waves) can be defined as a broad spectrum of electromagnetic waves generated by oscillation of a charged particle with wave frequency (the number of sound waves per unit time) in the RF range, which is usually between 10 kilohertz (kHz) and 300,000 megahertz (MHz) (DHS 2005). In the United States the FCC authorizes or licenses most RF telecommunications services, facilities, and devices used by the public, industry, and state and local governmental organizations.

Probably the most important use for RF energy is in providing telecommunications services to the public, industry, and government. Radio and television broadcasting, cellular telephones, personal

communications services (PCS), pagers, cordless telephones, business radio, radio communications for police and fire departments, amateur radio, microwave point-to-point radio links, and satellite communications are just a few of the many applications of RF energy for telecommunications. For comparison purposes, a handheld cellular phone broadcasts at 0.6 watt at a frequency of 824 to 849 MHz, a citizen band (CB) radio broadcasts at 4 watts on frequencies from 26.96 to 27.41 MHz, and a large urban FM radio station can broadcast at up to 50,000 watts on frequencies ranging from 88 to 108 MHz (DHS 2005). Although RF radiation does not present as great a health hazard as “ionizing” radiation sources (which can cause molecular changes that could result in significant genetic damage) such as X-rays and gamma rays, high intensities of RF radiation can be harmful. Similar to microwaves, RF radiation has the ability to heat biological tissue rapidly, resulting in tissue damage, which is known as a “thermal” effect. The extent of this heating depends on several factors, the most limiting of which is radiation frequency. Others include the size, shape, and orientation of the exposed object; duration of exposure; environmental conditions; and efficiency of heat dissipation (FCC 1999).

Studies have shown that environmental levels of RF energy routinely encountered by the general public are generally far below levels necessary to produce significant heating and increased body temperature (DHS 2005). However, there might be situations, particularly workplace environments near high-powered RF sources, where recommended limits for safe exposure of human beings to RF energy could be exceeded. In such cases, restrictive measures or actions could be necessary to ensure the safe use of RF energy.

At relatively low levels of exposure to RF radiation, the evidence for resulting harmful biological effects is unproven (FCC 1999). However, there are multiple sources of information that list maximum permissible exposure, also known as permissible exposure limits (PEL), for RF radiation. The FCC adopted guidelines for RF radiation in 1996, which were developed by the American National Standards Institute (ANSI) and the Institute of Electrical and Electronics Engineers, Inc. (IEEE) in 1992. These exposure criteria identify the threshold level at which harmful biological effects could occur based on electric and magnetic field strength and power density. FCC guidelines are most stringent for the frequency range from 30 to 300 MHz, the range in which the human body absorbs RF radiation most efficiently. PELs are placed in two categories. The first category, the occupational population, applies to human exposure to RF fields when a person is exposed due to their employment, has been made fully aware of the potential for exposure, and can exercise control over their exposure (DHS 2005). The second category, the general population, applies to human exposure to RF fields when the general public might be exposed or when personnel exposed because of their employment might not be aware of exposure or cannot exercise control over the exposure (DHS 2005). A significant impact would occur if exposure limits to the occupational or general population exceeded the maximum PEL. Operating power is a major factor in determining exposure limits. Commercial radio and television stations operate in a range from a few hundred watts up to millions of watts. The FCC only requires that tower-mounted installation be evaluated if antennas are mounted lower than 10 meters above the ground and the total power of all channels being used is more than 1,000 watts of effective radiated power. The proposed operating power of the radio transmitters at an NAIS site would be a maximum of 50 watts, with frequencies ranging from approximately 156 to 414 MHz. Based on this operating power, it is reasonable to assume that the potential for harmful exposure to RF radiation would be extremely low.

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4. Environmental Consequences

4.1 Introduction

This section presents an analysis of the potential direct and indirect impacts each alternative would have on the affected environment as characterized in **Section 3.0**. Direct impacts are caused by the action and occur at the same time and place. Indirect impacts are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. As applicable, a framework for establishing whether an impact would be negligible, minor, moderate, or major is provided. These evaluation criteria were developed by environmental professionals in their respective fields based on accepted professional practice and in coordination and consultation with stakeholder agencies. Although some evaluation criteria have been designated based on legal or regulatory limits or requirements, others are based on best professional judgment and best management practices. The evaluation criteria include both quantitative and qualitative analyses, as appropriate to each resource area.

4.1.1 Proposed NAIS Project Implementation Approach

As described in **Section 2.2**, The USCG would achieve the preferred implementation alternative of the proposed NAIS project through use of a combination of shore-based RF sites, satellites, and offshore platforms and data buoys. The USCG would be faced with the choice of installing AIS equipment at new sites (“new build”); installing AIS equipment adjacent to existing communications equipment (“collocation”); or, programwide, using a combination of the collocation and new build sites for shore-based RF sites. For the proposed implementation of the NAIS project, the USCG has chosen to bound or bracket the programmatic environmental analysis of the shore-based RF sites by evaluating three potential NAIS siting alternatives: **All New Tower Builds, Combination of Collocations and New Tower Builds, and All Collocations**.

As described in **Section 2.3**, the USCG has identified the Proposed Action to implement the NAIS project using a combination of the following coverage mechanisms as the Preferred Alternative:

1. Establishing a combination of collocated and newly built shore-based RF sites for short-range AIS coverage.
2. Leasing commercial satellite services for long-range AIS coverage.
3. Installing AIS equipment on existing offshore oil and gas platforms and data buoys for supplemental long-range coverage.

Items 2 and 3 would involve no physical disturbances, earth moving, or construction activities; no actions inconsistent with present and foreseeable land use patterns; no activities that would contribute to changes in socioeconomic resources; and would involve very minor installation and maintenance work. Leasing commercial satellite services would not require new satellites, but only new equipment onboard existing satellite constellations. As independent actions, leasing commercial satellite services for long-range AIS coverage and installing AIS equipment on existing offshore oil and gas platforms and data buoys for supplemental long-range coverage would likely be categorically excluded from detailed NEPA analysis. Consequently, no impacts would be expected, and any extraordinary circumstances would be addressed in the tiered NEPA analysis. Accordingly, the USCG has omitted detailed examination of leasing commercial satellite services for long-range AIS coverage and installing AIS equipment on existing offshore oil and gas platforms and data buoys for supplemental long-range coverage. The analysis in the PEIS focuses on the environmental impacts associated with the **No Action Alternative** and the three NAIS siting alternatives described above: **All New Tower Builds, Combination of Collocations and**

New Tower Builds, and All Collocations. A summary of the alternatives and associated assumptions are presented below.

4.1.2 Assumptions Associated with Each Alternative Analyzed

4.1.2.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. No collocated or newly built shore-based RF sites would be established. The USCG would continue, where possible, to collect, integrate, and analyze information concerning vessels operating on or bound for waters subject to the jurisdiction of the United States, including information related to crew, passengers, cargo, and intermodal shipments using traditional methods and existing AIS capabilities.

4.1.2.2 All New Tower Builds Alternative

The USCG would implement the NAIS project using new shore-based RF sites. For the purpose of this PEIS, the USCG assumed that AIS equipment would need to be installed in approximately 450 locations to meet the technical and operational requirements of the NAIS project. Shore-based RF sites would consist of AIS equipment mounted on tower structures. A typical RF tower would be approximately 150 to 200 feet tall, with an approximate footprint of 6,400 square feet (ft²) (80 feet by 80 feet). The entire site would be graded and surrounded by a chain-link fence, gated, and locked. Typical equipment at a tower site would include the tower structure, a small generator, and a small building (approximately 8 feet by 12 feet) within the footprint to house electronic equipment. The building would be climate-controlled to protect AIS-related electronic equipment from the elements. Each generator would be approximately 60 horsepower (hp) and would operate only 12 hours per year. In addition, each generator would require a 500-gallon diesel or propane tank for fueling. Shore-based RF sites would require electric utility service and communications lines for routing AIS signals and data. Each site might require utilities run from the vicinity (approximately 2 miles of utility trenching was assumed), and might require construction of an access roadway (it was assumed that the roadway would be approximately 2 miles long and 18 feet wide). **Figure 4-1** presents a conceptual overview of an RF site.

4.1.2.3 Combination of Collocations and New Tower Builds Alternative

The USCG would implement the NAIS project using a combination of newly built and collocated shore-based RF sites. For the purpose of this PEIS, the USCG assumed that AIS equipment would need to be installed in approximately 450 locations to meet the technical and operational requirements of the NAIS project; of these, 50 would be new RF sites and 400 would be collocations. The description of assumptions used for the new shore-based RF sites is presented in **Section 4.1.2.2**. For collocations, the USCG would add AIS equipment to an existing structure. A small structure (approximately 8 feet by 12 feet) could be needed at each collocated site to house electronic equipment and a small generator. In addition, new utility service and communications lines might be required to support the site. For the purposes of this PEIS, the USCG assumed for collocations that utility service and communications lines would be placed in existing utility easements and no new grading or ground disturbance would be required to mount the equipment on the existing structure.

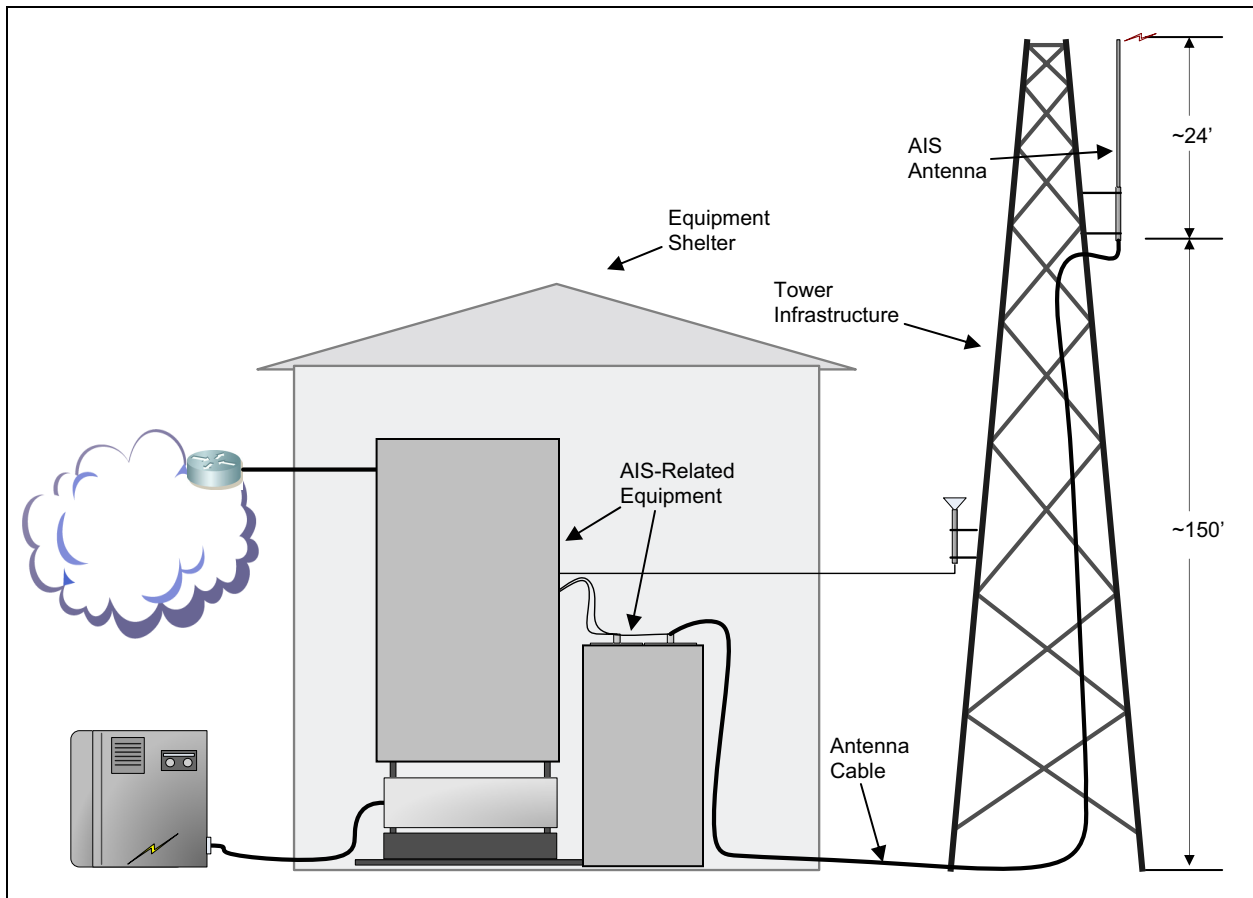


Figure 4-1. Conceptual NAIS Shore-based RF Site Diagram

4.1.2.4 All Collocations Alternative

The USCG would implement the NAIS project using entirely collocated shore-based RF sites. As previously stated, the USCG has assumed that AIS equipment would need to be installed in approximately 450 locations to meet the technical and operational requirements of the NAIS project. The description of assumptions used for collocation of the shore-based RF sites is presented in **Section 4.1.2.3**.

4.2 Noise

Noise impact analyses typically evaluate potential changes to the existing noise environment that would result from implementation of a proposed action. Potential changes in the acoustical environment can be beneficial (i.e., if they reduce the number of sensitive receptors exposed to unacceptable noise levels or reduce the ambient sound level), negligible (i.e., if the total number of sensitive receptors exposed to unacceptable noise levels is essentially unchanged), or adverse (i.e., if they result in increased sound exposure to unacceptable noise levels or ultimately increase the ambient sound level). Due to the fact that specific proposed project implementation sites have not been identified, projected noise impacts were evaluated qualitatively. Once specific proposed project areas have been identified, more quantitative noise analysis will be conducted in future site-specific environmental documentation, if required.

4.2.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. No collocated or newly built shore-based RF sites would be established. The USCG would continue, where possible, to collect, integrate, and analyze information concerning vessels operating on or bound for waters subject to the jurisdiction of the United States, including information related to crew, passengers, cargo, and intermodal shipments using traditional methods and existing AIS capabilities. No adverse impacts on the ambient noise environment would occur under the No Action Alternative.

4.2.2 All New Tower Builds Alternative

Construction-related Impacts. Short-term negligible adverse impacts would be expected. Noise from construction activities varies depending on the type of construction being done, the area that the project would occur in, and the distance from the source. To predict how the construction activities would impact adjacent populations, noise from each of the probable construction activities (building, grading, and paving) was estimated. For example, as shown on **Table 3-2**, paving usually involves several pieces of equipment (pavers and rollers) which can be used simultaneously. The cumulative noise from the paver and roller can be estimated to determine the total impact of construction noise from paving at a given distance. Examples of expected construction noise are as follows:

- Populations 400 feet away from building construction would experience noise levels of approximately 74 dBA.
- Populations 1,000 feet from grading would experience noise levels of about 66 dBA.
- Populations 2,000 feet away from paving construction would experience noise levels of approximately 57 dBA.

Implementation of this alternative would have short-term minor adverse impacts on the noise environment from the use of heavy equipment during construction activities if noise-sensitive populations are adjacent to a proposed site. However, noise generation would last only for the duration of construction activities and would be isolated to normal working hours (i.e., between 7:00 a.m. and 5:00 p.m.). Therefore, it is anticipated short-term negligible adverse impacts would be expected as a result of the construction activities.

Operations-related Impacts. Once the proposed towers are constructed, the ambient noise level would return to its normal level. There is no equipment use proposed that would significantly increase the ambient noise level. As identified in **Section 4.1.2.2**, a backup generator would be required at most shore-based RF sites. These generators would be used as backup power and operate on an as-needed basis. The generator would not be expected to cause the ambient noise levels to increase due to its limited operation as a backup power source.

Therefore, it is not anticipated that adverse long-term impacts on the ambient noise level would occur.

4.2.3 Combination of Collocations and New Tower Builds Alternative

Construction-related Impacts. Short-term negligible adverse impacts would be expected. The noise impacts for new towers and the anticipated construction of additional equipment structures to support the collocations would be the same as described in **Section 4.2.2** resulting in negligible impacts as a result of the construction activities.

Operations-related Impacts. Once the Combination of Collocations and New Tower Builds Alternative is complete in each location, the ambient noise level would return to its normal level. As identified in **Section 4.1.2.2**, a backup generator would be required at most shore-based RF sites. These generators would be used as backup power and operate on an as-needed basis. The generator would not be expected to cause the ambient noise levels to increase due to its limited operation as a backup power source. Therefore, it is not anticipated that long-term adverse impacts on the ambient noise levels would occur.

4.2.4 All Collocations Alternative

Construction-related Impacts. Short-term negligible adverse impacts would be expected. Some construction would likely be required at each of the proposed sites. Impacts from construction noise for collocations are anticipated and would be temporary in nature. Therefore it is anticipated that implementation of the All Collocations Alternative would have negligible impacts during the construction period.

Operations-related Impacts. Once the All Collocations Alternative is completed, the ambient noise level would return to its normal level. As identified in **Section 4.1.2.2**, a backup generator might be required. These generators would be used as backup power and operate on an as-needed basis. The generator would not be expected to cause the ambient noise levels to increase due to its limited operation. Therefore, it is not anticipated that adverse long-term impacts on the ambient noise level would occur as a result of the All Collocations Alternative.

4.3 Air Quality

The environmental consequences to local and regional air quality conditions near a proposed Federal action are determined based upon the increases in regulated pollutant emissions relative to existing conditions and ambient air quality. Specifically, the impact in NAAQS “attainment” areas would be considered significant if the net increases in pollutant emissions from the Federal action would result in any one of the following scenarios:

- Cause or contribute to a violation of any national or state ambient air quality standard
- Expose sensitive receptors to substantially increased pollutant concentrations
- Represent an increase of 10 percent or more in an affected Air Quality Control Region (AQCR) emissions inventory
- Exceed any Evaluation Criteria established by a SIP.

Effects on air quality in NAAQS “nonattainment” areas are considered significant if the net changes in project-related pollutant emissions result in any of the following scenarios:

- Cause or contribute to a violation of any national or state ambient air quality standard
- Increase the frequency or severity of a violation of any ambient air quality standard
- Delay the attainment of any standard or other milestone contained in the SIP.

With respect to the General Conformity Rule, effects on air quality would be considered significant if the proposed Federal action would result in an increase of a nonattainment or maintenance area’s emissions inventory by 10 percent or more for one or more nonattainment pollutants, or if such emissions exceed *de minimis* threshold levels established in 40 CFR 93.153(b) for individual nonattainment pollutants or for pollutants for which the area has been redesignated as a maintenance area.

The *de minimis* threshold emissions rates were established by USEPA in the General Conformity Rule to focus analysis requirements on those Federal actions with the potential to have “significant” air quality impacts. **Table 4-1** presents these thresholds, by regulated pollutant. These *de minimis* thresholds are similar, in most cases, to the definitions for major stationary sources of criteria and precursors to criteria pollutants under the CAA’s New Source Review (NSR) Program (CAA Title I). As shown in **Table 4-1**, *de minimis* thresholds vary depending upon the severity of the nonattainment area classification. No *de minimis* threshold emissions rate has been established by USEPA for PM_{2.5}; regardless, the proposed NAIS sites, no matter which alternative chosen, would not be expected to cause a significant increase in fine particulate emissions.

In addition to the *de minimis* emissions thresholds, Federal PSD regulations define air pollutant emissions to be significant if the source is within 10 kilometers of any Class I area, and emissions would cause an increase in the concentration of any regulated pollutant in the Class I area of 1 µg/m³ or more (40 CFR 52.21(b)(23)(iii)).

Table 4-1. Conformity *de minimis* Emission Thresholds

Pollutant	Status	Classification	<i>de minimis</i> Limit (tpy)
O ₃ (measured as NO _x or VOCs)	Nonattainment	Extreme	10
		Severe	25
		Serious	50
		Moderate/marginal (inside ozone transport region)	50 (VOCs)/100 (NO _x)
		All others	100
	Maintenance	Inside ozone transport region	50 (VOCs)/100 (NO _x)
		Outside ozone transport region	100
CO	Nonattainment/ maintenance	All	100
PM ₁₀	Nonattainment/ maintenance	Serious	70
		Moderate	100
		Not Applicable	100
SO ₂	Nonattainment/ maintenance	Not Applicable	100
NO _x	Nonattainment/ maintenance	Not Applicable	100

Source: 40 CFR 93.153

4.3.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. No impacts on air quality would be expected.

4.3.2 All New Tower Builds Alternative

Short-term and long-term negligible to minor adverse impacts on regional or local air quality would be expected. The All New Tower Builds Alternative would result in short-term minor adverse impacts on regional air quality during construction activities, primarily from site-disturbing activities and operation of construction equipment. In addition, long-term negligible to minor adverse impacts from the operation of a backup generator at each site would be expected.

Regulated pollutant emissions would not contribute to or affect local or regional attainment status with the NAAQS. The All New Tower Builds Alternative would generate both temporary and long-term air pollutant emissions. The construction and infrastructure projects would generate air pollutant emissions as a result of grading, filling, compacting, trenching, and construction operations, but these emissions would be temporary and would not be expected to generate any off-site impacts. The All New Tower Builds Alternative would not involve a net increase in personnel or commuter vehicles. Therefore, the emissions from existing personnel and commuter vehicles would not result in an adverse impact on regional air quality.

The construction projects would generate total suspended particulate and PM₁₀ emissions as fugitive dust from ground-disturbing activities (e.g., grading, trenching, soil piles) and from combustion of fuels in construction equipment. Fugitive dust emissions would be greatest during the initial site preparation activities and would vary from day to day depending on the construction phase, level of activity, and prevailing weather conditions. The quantity of uncontrolled fugitive dust emissions from a construction site is proportional to the area of land being worked and the level of construction activity. As discussed in **Section 4.1.2**, each NAIS site would be approximately 6,400 ft². It is assumed that all 6,400 ft² would be graded for site development and then be revegetated after construction is complete. The length of trenching could vary greatly at each site depending upon the distance of the chosen site to available infrastructure in that area. However, it is estimated that up to 2 miles of trenching would occur. Access roads might have to be constructed at the chosen site if no roads are available. The length of these access roads could vary greatly at each site depending upon the distance of the chosen site to available roadways. However, it is estimated that each site would require a 1.5-lane road up to approximately 2 miles long.

Construction operations would result in emissions of criteria pollutants as combustion products from construction equipment, as well as evaporative emissions from architectural coatings and any needed asphalt paving operations. These emissions would be of a temporary nature. The emissions factors and estimates were generated based on guidance provided in USEPA AP-42, Volume II, *Mobile Sources*. Fugitive dust emissions for various construction activities were calculated using emissions factors and assumptions published in USEPA's AP-42 Section 11.9.

Each site would require a small diesel-powered backup generator. It is assumed that each generator would be approximately 60 hp and would operate only 12 hours per year. In addition, each generator would require a 500-gallon diesel or propane tank for fueling. Day-to-day operations would generate emissions of criteria pollutants as combustion products from the operation of each generator to produce electrical power. Operational emissions associated with the Proposed Action would not result in adverse impacts on air quality. The emissions factors and estimates were generated based on guidance provided in USEPA AP-42, Volume I, *Stationary Internal Combustion Sources*. After a site has been chosen for construction of a shore-based RF site, the USCG would coordinate with the appropriate local AQCR to determine if an air quality permit is required for the backup generator.

As discussed in **Sections 2.2 and 4.1.2**, each shore-based RF site would take between 4 to 6 weeks to construct. This assumption and other project details presented in **Section 2** were used to estimate fugitive

dust and all other criteria pollutant emissions. **Table 4-2** details potential emissions associated with constructing and operating a representative shore-based RF site.

Since the locations of the 450 shore-based RF sites are unknown at this time, it is possible that a chosen site might fall within a nonattainment area. Each NAIS site would not be classified as a major emissions source. As discussed in **Sections 1 and 2**, site-specific NEPA documentation will be completed for each site and conformity will be analyzed at that time. However, based on emissions estimates presented in **Table 4-2**, emissions from construction activities and operation of the generator would be well below *de minimus* air quality thresholds. In summary, short-term and long-term, negligible to minor adverse impacts on regional or local air quality would be expected. **Appendix E** details the emissions factors, calculations, and estimates of emissions for the All New Tower Builds Alternative.

Table 4-2. Potential Construction and Station Source Emissions Estimates

Description	NO _x (tpy)	VOC (tpy)	CO (tpy)	SO _x (tpy)	PM ₁₀ (tpy)
Site Preparation and Construction Activities	0.046	0.023	0.054	0.001	6.122
Stand-by Generator Operation	0.035	0.003	0.008	0.002	0.002
Total Estimated Emissions	0.081	0.026	0.062	0.003	6.124

4.3.3 Combination of Collocations and New Tower Builds Alternative

Short-term and long-term, negligible to minor adverse impacts on regional or local air quality would be expected. As discussed in **Section 2.2.4**, the Combination of Collocations and New Tower Builds Alternative would include collocating NAIS equipment at approximately 90 percent of the 450 potential locations and constructing new shore-based RF sites for the rest. This alternative would have similar impacts as those discussed in **Section 4.3.2**. New facilities and a backup generator would be required at all new shore-based RF sites and some collocation sites. Air quality emissions for construction of the new sites would be the same as those presented in **Table 4-2**. Based on emissions estimates presented in **Table 4-2**, emissions from construction activities and operation of the generator would be well below *de minimus* air quality thresholds.

4.3.4 All Collocations Alternative

Short-term and long-term, negligible to minor adverse impacts on regional or local air quality would be expected. As discussed in **Section 2.2.4**, the All Collocations Alternative would include collocating all NAIS equipment at the 450 potential locations. However, some facilities and backup generators might be required at these locations. The All Collocations Alternative would have similar impacts as those discussed in **Section 4.3.2**. Air quality emissions for construction of the new facilities and operation of backup generators would be the same as those presented in **Table 4-2**. Based on emissions estimates presented in **Table 4-2**, emissions from construction activities and operation of the generator would be well below *de minimus* air quality thresholds.

4.4 Earth Resources

The following impact thresholds were used to assess the magnitude of impacts on earth resources:

- Negligible adverse impacts would result in a change to a natural physical resource, but the change would be small and localized and of little consequence. Adverse impacts on adjacent resources resulting from erosion and sedimentation would be small and localized and of little consequence.
- Minor adverse impacts would result in a change to a natural physical resource, but the change would be small and localized and of little consequence. Adverse impacts on adjacent resources resulting from erosion and sedimentation would be small and localized and of little consequence.
- Moderate adverse impacts would result in a change to a natural physical resource; the change would be measurable. Adverse impacts on adjacent resources resulting from erosion and sedimentation would be measurable.
- Significant adverse impacts would result in a noticeable change to a natural physical resource; the change would be measurable and result in a severely adverse or major impact. Adverse impacts on adjacent resources resulting from erosion and sedimentation would be severe.

4.4.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. No impacts on earth resources would be expected.

4.4.2 All New Tower Builds Alternative

Short-term and long-term negligible to minor adverse impacts on earth resources would be expected. Up to 450 new shore-based RF towers would be constructed to accommodate NAIS requirements under this alternative. The USCG would have some flexibility in the exact siting of NAIS towers and would seek to avoid impacts on earth resources to the greatest extent possible. Construction of each shore-based RF tower could result in the disturbance of approximately 6,400 ft² (0.15 acre) to accommodate the tower and the prefabricated utility building, and up to just over 5 acres for access road and utility line development. Therefore, the range of anticipated disturbance at any particular site would be between 0.15 acre and approximately 5 acres. Negligible adverse impacts on geologic resources could occur at locations where bedrock is at the surface and blasting would be necessary to grade for tower placement or access road development. Geologic resources could affect the placement of towers or access roads due to the occurrence of bedrock at the surface, or as a result of structural instability. In most cases, it is expected that project design and engineering practices could be implemented to mitigate geologic limitations to site development.

Long-term negligible to minor adverse impacts on soils would be expected as a result of grading, excavation, placement of fill, compaction, mixing, or augmentation necessary to accommodate tower, access road, and utility line development. Additional impacts on soils could occur as a result of erosion, if properly designed erosion and sediment controls and storm water management practices are not implemented during site development. Minor adverse impacts on adjacent habitats could also result from the deposition of soils eroded from the development site during construction. Properly designed erosion and sediment control and storm water management practices would be implemented, consistent with state and USCG requirements and guidelines, to minimize potential adverse impacts. The USCG would ensure that applicable NPDES construction permits would be obtained in accordance with the CWA and the Draft Phase II Storm Water Management Guide (COMDTPUB 11300.3). A Phase I NPDES permit for construction would be required for all projects that would disturb more than 5 acres. A Phase II NPDES permit would be required for disturbances between 1 and 5 acres. Under the All New Tower Builds Alternative, no NPDES permit would be required for construction of the tower and equipment building and up to 0.35 miles of roads and utilities trenching. A Phase II NPDES permit would be required for construction of the tower and equipment building and up to approximately 2 miles of road and utilities trenching. A Phase I NPDES permit would be required for construction of the tower and equipment

building and any length of road and utilities trenching greater than 2 miles. It is not anticipated that more than 2 miles of road and utilities would be required at any one site. Compliance with either a Phase I or II NPDES permit would include (1) developing site-specific best management practices (BMPs), (2) implementing BMPs, and (3) satisfying reporting and recordkeeping requirements. The permit would also require the development of a site-specific Storm Water Pollution Prevention Plan (SWPPP) to ensure that storm water runoff from the construction site was minimized. Management of storm water on the construction sites would minimize the potential for increased soil erosion associated with runoff from the site.

Soil characteristics (e.g., excessive erodibility, instability, shrink swell clays) could limit the suitability of a site for development. In most cases, it is expected that project design and engineering practices could be implemented to mitigate soil-related limitations to site development.

Long-term negligible adverse impacts on natural microtopography could occur on previously undisturbed sites as a result of excavation, grading, or filling necessary to accommodate tower, access road, and utility line development. Topography could limit the suitability of a site for tower placement in areas where there are high variations in relief which could limit the line of site to the tower.

Negligible impacts on prime or unique farmland would be expected at locations where it was determined to occur. Determination of the occurrence of prime farmland would be based on the presence of prime farmland soils in combination with other site-specific characteristics. The placement of a tower, access road, and utility line on a site designated as prime or unique farmland would not be expected to limit the future use of the site as farmland.

The USCG has some flexibility in the siting of the new towers and would seek to minimize potential adverse impacts on earth resources. In addition, the USCG will coordinate with the applicable agencies to obtain any permits determined to be necessary based on the final tower and access road locations. Site-specific tiered NEPA analysis will be conducted, as determined to be necessary, at new tower sites once the location of the site is determined.

4.4.3 Combination of Collocations and New Tower Builds Alternative

Short-term negligible to minor adverse impacts on earth resources would be expected. Negligible impacts on earth resources would be expected at sites where towers are collocated, and negligible to minor for sites where new towers are built. Impacts on earth resources discussed under the All New Tower Builds Alternative would be expected at locations where new towers are built. The USCG would have some flexibility in the exact siting of NAIS towers and would seek to avoid impacts on earth resources to the greatest extent possible.

Short-term negligible adverse impacts on soils could occur as a result of ground disturbance that might be required to grade a site for the placement of the 96-ft² prefabricated utility building. The prefabricated buildings would be placed under the existing towers where possible. In most cases, it is expected that the prefabricated structure could be leveled without a need for ground disturbance. Properly designed erosion and sediment control and storm water management practices would be implemented, consistent with state and USCG requirements and guidelines, to minimize potential adverse impacts at locations where ground disturbance was determined to be necessary. Site-specific tiered NEPA analysis will be conducted, as determined to be necessary, at each new and collocation tower site once the location of the site is determined.

4.4.4 All Collocations Alternative

Negligible adverse impacts on earth resources would be expected as a result of implementing the All Collocations Alternative. Impacts on earth resources discussed under the collocation scenario in the Combination of Collocations and New Tower Builds Alternative would be expected. Additional tiered NEPA analysis would be conducted, as necessary, once the sites for collocation were determined and prior to project implementation.

4.5 Water Resources

Evaluation criteria for impacts on water resources are based on water availability, quality, and use; existence of floodplains; and associated regulations. A proposed action would result in adverse impacts on water resources if it does one or more of the following:

- Violates a Federal, state, or local law or regulation adopted to protect water resources (major)
- Causes irreparable harm to human health, aquatic life, or beneficial uses of aquatic ecosystems (major)
- Degrades surface water or groundwater quality (minor to major depending on extent of degradation)
- Alters surface runoff resulting in flooding, or places a structure within a 100-year floodplain (minor to major depending on extent of change)
- Reduces water availability or supply to existing users (minor to major depending on extent of change).

4.5.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. No impacts on water resources would be expected.

4.5.2 All New Tower Builds Alternative

Surface Water and Groundwater. Short-term and long-term negligible to minor adverse impacts on surface water and groundwater resources would be expected. The USCG would have some flexibility in the exact siting of NAIS towers and would seek to avoid impacts on water resources to the greatest extent possible. The USCG would obtain any necessary permits in accordance with the CWA and state regulations.

Construction-Related Impacts. The All New Tower Builds Alternative would be expected to result in short-term negligible to minor adverse impacts on surface water resources and negligible to minor adverse impacts on groundwater resources as a result of construction activities. Construction activities would directly result in increased sediment runoff into drainage streams, lakes, estuaries, or the ocean. Increased sediment loads increase water turbidity and temperature, and decrease the overall habitat quality for aquatic life.

The magnitude of adverse impacts would depend on the specific location and the construction requirements of that location. If roads and necessary utilities exist at a specific site, then only the tower and prefabricated equipment building would be constructed; construction of the tower and equipment building would result in the approximate disturbance of 6,400 ft² (0.15 acres). As presented in **Section 4.1.2**, up to 2 miles of road and utilities might also be required. The total disturbance would be

approximately 5 acres. Therefore, the range of anticipated disturbance at any particular site would be between 0.15 acres and 5 acres.

Construction of the tower and equipment building would be expected to result in negligible adverse impacts from construction activities alone, but the additional roads and utilities that might be required could result in minor to moderate adverse impacts depending on site-specific soil conditions, topography (see **Section 4.4.2** for discussion of geologic conditions), and surface waterbodies at any given location. For example, in areas where there are many small tributaries, construction of the road and installation of the utilities would be likely to result in more moderate adverse impacts on those streams than construction of a tower alone.

The USCG would preferentially choose sites to minimize adverse construction impacts to the greatest extent possible. The USCG would ensure that the construction contractor has coordinated with the state or USEPA to obtain the appropriate NPDES construction permit in accordance with the CWA and COMDTPUB 11300.3 (Phase I and Phase II), *Storm Water Management Guide*. A Phase I NPDES permit for construction is required for all projects that would disturb 5 acres or more. A Phase II NPDES permit for construction is required for all construction projects that would disturb between 1 and 5 acres. Under the All New Tower Builds Alternative, no NPDES permit would be required for construction of the tower and equipment building and less than 0.35 miles of roads and utilities trenching. A Phase II NPDES permit would be required for construction of the tower and equipment building and up to approximately 2 miles of road and utilities trenching. A Phase I NPDES permit would be required for construction of the tower and equipment building and any length of road and utilities trenching greater than 2 miles, though it is not anticipated that more than 2 miles of road and utilities would be required at any one site. Basic compliance with either a Phase I or II NPDES permit would include (1) developing site-specific BMPs, (2) implementing BMPs, and (3) satisfying reporting and recordkeeping requirements. The construction contractor would also be required to develop a site-specific SWPPP to ensure that storm water runoff from the construction site is minimized. If a Phase I or II NPDES permit is not required, the USCG would still develop and implement a SWPPP that identifies BMPs to minimize any potentially adverse impacts as a result of construction.

There is a minor potential for spills or leaks from construction equipment. Spills or leaks would likely result in negligible to minor adverse impacts on surface water or groundwater resources. Surface water or areas that have karst terrain would be more susceptible to adverse impacts in the event of a spill or leak. Construction contractors would be responsible for ensuring that equipment is in good operating order to reduce the potential for leaks, and would develop a Spill Prevention, Control, and Countermeasure (SPCC) Plan to ensure that the potential for a dangerous chemical spill is minimized by providing appropriate procedures to contain and clean up spills if they occur. The construction contractor would also be expected to practice good housekeeping measures to reduce the quantity of potentially hazardous chemicals needed, and ensure they are handled and used properly. In the event that a spill occurs, it would not be likely to have a significant impact on surface water quality or groundwater quality.

The use of staging areas would result in short-term negligible adverse impacts. It is not expected that staging areas would be cleared, graded, or permanently altered, though minor soil disturbance could occur as a result of vehicle traffic. Vehicles also have the potential for fuel leaks, but contractors would be required to practice good housekeeping practices. Overall, short-term adverse impacts as a result of using staging areas would be negligible.

The USCG would preferentially choose tower locations to minimize adverse impacts on water resources to the greatest extent possible. The USCG would obtain any construction-related permits required by the CWA and other state laws and regulations. Construction activities would not be likely to result in violations of other Federal regulations, such as the SDWA.

Operations-Related Impacts. This alternative would be expected to result in long-term negligible to minor adverse impacts on surface water and groundwater resources. The USCG would have some flexibility in the exact siting of NAIS towers and would seek to avoid impacts on water resources to the greatest extent possible. The USCG would obtain any necessary permits in the accordance with the CWA and state regulations.

The construction of new shore-based RF towers would result in the creation of permanent impervious surfaces. The creation of impervious surfaces could increase the quantity of storm water runoff, decrease storm water quality, and reduce the amount of groundwater that infiltrates underlying aquifers. Most towers would likely only require the tower and equipment building to be permanently impervious (0.15 acres), which would have a negligible adverse impact. It is anticipated that gravel roads would be used when road construction is required under the All New Tower Builds Alternative. The length of road needed at any one site is also variable. The construction of 2 miles of road would create approximately 5 acres of semipervious surface, depending on the material used. The impact magnitude of this amount of semipervious surface would be negligible to minor, depending on the site-specific location. For example, construction of 2 miles of road adjacent to a stream or over karst terrain would have the potential to introduce contaminants directly into surface water or groundwater resources, as well as increase the potential for flash flooding downstream. At most sites, these kinds of impacts would be negligible.

At some locations, the creation of roads could result in minor hydromodification of stream channels, such as culverting or hardened stream crossing. These kinds of modification could result in minor to moderate adverse impacts, such as increased potential for flooding. The magnitude of the impact would depend on the site-specific location. The USCG would avoid hydromodification to the greatest extent possible. If hydromodification is required, the USCG would coordinate and obtain permits with USACE or other applicable Federal or state agencies.

Each new shore-based RF tower site would require a backup generator, most likely powered by diesel or liquid propane. Storage of fuels on site has the potential to introduce contamination into surface water or groundwater. The 500-gallon tank would be above ground, and have appropriate spill-containment to protect surface water and groundwater resources in the event of a spill. Overall, the potential that a spill or leak would occur is minor, and the amount of fuel onsite would not be sufficient to cause widespread contamination.

No long-term impacts would be expected as a result of utilities trenching. If trenching would be required, disturbed areas would be revegetated with appropriate vegetation to reduce soil erosion and potential transport into waterbodies.

The All New Tower Builds Alternative would not increase the demand for potable water, so there would be no impact on water availability or supply from surface water or groundwater resources. Operations activities would not be likely to result in violations of other Federal regulations, such as the SDWA.

Floodplains. The USCG would avoid siting new towers in the 100-year floodplain in accordance with EO 11988 and COMDTINST M16475.ID. If the 100-year floodplain cannot be avoided, it is USCG policy to modify proposals to (1) reduce the hazard and the risk of floodplain loss; (2) minimize the impact of floods on human safety, health, and welfare; and (3) restore and preserve the natural and beneficial floodplain values (COMDTINST M16475.ID). If any part of a new tower build were to be sited within the 100-year floodplain, the USCG would initiate public and agency involvement during the site-specific NEPA process prior to any actions occurring.

4.5.3 Combination of Collocations and New Tower Builds Alternative

Surface Water and Groundwater. Short-term and long-term negligible to minor adverse impacts on surface water and groundwater resources would be expected. The magnitude of impacts would be negligible to minor for sites where towers are collocated, and negligible to moderate for sites where new towers are built. The USCG would preferentially choose sites for collocation over new tower builds. However, if a new tower is required, the USCG would have some flexibility in the exact siting of the NAIS tower and would seek to avoid impacts on water resources to the greatest extent possible. The USCG would obtain any necessary permits in the accordance with the CWA and state regulations.

Construction-Related Impacts. Refer to **Section 4.5.2** for a detailed discussion of potential impacts for those sites requiring a new tower build. Overall, construction of a new tower would be likely to result in short-term negligible to moderate adverse impacts. The magnitude of potential impacts would vary depending on if a new road and utilities would be required, and how many miles of new road and utilities would be required.

For collocated towers, short-term negligible to minor adverse impacts would be expected as a result of construction activities. A prefabricated equipment building might be required for collocated towers, which would result in disturbance of approximately 96 ft². The equipment building would likely be constructed in previously disturbed areas. Overall soil disturbance that could cause storm water runoff into surface waterbodies would be negligible to minor. A NPDES permit would not be required if the area disturbed area is less than 1 acre in size. However, the USCG would implement BMPs to minimize potential impacts.

There is a minor potential for spills or leaks from construction equipment. Spills or leaks would likely result in negligible to minor adverse impacts on surface water or groundwater resources. Surface water or areas that have karst terrain would be more susceptible to adverse impacts in the event of a spill or leak. Construction contractors would be responsible for ensuring that equipment is in good operating order to reduce the potential for leaks, and would develop an SPCC Plan to ensure that the potential for a dangerous chemical spill is minimized by providing appropriate procedures to contain and clean up spills if they occur. The construction contractor would also be expected to practice good housekeeping measures to reduce the quantity of potentially hazardous chemicals needed, and ensure they are handled and used properly.

Collocating NAIS equipment with existing towers or structures would not be expected to result in road construction, utility trenching, or the use of construction staging areas. The USCG would preferentially choose tower collocations to minimize adverse impacts on water resources. The USCG would obtain any permits required by the CWA and other state laws and regulations for construction related to new towers. Construction activities would not be likely to result in violations of other Federal regulations, such as the SDWA.

Operations-Related Impacts. Refer to **Section 4.5.2** for a detailed discussion of potential impacts for those sites requiring a new tower build. Overall, a new tower would be likely to result in long-term negligible to minor adverse impacts. The magnitude of potential impacts would vary depending on if a new road and utilities would be required, and how many miles of new road and utilities would be required.

For collocated towers, long-term negligible adverse impacts would be expected from the increase of 96 ft² of impervious surface from the equipment building, if required. The loss of 96 ft² of drainage or infiltration area would be imperceptible.

Collocated towers might require a backup generator, most likely powered by diesel or liquid propane. Storage of fuels onsite has the potential to introduce contamination into surface water or groundwater. The 500-gallon tank would be above ground, and have appropriate spill-containment to protect surface water and groundwater resources in the event of a spill. Overall, the potential that a spill or leak would occur is minor, and the amount of fuel onsite would not be sufficient to cause widespread contamination.

It is possible that NAIS equipment could be collocated with towers in areas that operate under an existing industrial Phase I and Phase II group or general NPDES permit. The USCG would be required to conform to any existing NPDES permits. However, it is not expected that the quality of point-source discharged effluent would be degraded as a result of tower collocation, so permit violations would not be expected.

The Combination of Collocations and New Tower Builds Alternative would not increase the demand for potable water, so there would be no impact on water availability or supply from surface water or groundwater resources.

Collocating NAIS equipment with existing towers or structures would not be expected to result in road construction. The USCG would preferentially choose tower collocations to minimize adverse impacts on water resources. The USCG would obtain any permits required by the CWA and other state laws and regulations. Operations activities would not be likely to result in violations of other Federal regulations, such as the SDWA.

Floodplains. As indicated in **Section 4.5.2**, the USCG would avoid siting new towers in the 100-year floodplain in accordance with EO 11988 and COMDTINST M16475.ID. However, if there is no practicable alternative to siting new towers in the 100-year floodplain, the USCG would accomplish the requirements identified in **Section 4.5.2**.

Collocation with existing towers or structures already in the floodplain would not have additional impacts on the floodplain. The USCG would avoid siting the prefabricated equipment building in the floodplain. However, if there was no practicable alternative to siting the prefabricated equipment building in the floodplain, the USCG would accomplish the requirements identified in **Section 4.5.2** in accordance with COMDTINST M16475.ID.

4.5.4 All Collocations Alternative

Surface Water and Groundwater. Short-term and long-term, negligible to minor adverse impacts would be expected. Refer to **Section 4.5.3** for a detailed discussion of potential impacts associated with collocating NAIS equipment with existing towers or structures. Short-term impacts from the placement of the 96-ft² equipment building would be negligible to minor. Long-term impacts from the increase of 96 ft² of impervious surface would be negligible. The long-term potential exists that a fuel leak could occur; anticipated impacts on surface water and groundwater would be minor. The USCG would preferentially choose tower collocations to minimize adverse impacts on water resources. The USCG would obtain any construction-related permits required by the CWA and other state laws and regulations.

The All Collocations Alternative would not increase the demand for potable water, so there would be no impact on water availability or supply from surface water or groundwater resources. Construction or operations activities would not be likely to result in violations of other Federal regulations, such as the SDWA.

Floodplains. The All Collocations Alternative would have minimal potential to result in adverse impacts associated with the 100-year floodplain. The USCG would avoid siting the prefabricated equipment

building in the floodplain. However, if there was no practicable alternative to siting the prefabricated equipment building in the floodplain, the USCG would accomplish the requirements identified in **Section 4.5.2** in accordance with COMDTINST M16475.ID.

4.6 Biological Resources

The following evaluation criteria were used to determine the magnitude of impacts on vegetation, wildlife, wildlife habitat, and wetlands with separate criteria being used to evaluate impacts on threatened and endangered species:

- Negligible adverse impacts would result if there were no observable or measurable impacts on native vegetation or wildlife, or sensitive or unique wildlife habitats. Impacts would be of short duration and well within natural fluctuations. Impacts on wetlands would not be detectable. Impacts would result in no measurable or perceptible changes in wetland plant community size, integrity, or continuity.
- Minor adverse impacts would be detectable, but they would not be expected to be outside the natural range of variability. Impacts on native plants would be measurable or perceptible, but would affect a small area. The viability of the plant community would not be affected and the community, if left alone, would recover. Population numbers, population structure, genetic variability, and other demographic factors for wildlife species might have small, short-term changes, but long-term characteristics would remain stable and viable. Occasional responses to disturbance by some individuals could be expected, but without interference to feeding, reproduction, or other factors affecting population levels. Key ecosystem processes might have short-term disruptions that would be within natural variation. Sufficient habitat would remain functional to maintain the system and viability of all species. Impacts on wetlands would be measurable or perceptible but localized within a small area. The overall viability of the wetland plant community would not be affected and, if left alone, would recover.
- Moderate adverse impacts on vegetation would result if a change would occur over a relatively large area in the native plant community that would be readily measurable in terms of abundance, distribution, quantity, or quality. Impacts on native wildlife species, their habitats, or the natural processes sustaining them would be detectable, and they could be outside the natural range of variability for short periods of time. Population numbers, population structure, genetic variability, and other demographic factors for species might have short-term changes, but would be expected to rebound to pre-impact numbers and to remain stable and viable in the long term. Frequent responses to disturbance by some individuals could be expected, with some negative impacts on feeding, reproduction, or other factors affecting short-term population levels. Key ecosystem processes might have short-term disruptions that would be outside natural variation. Sufficient habitat would remain functional to maintain viability of all native species. Impacts on wetlands would be measurable or perceptible and would result in a loss of wetland habitat. Impacts would cause a change in the plant community (e.g., abundance, distribution, quantity, or quality); however, the impact would remain localized.
- Significant adverse impacts on native plant communities would be readily apparent, and would substantially change vegetation community types over a large area. Adverse impacts on native species, their habitats, or the natural processes sustaining them would be detectable, and they would be expected to be outside the natural range of variability for long periods of time, or be permanent. Population numbers, population structure, genetic variability, and other demographic factors for species might have large, short-term declines, with long-term population numbers significantly depressed. Frequent responses to disturbance by some individuals would be expected, with negative impacts on feeding, reproduction, or other factors resulting in a long-term decrease in population levels. Breeding colonies of native species might relocate to other areas.

Key ecosystem processes might be disrupted in the long term or permanently. Loss of habitat might affect the viability of the ecosystem for some native species. Impacts on wetlands would be substantial and permanent and would result in complete alteration of wetland habitats. Impacts on the plant community would be substantial, highly noticeable, and permanent. Mitigation would be required to offset impacts.

Impacts on threatened and endangered species were classified using the following terminology, as defined under the ESA:

- No effect – would be determined if a proposed action would not affect a listed species or designated critical habitat.
- May affect/not likely to adversely affect – would be determined if impacts on special status species are discountable (i.e., extremely unlikely to occur and not able to be meaningfully measured, detected, or evaluated) or completely beneficial.
- May affect/likely to adversely affect – would be determined when an adverse effect on a listed species occurs as a direct or indirect result of proposed actions and the effect is either not discountable or completely beneficial.
- Likely to jeopardize proposed species/adversely modify proposed critical habitat – would be determined if the USCG or USFWS identified situations in which actions could jeopardize the continued existence of a proposed species or adversely modify critical habitat to a species within or outside of the project area.

4.6.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. No collocated or newly built shore-based RF sites would be established. No impacts on vegetation, wildlife, threatened or endangered species, or wetlands would be expected.

4.6.2 All New Tower Builds Alternative

Short-term and long-term, negligible to moderate adverse impacts would be expected. The following discussion describes potential impacts on vegetation, wildlife, threatened and endangered species, and wetlands.

Vegetation. Short-term and long-term, minor to moderate adverse impacts on vegetation would be expected. Up to 450 new RF towers would be constructed to accommodate NAIS requirements under the alternative. Construction of each shore-based RF tower could result in the disturbance of approximately 0.15 acre to accommodate the tower and the prefabricated utility building, and up to 6.5 acres for access road and utility line development. Potential adverse impacts on vegetation associated with site development would vary depending on the characteristics of the tower location and would result from direct long-term impacts associated with removal, or indirect short- and long-term impacts associated with damage to species during, or as a result of, site development. Placement of a tower in an urbanized environment would be expected to have less potential for adverse impacts on native vegetation than placement in an undeveloped naturally vegetated area. Development in active agricultural plots would result in minimal impacts on natural vegetation. Development in fields, successional habitats, or fallow agricultural land would be expected to impact vegetation characterized by herbaceous species, shrubs and young tree species. Development in forested habitats would result in direct removal of trees and associated understory vegetation necessary to accommodate the development footprint. Indirect damage to trees and understory vegetation would also be expected to occur as a result of damage to root systems, soil compaction, and landscape modification associated with site development.

Removal and disturbance of vegetation to accommodate site development has the potential to introduce and spread exotic invasive species. Spread of exotic invasive species in the area of tower development could result from disturbance which could allow aggressive invasives to become established from seed stock on the site or in adjacent habitats. Invasive species could also be introduced on construction equipment brought to the site from other locations. Likewise exotic invasive species occurring at a new tower location could be spread to offsite locations if equipment was not properly cleaned before leaving the site. The establishment and spread of *Phragmites australis* is of particular concern in coastal areas where it can aggressively take over areas previously characterized by native vegetation following disturbance. EO 13112, *Invasive Species*, directs all government agencies to review projects to ensure that no increase in the spread of invasive plant species occurs from construction activities. The USCG would comply with the guidelines in the EO to minimize potential for the spread of exotic invasive species associated with the proposed development of new tower sites.

Short-term and long-term minor adverse impacts on wetland or aquatic vegetation in proximity to tower or access road locations could occur if water quality was degraded as a result of erosion and sedimentation and storm water runoff from the tower site or access road during construction. Erosion and sediment control and storm water management practices consistent with USGC guidelines and state requirements would be implemented both during construction and for operations of the new tower sites to minimize potential adverse impacts on wetland and aquatic vegetation. Spill contingency plans and management practices would be developed and, when necessary, implemented to minimize potential impacts on aquatic resources resulting from leakage of equipment and potential chemical or fuel spills during site development.

The USCG has some flexibility in the siting of the new towers and would seek to avoid sensitive and unique habitats and vegetation. In addition, the USCG will coordinate with the applicable agencies to obtain Special Use Permits or other permits determined to be necessary based on the final tower and access road locations. Site-specific tiered NEPA analysis will be conducted, as necessary, at new tower sites once the location of the site is determined.

Wildlife. Short-term and long-term minor adverse impacts on wildlife would be expected. Up to 450 new RF towers would be constructed to accommodate NAIS requirements under the alternative. As discussed above, tower development could result in the disturbance of up to 6.5 acres to accommodate tower, access road, and utility line development at each new tower location. Potential adverse impacts on wildlife associated with site development would vary depending on the characteristics of the tower location. Placement of a tower in an urbanized environment would be expected to have less potential for adverse impacts on wildlife than placement in an undeveloped area. Placement of a tower in a forested habitat or in proximity to wetlands or other sensitive habitats would be expected to have a greater potential for short-term and long-term adverse impacts on wildlife that might utilize the habitats. Up to 6.5 acres of wildlife habitat could be permanently lost as a result of site development and road construction associated with the construction and operation of new towers. Construction activities would likely result in mortality of some less mobile fauna such as reptiles, amphibians, and small mammals. Most wildlife would be expected to relocate from areas within or immediately surrounding the construction area. Ability to relocate would be affected by availability of suitable adjacent habitats and connectedness to these habitats. Some species would be expected to move back into the area following the completion of construction. Mortality of some species would be expected over time as a result of collision with vehicles following the completion of development.

Following the completion of site development, adverse impacts on species sensitive to disturbance could result from temporary noise generated by climate control (heating and air conditioning) equipment associated with the towers. This reoccurring temporary noise disturbance would be minor and species

sensitive to the disturbance would be expected to move away from the immediate location of the tower and associated equipment.

Short-term and long-term, minor to moderate adverse impacts on aquatic species and their habitats could occur if water quality was degraded as a result of erosion and sedimentation and increased storm water runoff during the development and operation of the new towers. Erosion and sediment control and storm water management practices consistent with USGC guidelines and state requirements would be implemented both during construction and for operations of the new tower sites to minimize potential adverse impacts on aquatic resources. Spill contingency plans and management practices would be developed and, when necessary, implemented to minimize potential impacts on aquatic resources resulting from leakage of equipment and potential chemical or fuel spills during site development.

The USCG has some flexibility in the siting of the new towers and would seek to avoid sensitive and protected wildlife areas such as National Wildlife Preserves and wetland habitats. In addition, the USCG will coordinate with the applicable agencies to obtain Special Use Permits or other permits determined to be necessary based on the final tower and access road locations. Site-specific tiered NEPA analysis will be conducted as necessary at new tower sites once the location of the site is determined.

Migratory Birds. Long-term minor to moderate adverse impacts on migratory birds would be expected. Up to 450 new RF towers would be constructed to accommodate NAIS requirements under the alternative. Impacts on migratory birds would be expected as a result of collision and exhaustion associated with the operation of new towers under the All New Tower Builds Alternative. Some adverse impacts on bird navigation could also occur in association with poor visibility and tower lighting. The probability of collision is difficult to determine because of the range of variables that affect the potential for collision, and the lack of conclusive data regarding the causes of collision. There are several factors that could increase or decrease the risk of adverse impacts at tower locations.

Migratory bird impacts are possible due in part to the need to construct towers along coastlines, some rivers, and other navigable waters such as the Great Lakes. Many of the major migratory routes are concentrated along the coastlines and major rivers and lakes. As a result, large concentrations of birds pass through the areas where new towers would be located during their spring and fall migrations, increasing the potential for collision with the structures.

Most migratory birds fly at a height of about 2,000 to 3,000 feet above sea level, with some species flying at levels down to about 500 feet above sea level. Birds also might fly at lower altitudes during inclement weather or low visibility conditions (URS 2004). Based on the altitudes known for migrating birds, most fly at elevations well above the height of the proposed new towers. These flight elevations do not account for birds landing or taking off from breeding and feeding habitat when there would be an increased potential for injury or mortality due to collision with tower structures.

Studies indicate that most adverse impacts on birds resulting from collision occur during foggy or low cloud conditions at lighted towers. Towers using guy wires likely increase potential for adverse impacts under these conditions. New towers that would be constructed would be 200 feet or less in height and would not use guy wires for support. Towers less than 200 feet in overall height, in most cases, would not require lighting. Potential impacts on birds would be expected to be greater during foggy or low cloud conditions at towers that require lighting. Impacts on birds associated with collisions with guy wires would not be a factor at any new tower locations because they would not be utilized for support.

There are numerous variables including tower height and design, lighting, seasons, adjacent land features, and migration patterns that affect the potential for adverse impacts on migratory birds at new tower locations. These variables are key factors affecting avian navigation and the potential for tower

collisions. The degree and mechanisms of influence either alone or in combination are not clear. Site-specific characteristics would also be expected to affect the potential for, and level of, adverse impacts. Site-specific characterization of potential impacts would be determined based on the individual tower locations.

EO 13186 requires Federal agencies taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations to develop and implement a MOU with the USFWS to promote the conservation of migratory bird populations. The USCG currently has a MOU with USFWS that addresses new tower locations associated with the National Distress and Response System Modernization Project (NDRSMP), also known as Rescue 21. The MOU addresses site- and structure-specific issues that could affect migratory birds. The USCG is currently corresponding with the USFWS regarding the development of a new MOU, or the modification of the existing MOU for Rescue 21, to address towers associated with implementation of the NAIS project. In addition, the USCG, to the extent practicable, will implement guidelines and best management practices established in the Service Interim Guidelines for Recommendations on Communications Tower Siting, Construction, Operation, and Decommission (USFWS 2000) to reduce potential for adverse impacts on birds at new tower locations.

Threatened or Endangered Species. A determination of whether the proposed construction or operation of a new tower is likely to adversely affect a federally listed threatened or endangered species will be determined based on correspondence with USFWS on a site-specific basis, once proposed tower locations are determined. The determination of potential adverse impacts on state-listed species will also be determined on a site-specific basis. Correspondence with the USFWS regarding the NAIS project was initiated through the NOI published in the *Federal Register* on November 23, 2005. The agency responded to the NOI in a letter stating that they will provide input and information when the locations of projects are determined and site-specific NEPA documentation is prepared (see **Appendix B**). As stated in **Section 3.6**, the USFWS currently lists 937 vertebrates, 192 invertebrates, 715 flowering plants, and 33 nonflowering plants as threatened or endangered in the United States and its territories (USFWS 2006a). Additional species are protected at the state level. Determination of the potential for the occurrence of a Federal- or state-listed species in the area of a proposed tower location will be determined based on the proposed location of the tower and associated access road, correspondence with USFWS or applicable state agency(s), and the conduct of surveys where determined to be necessary. If it is determined that there is potential for adverse impacts on a threatened or endangered species, the USCG will coordinate with the USFWS or the applicable state agency(s) to ensure minimization of any potential adverse impacts.

Wetlands. Short-term and long-term negligible to minor adverse impacts on wetlands would be expected. Construction of each shore-based RF tower could result in the disturbance of approximately 0.15 acre to accommodate the tower and the prefabricated utility building, and up to 6.5 acres for access road and utility line development. Impacts on wetland habitats associated with tower placement and the development of up to 2 miles of access road and utility lines would be avoided and minimized to the maximum extent practicable. It is the goal and intent of the USCG, consistent with EO 11990, to avoid adverse impacts on wetlands and to proactively manage for wetlands during the environmental planning process to mitigate potential impacts through avoidance. If it was determined that possible encroachment might occur and could not be avoided, correspondence with the USACE and applicable state agencies would be conducted to determine if jurisdictional wetlands would be impacted, and to establish appropriate mitigation to minimize adverse impacts.

Short-term and long-term minor adverse impacts on wetland habitats occurring in proximity to tower or access road locations could occur if water quality was degraded as a result of erosion and sedimentation and storm water runoff from the tower site, access road, or utility line alignments during construction. Erosion and sediment control and storm water management practices consistent with USGC guidelines

and state requirements would be implemented to minimize potential adverse impacts on wetland habitats. Spill contingency plans and management practices would be developed and, when necessary, implemented to minimize potential impacts on wetland habitats resulting from leakage of equipment and potential chemical or fuel spills during site development.

The locations of the new towers or associated access roads and utility lines have not been determined. Additional tiered NEPA analysis will be conducted as necessary once the proposed location of each tower is determined and prior to initial planning and design. The analysis will further evaluate potential impacts on wetlands based on specific project design and location.

4.6.3 Combination of Collocations and New Tower Builds Alternative

Short-term and long-term, negligible to moderate adverse impacts would be expected. The magnitude of impacts would be negligible to minor for sites where towers are collocated, and negligible to moderate for sites where new towers are built. The USCG would preferentially choose sites for collocation over new tower builds. However, if a new tower is required, the USCG would preferentially choose tower locations to minimize adverse impacts on biological resources to the greatest extent possible.

The following discussion describes potential impacts on vegetation, wildlife, threatened and endangered species, and wetlands.

Vegetation. Minor to moderate short- and long-term adverse impacts on vegetation would be expected at locations where it was determined that new tower construction would be necessary. Impacts on vegetation would be expected at locations where new towers are built under this alternative. Short-term and long-term negligible to minor adverse impacts on vegetation would be expected at sites where towers are collocated. Under this scenario, impacts would be expected to occur as a result of clearing for the 96-ft² prefabricated utility building in cases where it could not be placed under the existing tower. Long-term adverse impacts would occur as a result of clearing of vegetation within the footprint of the building, and as a result of any clearing necessary to access the building location. Short-term adverse impacts on vegetation could occur as a result of trimming necessary to access the site. In all cases the USCG would place the building in a location that would minimize potential adverse impacts to the maximum extent practicable.

Clearing to accommodate the prefabricated utility building has the potential to introduce and spread exotic invasive species. Spread of exotic invasive species in the area of clearing for the building could result from ground disturbance which could allow aggressive invasives to become established from seed stock on the site or in adjacent habitats. Invasive species could also be introduced on construction equipment brought to the site from other locations. Likewise exotic invasive species occurring at the collocation site could be spread to offsite locations, if equipment was not properly cleaned before leaving the site. The establishment and spread of *Phragmites australis* is of particular concern in coastal areas where it can aggressively take over areas previously characterized by native vegetation. EO 13112, *Invasive Species*, directs all government agencies to review projects to ensure that no increase in the spread of invasive plant species occurs from construction activities. The USCG would comply with the guidelines in the EO to minimize potential for the spread of exotic invasive species associated with disturbance necessary to accommodate the prefabricated utility building at collocation sites.

Short-term and long-term minor adverse impacts on wetland or aquatic vegetation in proximity to collocation tower sites could occur if water quality was degraded as a result of erosion and sedimentation and storm water runoff from the prefabricated building site during preparation of the site. Erosion and sediment control and storm water management practices consistent with USGC guidelines and state

requirements would be implemented to minimize potential adverse impacts on wetland and aquatic vegetation.

The USCG has some flexibility in the siting of new towers where they are determined to be necessary, and in the case of collocations, the location of the prefabricated utility building, and would seek to avoid sensitive and unique habitats and vegetation. In addition, the USCG will coordinate with the applicable agencies to obtain Special Use Permits or other permits determined to be necessary based on new tower site locations. Site-specific tiered NEPA analysis will be conducted at new tower or collocation sites once the location of the site is determined.

Wildlife. Short-term and long-term minor adverse impacts on wildlife would be expected at locations where it was determined that new tower construction would be necessary. Impacts on vegetation discussed in **Section 4.6.2** would be expected at locations where new towers are built under this alternative. Negligible adverse impacts on wildlife would be expected at sites where towers were collocated. Under this scenario, impacts would be expected to occur as a result of noise and disturbance during site preparation for the prefabricated utility building. Wildlife disturbed during site preparation would be expected to return to the area following placement of the structure. Negligible adverse impacts on wildlife species sensitive to disturbance could result from temporary noise generated by climate control (heating and air conditioning) equipment associated with the prefabricated utility buildings. This reoccurring temporary noise disturbance would be negligible and species sensitive to the disturbance would be expected to move away from the immediate location of the tower and associated equipment. Equipment associated with the existing tower would also be expected to generate noise, so species sensitive to the noise would not be expected to occur in the vicinity of the existing towers.

The USCG has some flexibility in the siting of new towers, and in the case of collocations, the location of the prefabricated utility building, and will seek to avoid sensitive and protected wildlife areas such as National Wildlife Preserves and wetland habitats. In addition, the USCG will coordinate with the applicable agencies to obtain Special Use Permits or other permits determined to be necessary based on the final new tower or prefabricated building locations. Site-specific tiered NEPA analysis will be conducted as necessary at new tower or collocation sites once the location of the site is determined.

Migratory Birds. Long-term minor to moderate adverse impacts on migratory birds would be expected at locations where it was determined that new tower construction would be necessary. Impacts on migratory birds would be expected at locations where new towers are built under this alternative. Negligible new adverse impacts would be expected to migratory birds at collocation sites.

EO 13186 requires Federal agencies taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations to develop and implement an MOU with the USFWS to promote the conservation of migratory bird populations. The USCG currently has an MOU with USFWS that addresses new tower locations associated with Rescue 21. The MOU addresses site- and structure-specific issues that could affect migratory birds. The USCG is currently corresponding with the USFWS regarding the development of a new MOU, or the modification of the existing MOU for Rescue 21, to address new towers associated with implementation of the NAIS project. In addition, the USCG, to the extent practicable, will implement guidelines and best management practices established in the Service Interim Guidelines for Recommendations on Communications Tower Siting, Construction, Operation, and Decommission to reduce potential for adverse impacts on birds at new tower locations (USFWS 2000).

Threatened or Endangered Species. A determination of whether the proposed construction or operation of a new tower or collocation on an existing tower or other structure is likely to adversely affect a federally listed threatened or endangered species will be determined based on correspondence with the

USFWS on a site-specific basis, once proposed new tower locations and collocation sites are determined. The determination of potential adverse impacts on state-listed species will also be determined on a site-specific basis. Correspondence with the USFWS regarding the NAIS project was initiated through the NOI published in the *Federal Register* on November 23, 2005. The agency responded to the NOI in a letter stating that they will provide input and information when the locations of projects are determined and site-specific NEPA documentation is prepared (see **Appendix B**). As stated in **Section 3.6**, the USFWS currently lists 937 vertebrates, 192 invertebrates, 715 flowering plants, and 33 nonflowering plants as threatened or endangered in the United States and its territories (USFWS 2000). Additional species are protected at the state level. Determination of the potential for the occurrence of a Federal- or state-listed species in the area of a proposed new tower location or collocation site will be determined based on the current or proposed location of the tower and associated access road, correspondence with USFWS or applicable state agency(s), and the conduct of surveys where determined to be necessary. If it is determined that there is potential for adverse impacts on a threatened or endangered species, the USCG will coordinate with the USFWS or the applicable state agency(s) to ensure minimization of any potential adverse impacts.

Wetlands. Short-term and long-term, negligible to minor adverse impacts on wetlands would be expected at locations where new tower construction would be necessary. Impacts on wetlands would be expected at locations where new towers are built. Negligible adverse impacts on wetlands would be expected at collocation sites. The prefabricated utility building would be located to avoid any direct impacts on wetlands.

Short-term and long-term, minor adverse impacts on wetlands in proximity to collocation tower sites could occur if water quality was degraded as a result of erosion and sedimentation and storm water runoff from the prefabricated building site during preparation of the site. Erosion and sediment control and storm water management practices consistent with USCG guidelines and state requirements would be implemented during site preparation to minimize potential adverse impacts on wetland and aquatic vegetation.

The USCG has some flexibility in the siting of new towers, and in the case of collocations, the location of the prefabricated utility building, and would seek to avoid and minimize any adverse impacts on wetland habitats. Additional tiered NEPA analysis will be conducted, as necessary, once the proposed location of a required new tower is determined and prior to initial planning and design. The analysis would further evaluate potential impacts on wetlands based on specific project design and location.

4.6.4 All Collocations Alternative

Short-term and long-term, negligible to minor adverse impacts would be expected. The following discussions describe potential impacts on vegetation, wildlife, threatened and endangered species, and wetlands.

Vegetation. Short-term and long-term, negligible to minor adverse impacts on vegetation would be expected. Impacts on vegetation discussed under the collocation scenario in **Section 4.6.3** would be expected. Additional tiered NEPA analysis would be conducted as necessary once the sites for collocation were determined and prior to project implementation.

Wildlife. Negligible adverse impacts on wildlife would be expected. Impacts on wildlife discussed under the collocation scenario in **Section 4.6.3** would be expected. Additional tiered NEPA analysis would be conducted as necessary once the sites for collocation were determined and prior to project implementation.

Migratory Birds. Negligible new adverse impacts would be expected. Impacts on migratory birds discussed under the collocation scenario in **Section 4.6.3** would be expected. Additional tiered NEPA analysis would be conducted as necessary once the sites for collocation were determined and prior to project implementation.

Threatened or Endangered Species. A determination of whether collocation on an existing tower or other structure is likely to adversely affect a federally listed threatened or endangered species will be based on correspondence with USFWS on a site-specific basis, once proposed collocation sites are determined. The determination of potential adverse impacts on state-listed species will also be determined on a site-specific basis. Correspondence with the USFWS regarding the NAIS project was initiated through the NOI published in the Federal Register on November 23, 2005. The agency responded to the NOI in a letter stating that they will provide input and information as the locations of projects are determined and site-specific NEPA documentation is prepared (see **Appendix B**). As stated in **Section 3.6**, the USFWS currently lists 937 vertebrates, 192 invertebrates, 715 flowering plants, and 33 nonflowering plants as threatened or endangered in the United States and its territories (USFWS 2006a). Additional species are protected at the state level. Determination of the potential for the occurrence of a Federal- or state-listed species in the area of a proposed collocation site is based on the location of the collocation site, correspondence with USFWS or applicable state agency(s), and the conduct of surveys where determined to be necessary. If it is determined that there is potential for adverse impacts on a threatened or endangered species, the USCG will coordinate with the USFWS or the applicable state agency(s) to ensure minimization of any potential adverse impacts.

Wetlands. Negligible adverse impacts on wetlands would be expected. Impacts on wetlands discussed under the collocation scenario in **Section 4.6.3** would be expected. Additional tiered NEPA analysis would be conducted, as necessary, once the sites for collocation were determined and prior to project implementation.

4.7 Cultural Resources

As noted in the discussion of legal authorities in **Section 3.7.3**, Federal agencies are required to consider the impacts of their actions on cultural resources under a variety of laws, depending on the nature of the resource being impacted. NEPA requires that Federal agencies determine whether their proposed actions will have significant impact on the human environment, including a range of cultural resources. Review of Federal actions under the NHPA, which should be conducted concurrent with NEPA review, requires Federal agencies to take into account the impacts of their actions or undertakings on historic properties. NAGPRA and the ARPA provide guidance on how to conduct resource identification efforts on Federal lands and how to consult with American Indian, Native Hawaiian, or Native Alaskan stakeholders in the event that Federal actions result in the discovery of human remains or items of cultural patrimony.

In general, an impact could be considered significant to cultural resources if project activities result in

- Destruction or alteration of all or a contributing part of any NRHP-eligible resource without mitigation of the adverse effect through prior consultation with the SHPO/THPO or affected American Indian tribe, or Native Hawaiian or Native Alaskan organization
- Isolation of an eligible or listed resource from its surrounding environment
- Introduction of a visual, audible, or atmospheric element that is out of character with an eligible or listed resource, or would alter its setting
- Neglect and subsequent deterioration of an NRHP-eligible or listed resource
- Disturbance of properties with traditional, cultural, or religious significance to American Indian tribes, or Native Hawaiian or Native Alaskan organizations.

4.7.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. No collocated or newly built shore-based RF sites would be established. Therefore, no impacts on archaeological resources, historic buildings and structures, or TCPs would be expected.

4.7.2 All New Tower Builds Alternative

Under this alternative, the USCG would implement the NAIS project using entirely new shore-based RF sites. Shore-based RF sites would consist of AIS equipment mounted on tower structures. It is also assumed that, while access roads and equipment would require regular maintenance, maintenance actions would have no impacts on cultural resources.

Archaeological Resources. Depending on the location of the tower, short-term and long-term negligible to major adverse impacts would be expected. Because construction of new RF sites can involve substantial ground disturbance (grading and excavation), implementation of this alternative has the potential to impact either previously recorded or unrecorded archaeological resources within the RF site footprint, the access road, and any staging areas used for construction. Impacts can range from no impact, if archaeological resources are absent within the areas being disturbed; to short-term minor adverse if the archaeological resources present within the areas being disturbed are either ephemeral in nature or have been previously disturbed; to long-term major and adverse if significant archaeological resources are present. Mitigation measures such as avoidance of archaeological resources, or archaeological monitoring during construction could reduce the level of adverse impacts on archaeological resources. Data recovery of archaeological resource information can mitigate the long-term impact of an action under NEPA; however, data recovery excavations have been determined to represent an adverse effect on historic properties under Section 106 of the NHPA because excavation inherently destroys the resource.

Once specific RF site locations have been selected, the USCG would consult with the appropriate SHPO/THPO or affected American Indian, Native Hawaiian, or Native Alaskan groups in advance of construction to determine whether previously recorded archaeological resources exist within the construction APE or, if the construction APE has not been previously surveyed for archaeological resources, whether such a survey could be required in advance of construction.

Historic Buildings and Structures. Depending on the location of the tower, long-term negligible to major indirect adverse impacts would be expected. Because it would not involve changes to existing buildings or structures, construction of new RF sites would not have a direct impact on historic buildings or structures. Construction of a new RF site within the viewshed of a historic building, structure, or district could have an indirect impact, as the tower would visually affect the historic resource and its setting. For example, a tower constructed in a location where no physical features taller than the tower (e.g., mature trees or existing structures like water towers) are present would result in the introduction of an element not already present in the setting of the historic building, structure, or district. The degree to which the new RF site would have a visual effect on historic buildings, structures, or districts would depend upon the type of historic setting, existing visual clutter, height of the tower in relation to the height of existing features, topography, and vegetation.

As part of the process used to select new RF sites, the USCG would consult with the SHPO and local historic commissions, as appropriate, to determine whether the proposed RF site lies within the viewshed of any previously recorded or potential historic building, structure, or district. Where possible, impacts could be avoided by selecting a new RF site that is not within the viewshed of a historic building, structure, or district. If visual impacts cannot be avoided, the USCG can consult with the SHPO and local historic commissions to discuss ways to mitigate the impacts. Mitigation options might include

emplacing vegetation between the RF site and the historic building, structure, or district to help provide a visual screen; documentation of the historic building, structure, or district per the standards outlined by the Historic American Building Survey (HABS), or reconfiguring the height or style of the tower to limit the visual impact.

Traditional Cultural Properties. Depending on the location of the tower, long-term negligible to major direct and indirect adverse impacts would be expected. Because construction of new RF sites can involve substantial ground disturbance (grading and excavation), implementation of this alternative has the potential to both directly and indirectly impact TCPs. Direct impacts would occur if construction activity destroyed or damaged resources. Indirect impacts would occur if the construction of new RF sites intruded into the viewshed of this type of resource, or resulted in restricted access to significant resources.

As part of the process used to select new RF sites, the USCG would communicate with the appropriate SHPO/THPO, American Indian tribes, Native Hawaiian or Native Alaskan organizations, and other interested parties to determine whether the proposed RF site intersects or lies within the viewshed of any resource considered to have traditional, cultural, or religious significance to a particular group. Where possible, impacts could be avoided by selecting a new RF site that does not intersect or lie near this category of resource. If impacts cannot be avoided, the USCG can consult with the SHPO/THPO, American Indian tribes, Native Hawaiian or Native Alaskan organizations, and other interested parties to discuss ways to mitigate the impacts. Mitigation options to reduce the adverse visual impacts could include the range of options presented for mitigation of visual impacts on historic buildings, structures, or districts described above.

4.7.3 Combination of Collocations and New Tower Builds Alternative

Archaeological Resources. Depending on the location of the tower, short-term and long-term, negligible to major adverse impacts would be expected. Because construction of new RF sites can involve substantial ground disturbance (grading and excavation), implementation of this alternative has the potential to impact either previously recorded or unrecorded archaeological resources within the RF site footprint, the access road, and any staging areas used for construction. Impacts can range from no impact, if archaeological resources are absent within the areas being disturbed; to short-term minor adverse, if the archaeological resources present within the areas being disturbed are either ephemeral in nature or have been previously disturbed; to long-term major adverse, if significant archaeological resources are present. Mitigation measures such as avoidance of archaeological resources, or archaeological monitoring during construction could reduce the level of adverse impacts on archaeological resources. Data recovery of archaeological resource information can mitigate the long-term impact of an action under NEPA; however, data recovery excavations have been determined to represent an adverse effect on historic properties under Section 106 of the NHPA because excavation inherently destroys the resource.

Once specific locations have been selected for the 50 new RF sites, the USCG will need to consult with the appropriate SHPO/THPO; regional information center; or affected American Indian, Native Hawaiian, or Native Alaskan groups in advance of construction to determine whether previously recorded archaeological resources exist within the construction APE or, if the construction APE has not been previously surveyed for archaeological resources, whether such a survey might be required in advance of construction.

Collocation of RF sites with existing towers, buildings, bridges, or other structures is not anticipated to involve ground disturbance except in previously disturbed land areas or existing utility easements. Therefore, no impacts on archaeological resources are anticipated at collocation sites, and no mitigation is warranted.

Historic Buildings and Structures. Depending on the location of the tower, long-term negligible to major adverse impacts would be expected. Placement of AIS equipment on existing buildings, bridges, or structures that are eligible for or listed on the NRHP has the potential to adversely impact this type of resource, either by damaging character-defining features of the property, or causing sufficient alteration to reduce the property's integrity. Impacts would range from minor to major, depending on the degree of damage or alteration, and would be long-term and adverse. If buildings, bridges, or structures that are eligible for or listed on the NRHP cannot be avoided, mitigation options to reduce adverse impacts include photo documentation of the affected property to HABS standards, or consultation with a historic architect and the SHPO to identify a means of attaching the AIS equipment that would limit damage to character-defining features or alterations to the property.

As noted in **Section 4.7.2**, construction of new RF sites would not have a direct impact on historic buildings, structures, or districts. Construction of a new RF site within the viewshed of a historic building, structure, or district could have an indirect impact, as the tower would visually affect the historic resource and its setting. For example, a tower constructed in a location where no physical features taller than the tower (e.g., mature trees or existing structures like water towers) are present would result in the introduction of an element not already present in the setting of the historic building, structure, or district. The degree to which the new RF site would have a visual effect on historic buildings, structures, or districts would depend upon the height of the tower in relation to the height of existing features, topography, vegetation, and existing visual clutter.

As part of the process used to select new RF sites, the USCG would consult with the SHPO and local historic commissions to determine whether the proposed RF site lies within the viewshed of any previously recorded or potential historic building, structure, or district. Where possible, impacts could be avoided by selecting a new RF site that is not within the viewshed of a historic building, structure, or district. If visual impacts cannot be avoided, the USCG can consult with the SHPO and local historic commissions to discuss ways to mitigate the impacts. Mitigation options might include emplacing vegetation between the RF site and the historic building, structure, or district to help provide a visual screen; documentation of the historic building, structure, or district per the standards outlined by the HABS; or reconfiguring the height or style of the tower to limit the visual impact.

Traditional Cultural Properties. Depending on the location of the tower, long-term negligible to major direct and indirect adverse impacts would be expected. As previously noted, construction of new RF sites has the potential to both directly and indirectly impact TCPs. Direct impacts would occur if construction activity destroyed or damaged resources within the construction APE. Indirect impacts would occur if the construction of new RF sites intruded into the viewshed of this type of resource, or resulted in restricted access to significant resources.

Collocation of AIS equipment on existing towers, buildings, bridges, or other structures would not have a visual impact on TCPs unless the building, bridge, or structure has no previous antenna equipment mounted on it. If the AIS equipment represents a new type of element in the viewshed, implementation of this alternative would have potential visual impacts on any TCPs in the vicinity of the collocated RF site.

As part of the process used to select new RF sites, the USCG would consult with the appropriate SHPO/THPO, American Indian tribes, Native Hawaiian or Native Alaskan organizations, and other interested parties, as appropriate, to determine whether the proposed RF site intersects or lies within the viewshed of any resource considered to have traditional, cultural, or religious significance to a particular group. Where possible, impacts could be avoided by selecting a new RF site that does not intersect or lie near this category of resource. If impacts cannot be avoided, the USCG can consult with the SHPO/THPO, American Indian tribes, Native Hawaiian or Native Alaskan organizations, and other interested parties discuss ways to mitigate the impacts. Mitigation options to reduce the adverse visual

impacts could include the range of options presented for mitigation of visual impacts on historic buildings, structures, or districts in **Section 4.7.2**.

4.7.4 All Collocations Alternative

Archaeological Resources. No impacts on archaeological resources would be expected at collocation sites, and no mitigation is warranted. Collocation of RF sites with existing towers, buildings, bridges, or other structures is not anticipated to involve ground disturbance except in previously disturbed land areas or existing utility easements.

Historic Buildings and Structures. Long-term negligible to moderate adverse impacts would be expected. Placement of AIS equipment on existing buildings, bridges, or structures that are eligible for or listed on the NRHP has the potential to adversely impact this type of resource, either by damaging character-defining features of the property, or causing sufficient alteration to reduce the property's integrity. Impacts would range from negligible to moderate, depending on the degree of damage or alteration, and would be long-term and adverse. If buildings, bridges, or structures that are eligible for or listed on the NRHP cannot be avoided, mitigation options to reduce adverse impacts include photo documentation of the affected property to HABS standards, or consultation with a historic architect and the SHPO to identify a means of attaching the AIS equipment that would limit damage to character-defining features or alterations to the property.

If the collocation involves mounting of AIS equipment on buildings or structures that have not previously hosted similar equipment, such that the AIS equipment represents a new visual element in the setting, implementation of this alternative could have impacts on the viewsheds of historic buildings, structures, or districts. If visual impacts cannot be avoided, the USCG can consult with the SHPO and local historic commissions to mitigate the impacts. Mitigation options might include planting vegetation between the RF site and the historic building, structure, or district to help provide a visual screen; documentation of the historic building, structure, or district per the standards outlined by the HABS; or reconfiguring the height or style of the tower to limit the visual impact.

Traditional Cultural Properties. Long-term negligible to minor indirect impacts would be expected. Collocation of AIS equipment on existing towers, buildings, bridges or other structures should not have a visual impact on this category of resource unless the building, bridge, or structure has no previous antenna equipment mounted on it. If the AIS equipment represents a new type of element in the viewshed, implementation of this alternative would have potential visual impacts on any TCPs in the vicinity of the collocated RF site.

As part of the process used to select new and collocated RF sites, the USCG would consult with the appropriate SHPO/THPO, American Indian tribes, Native Hawaiian or Native Alaskan organizations, and other interested parties, as appropriate, to determine whether the proposed RF site intersects or lies within the viewshed of any resource considered to have traditional, cultural, or religious significance to a particular group. Where possible, impacts could be avoided by selecting a new RF site that does not intersect or lie near this category of resource. If impacts cannot be avoided, the USCG can consult with the SHPO/THPO, American Indian tribes, Native Hawaiian or Native Alaskan organizations, and other interested parties to discuss ways to mitigate the impacts.

4.8 Visual Resources

Depending on the alternative selected, shore-based RF sites could be placed within a variety of settings, including recreation areas; parks and preserves; commercial areas; or urban, suburban, or rural residential areas. The potential for impacts from collocation or construction of new RF sites is greater for some of

these types of settings than others, with the nature and extent of site-specific impacts being related to the degree to which the structures associated with the proposed action contrast with the features in the existing landscape. In general, because of the nature of the features at a typical RF site, the impacts on visual resources are likely to be greater in rural or natural settings than suburban, urban, or commercial settings, where towers and antennas are more common. The degree of impact might also be greater at a specific time of day. Features are generally more visible during the day, thereby causing greater impacts; however, if the RF tower has additional lighting at night to warn aircraft about the presence of the towers, impacts could be significant during nighttime hours as well.

Impacts on visual resources can also be short-term or long-term, depending on whether the impact is related to the construction activity rather than the feature being constructed. The Bureau of Land Management (BLM) has developed a set of thresholds to assess the significance of impacts on visual resources. While most RF sites would not be placed on land managed by the BLM, the thresholds provide useful criteria for this discussion (see **Table 4-3**).

Table 4-3. Thresholds for Impacts on Visual Resources

Description of Change	Impact
The Proposed Action would not change the existing environment.	No impact
The change to the existing environment would generally be overlooked by an observer.	Minor, not adverse
The change to the existing environment would not attract the attention of a casual observer; however, the change would be noticed if pointed out by another observer.	Minor, adverse
The change to the existing environment demands the attention of the casual observer or dominates the view such that it becomes the primary focus of the observer.	Significant, adverse

4.8.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. No impacts on visual resources would be expected.

4.8.2 All New Tower Builds Alternative

Short-term and long-term, minor to moderate impacts would be expected. There are several potential sources of impacts on visual resources under this alternative, including the clearing and grading of land for the RF site footprint, the construction of infrastructure necessary to install and operate the RF site (access road, utility corridor, and staging areas), and the construction of the RF site features (tower and equipment building). Permanent features that might create a permanent contrast with the existing environment would include the 150- to 200-foot tall tower, the access road, the fenced perimeter of the RF site, and the building housing the generator and electronics. If overhead transmission lines are required for power or communication (as opposed to buried lines), these lines would also represent a permanent feature.

As noted in the discussion of thresholds for impacts on visual resources, the short-term impacts on visual resources resulting from construction activities and the long-term impacts resulting from the placement of potentially contrasting visual features into the existing landscape can range from minor to major, and from nonadverse to adverse depending on the degree of contrast that the change represents relative to the

existing landscape. The USCG can avoid or minimize impacts on visual resources through selection of new RF sites that lie in areas with substantial existing visual clutter (such as commercial areas) and that have existing roads and utility corridors that could be used to service the site. Other methods of mitigation might include use of vegetation screening or differences in topography to reduce the visual contrast of the permanent features at the RF site. The locations of new RF sites could also be consolidated with other contrasting visual elements (e.g., existing utility towers, water towers, cell phone towers) to reduce visual sprawl and disturbance related to nighttime lighting, or designing the features of the towers to blend more effectively with the forms and lines found in the existing landscape (for example, painting towers, fences, or concrete foundations with earth-tone paint or stain to reduce contrasts, or using rustic designs and native materials).

4.8.3 Combination of Collocations and New Tower Builds Alternative

Short-term and long-term, minor to moderate impacts would be expected. Under this alternative, impacts on visual resources can range from short-term minor impacts related to construction of new RF sites to long-term minor to moderate impacts related to the placement of new permanent features within the existing landscape. The impacts on visual resources resulting from collocations are more likely to be minor, particularly if the AIS equipment is mounted on an existing tower, as the AIS equipment would be placed on an existing feature in the landscape. Placement of AIS equipment on other buildings or structures might be more intrusive, with impacts ranging from minor and nonadverse if the building or structure already hosts similar antenna equipment, to minor and adverse if the building has no previous antennas.

The potential impacts on visual resources resulting from construction of new RF sites are presented in **Section 4.8.2**. The short-term impacts on visual resources resulting from construction activities and the long-term impacts resulting from the placement of potentially contrasting visual features into the existing landscape can range from minor to major, and from nonadverse to adverse depending on the degree of contrast that the change represents relative to the existing landscape. The USCG can avoid or minimize impacts on visual resources through selection of new RF sites that lie in areas with substantial existing visual clutter (such as commercial areas) and that have existing roads and utility corridors that could be used to service the site. Other methods of mitigation might include use of vegetation screening or differences in topography to reduce the visual contrast of the permanent features at the RF site. The locations of new RF sites could also be consolidated with other contrasting visual elements (e.g., existing utility towers, water towers, cell phone towers) to reduce visual sprawl and disturbance related to nighttime lighting, or designing the features of the towers to blend more effectively with the forms and lines found in the existing landscape (for example, painting towers, fences, or concrete foundations with earth-tone paint or stain to reduce contrasts, or using rustic designs and native materials).

4.8.4 All Collocations Alternative

Long-term negligible to minor adverse impacts would be expected. Under this alternative, impacts on visual resources would be the same as those discussed in **Section 4.8.3** for the 300 collocated RF sites. The impacts on visual resources resulting from collocation are likely to be negligible, particularly if the AIS equipment is mounted on an existing tower, as the AIS equipment would be placed on an existing feature in the landscape. Placement of AIS equipment on other buildings or structures might be more intrusive, with impacts ranging from minor and nonadverse if the building or structure already hosts similar antenna equipment, to minor and adverse if the building has no previous antennas. Mitigation to reduce impacts would involve avoidance of collocation sites that do not have previous antenna arrays, or selection of collocation sites that are in areas with substantial previous visual clutter.

4.9 Land Use

The significance of potential land use impacts is based on the level of land use sensitivity in areas affected by a proposed action and compatibility of proposed actions with existing conditions. As discussed in **Section 3.10**, this PEIS evaluates general land use categories that include agricultural lands, low-density residential areas, medium- to high-density residential areas, commercial and industrial areas, and military installations. Land use categories of particular concern in this assessment include recreation, CZM-sensitive areas, and coastal barriers. Due to the potential for impacts associated with tower structures they are assessed as separate subcategories.

General Land Use Categories. In general, a land use impact would be significant if it were to

- Be inconsistent or not compliant with existing land use plans or policies
- Preclude the viability of existing land use
- Preclude continued use or occupation of an area
- Be incompatible with adjacent land use to the extent that public health or safety is threatened, or would lead to the violation of a Federal law or regulation
- Conflict with planning criteria established to ensure the safety and protection of human life, property, or resources.

The potential impacts on general land use categories would depend on the context and intensity of disturbance. The potential of impacts to residential, commercial, and industrial land use types would vary based on the level of disturbances to adjacent areas and compliance with local zoning laws and ordinances.

Recreation. A proposed action would result in significant impacts on recreation if it does one or more of the following:

- Interferes with access to coastal recreational shorelines or waterways
- Leads to substantial loss or displacement of an important recreational resource, such as impairment of recreational fishing activities and other water-dependent uses
- Leads to substantial degradation of recreational values
- Alters or impairs scenic quality, or aesthetic value not consistent with applicable zoning laws or regulations associated with recreation resources.

Coastal Zone Management. Activities conducted within the coastal zone are required to be consistent with the enforceable policies and mechanisms of the state or U.S. territory CZM program. Section 307 of the CZMA, as amended, requires that proposed Federal activities affecting a state or territory's coastal zone be consistent, to the maximum extent practicable, with the federally approved CZM program. Compliance with relevant state and Federal regulatory programs constitutes consistency with the policies of a state or territory CZM program. A proposed action would result in significant impacts on CZM if it is found to be inconsistent with a state or U.S. territory CZM program and potential adverse impacts could not be mitigated through coordination with the state or U.S. territory CZM program.

Coastal Barriers. A proposed action would result in significant impacts on coastal barriers if it is located within a CBRIS unit and potential adverse impacts could not be mitigated through coordination with the USFWS.

4.9.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. There would be no changes in land use under the No Action Alternative and therefore no impacts on land use in general, or on recreation, CZM, or coastal barriers.

4.9.2 All New Tower Builds Alternative

General Land Use Categories. Under this alternative, placement of a RF tower could require the USCG to obtain a permit or zoning variance based on local height restrictions and ordinances. Short-term adverse impacts would occur from construction and use of staging areas during the 6-week construction period for each new RF tower. Impacts on land use would vary depending on the length of time the tower would exist and the land use of adjacent properties.

Short-term minor adverse impacts on agricultural lands and low-density residential areas would be expected. Prime farmlands and potential impacts are discussed in **Section 4.4**. The severity of the impact would vary depending on the need for rezoning to accommodate the tower. Location of an RF tower in agricultural areas could also require a service road which would have short-term and long-term minor adverse impacts on land use from construction and creation of the road. Rural communities are beginning to resist communication towers as more are being constructed (USCG 1998). It should be noted that proliferation of cell phone towers and antennae have prompted rural locations to make more restrictions governing the installation of communication towers (USCG 1998). On the other hand, agricultural and low-density residential lands typically have less governing restrictions for growth and development.

Long-term minor adverse impacts on medium- to high-density residential areas would be expected if the towers are not compatible with existing and future land use zoning. USCG-owned property is exempted from local zoning laws. However, to maintain compatibility with existing zoning laws, the USCG would adhere to local zoning laws and ordinances to lessen impacts on land use conditions of areas affected. Impacts on residential areas could include incompatibility between adjacent land uses and conflicts with existing land use laws. Areas of medium to high density will have the most restrictions governing growth and placement of an RF tower. For example, height restrictions in an area could limit the placement of an RF tower in a particular medium- to high-density area. Future development of land use plans and changes in land use laws that govern an area could be incompatible with actual existing land uses and, therefore, could lead to adverse impacts on land use.

Long-term negligible adverse impacts would be expected on commercial and industrial lands. The impacts would be negligible because towers are generally compatible with commercial and industrial structures, the density of development, and local zoning for these types of lands.

Short-term and long-term minor adverse impacts would be expected on military lands. The placement of an RF tower on an installation could have minor long-term impacts on the installation if land use was altered to accommodate a new RF tower. Impacts would vary based on the location of the tower.

Recreation. There are several potential sources of long-term minor adverse impacts on recreational areas under this alternative, including the clearing and grading of land for the RF site footprint, the construction of infrastructure necessary to install and operate the RF site (access road, utility corridor, and staging areas), and the construction of the RF site features (tower and equipment building). The USCG can avoid or minimize impacts on recreation through selection of new RF sites that are not used for recreational areas or are not located near recreational areas. The USCG would avoid, to the extent practicable, public parks, recreation lands, or wildlife and waterfowl refuges.

Coastal Zone Management. Long-term minor adverse impacts would be expected. In accordance with the CZMA and COMDTINST M16475.1D, the USCG is required to carry out a proposed project in accordance with a state or U.S. territory's approved CZM plan if a project is within a designated CZM area. The USCG will need to determine if each NAIS shore-based RF equipment site is within the jurisdiction of a state or U.S. territory CZM program as the USCG determines where such equipment would be located. Proper coordination with the applicable state or U.S. territory CZM program will occur at that time. Depending on the specific CZM plan, the installation of a new shore-based RF tower would most likely require a consistency determination to ensure that the proposed activity would be consistent with the CZM plan. Each site-specific NEPA document will include information concerning the CZM plan consistency of the new shore-based RF tower and mitigation measures, as appropriate.

Coastal Barriers. Long-term minor adverse impacts would be expected. The likelihood exists that siting of NAIS shore-based RF equipment would be within the CBRS. Although CBRA prohibits most Federal spending in designated CBRS units, the construction, operation, maintenance, and rehabilitation of USCG facilities is exempt from this provision under 16 U.S.C. 3505. This exempted status is not applicable to the acquisition of land within the CBRS. Once the USCG determines where the proposed NAIS shore-based RF equipment sites would be located, proper coordination with the USFWS will be conducted, as necessary, to determine if the sites are within CBRS units and to take the necessary actions to comply with the CBRA.

4.9.3 Combination of Collocations and New Tower Builds Alternative

General Land Use Categories. Collocating AIS equipment on existing structures allows land uses to remain the same and compatible with existing zoning laws. This alternative offers fewer impacts on land use by helping to avoid sensitive land use areas that could otherwise be used under the All New Tower Builds Alternative.

There would be negligible impacts associated with this alternative on agricultural and residential land from collocation. However newly sited RF towers under this alternative have associated long-term adverse impacts.

Commercial and industrial areas are optimal sites for newly sited RF towers and collocation. No long-term impacts are associated with collocation or new RF towers for these types of land use categories. Commercial and industrial areas are zoned for these types of use and land use would not change through collocation.

Short-term and long-term minor adverse impacts would be expected on military lands. The placement of an RF tower on an installation could have minor long-term impacts on the installation if land use was altered to accommodate a new RF tower. Impacts would vary based on the location of the tower. No impacts would be expected from collocations on military lands.

Recreation. Under this alternative, impacts on recreational areas could range from short-term minor impacts related to construction of new RF sites to long-term minor impacts related to the placement of new permanent features within recreational areas. The impacts on recreation resulting from collocations are more likely to be minor, particularly if the AIS equipment is mounted on an existing tower, which would require no additional land area. The short-term impacts on recreational areas resulting from construction activities and the long-term impacts resulting from the placement of RF sites in recreational areas are discussed in **Section 4.8.2**.

Coastal Zone Management. Long-term minor adverse impacts might be expected for new tower builds as described in **Section 4.8.2**. No impacts would be expected for collocations.

Coastal Barriers. Long-term minor adverse impacts might be expected for new tower builds as described in **Section 4.8.2**. No impacts would be expected for collocations.

4.9.4 All Collocations Alternative

General Land Use Categories. Under this alternative all the RF sites would be collocated on existing structures. AIS equipment would be mounted on existing towers, bridges, or buildings. Although the extent of renovations required to implement this alternative would vary depending upon the suitability of the existing site and the extent of modifications needed, no additional land would be required to implement this alternative.

Recreation. Since the area of land available for recreational purposes would be unaffected, collocating the 450 RF sites would have no long-term impact on recreation resources and no mitigation would be warranted.

Coastal Zone Management. No impacts would be expected.

Coastal Barriers. No impacts would be expected.

4.10 Infrastructure

Impacts on infrastructure are evaluated based on their potential for disruption or improvement of existing levels of service and additional needs for energy consumption and transportation patterns and circulation. Impacts might arise from physical changes to circulation, construction activities, introduction of construction-related traffic on local roads or changes in daily or peak-hour traffic volumes, and energy needs created by either direct or indirect workforce and population changes related to implementation activities. In considering the basis for evaluating the significance of impacts on solid waste, several items are considered. These items include evaluating the degree to which the proposed implementation of the NAIS project could affect the existing solid waste management and capacity landfill. An effect might be considered adverse if a proposed action exceeded the capacity of a utility.

4.10.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. No collocated or newly built shore-based RF sites would be established. No impacts on infrastructure would be expected.

4.10.2 All New Tower Builds Alternative

Utilities. For those areas in undeveloped settings proposed for construction of a new NAIS shore-based RF tower, more extensive construction activities could be required to access available electric and communication services. For the purpose of this analysis, it is assumed that each site could require up to 2 miles of trenching to access required utilities.

Short-term minor adverse impacts on utility quality and availability is anticipated unless construction, excavation, or maintenance activities result in actual damage to a utility system or installation of a utility requires an interruption of surrounding service. Care would be taken to avoid existing utility lines and the USCG would coordinate with local and regional utility service providers to avoid unnecessary damage or interruptions.

Solid Waste. No impacts would be expected. Normal operation of an RF site requires no solid waste collection and disposal services. However, it is probable that some amount of waste would be generated

during construction activities that would require disposal. Short-term minor adverse impacts would result from C&D waste produced during construction. Solid waste generated from the proposed construction activities would consist of building materials such as solid pieces of concrete, metals (conduit, piping, and wiring), and lumber. Contractors would be required to recycle C&D waste to the greatest extent possible as part of USCG policy, and any recycled C&D waste would be diverted from landfills. Normal operations of the shore-based RF sites would not require solid waste collection and disposal services. The amount of waste generated would not cause a significant impact on local or regional solid waste management resources.

Transportation Network. Construction of facilities and access roads could result in short-term impacts on local or regional roadway traffic. Such impacts might include road closures or delays resulting from the movement of construction equipment and vehicles. In the event there is the potential for adverse impacts that significantly affect the environment, the USCG would endeavor to eliminate or reduce impacts by implementing the following measures: storing construction vehicles and equipment onsite during construction, posting appropriate signage on affected roadways, and providing timely notification of potential roadway closures to area residents.

Generally, traffic levels on rural roads are relatively low (i.e., little or no congestion). Since RF sites are not continually occupied and maintenance-related visits are infrequent and involve a small number of people, vehicular traffic into and out of any existing site associated with this project would be minimal. Minimal traffic would also be expected at potential unused or undeveloped sites. It is anticipated that the operation and maintenance of the RF sites would not result in significant impacts on transportation and circulation. In addition, BMPs such as dust suppression, erosion control, and soil compaction would be used during new road construction activities to reduce any potential impacts.

4.10.3 Combination of Collocations and New Tower Builds Alternative

Utilities. Short-term minor adverse impacts would be expected for new tower builds as described in **Section 4.11.2**. No impacts would be expected for collocations.

Solid Waste. The Combination of Collocations and New Tower Builds Alternative would have similar impacts on solid waste as those described in **Section 4.11.2**.

Transportation Network. The Combination of Collocations and New Tower Builds Alternative would have similar impacts on transportation as those described in **Section 4.11.2**. However, for those areas where collocation would occur, existing transportation networks would already be in place and little to no new access road would be needed.

4.10.4 All Collocations Alternative

Utilities. No impacts would be expected under this alternative.

Solid Waste. The All Collocations Alternative would have similar impacts on solid waste as those described in **Section 4.11.2**.

Transportation Network. The All Collocations Alternative would have similar impacts on transportation as those described in **Section 4.11.2**. However, existing transportation networks would already be in place and little to no new access road would be needed.

4.11 Hazardous Substances

Impacts on hazardous materials and waste management would be considered significant if a Federal action resulted in noncompliance with applicable Federal and USCG regulations, or increased the amounts generated or procured beyond current USCG waste management procedures and capacities. Impacts on pollution prevention would be considered significant if the Federal action resulted in worker, resident, or visitor exposure to these materials, or if the action generated quantities of these materials beyond the capability of current management procedures.

4.11.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. No collocated or newly built shore-based RF sites would be established. No impacts would be expected.

4.11.2 All New Towers Build Alternative

No adverse impacts would be expected. It is anticipated that the All New Towers Build Alternative would not generate a substantial amount of hazardous materials and waste as a result of construction activities and operation of the NAIS complex.

Hazardous Materials. Relevant hazardous materials would include batteries, paint, diesel fuel, and oil. Products containing hazardous materials would be procured and used during the proposed construction. It is anticipated that the quantity of products containing hazardous materials used during construction would be minimal and their use would be of short duration. Contractors would be responsible for the management of hazardous materials, which would be handled in accordance with Federal and state regulations. Therefore, no adverse impacts from hazardous materials usage would be expected.

Hazardous Waste. It is anticipated that the quantity of hazardous wastes generated from proposed construction and operational activities would be negligible. During the operation of the NAIS complexes, standard maintenance would occur. This would include routine maintenance and upkeep of the site (e.g., repairing and replacement of system components) so that mission and operational requirements are met. Routine maintenance would include servicing, cleaning, and repairing electronic equipment within the prefabricated shelter or on the tower itself. In addition, regular maintenance of the backup generators would require changing oil and filters. Contractors would be responsible for the transportation and disposal of hazardous wastes, which would be handled in accordance with Federal and state regulations. Therefore, no adverse impacts from transport, storage, and disposal of hazardous wastes would be expected.

Asbestos and Lead-Based Paint. Specifications for the proposed construction activities and USCG regulations prohibit the use of ACM and LBP for new construction. Therefore, no ACM or LBP would be encountered and no adverse impacts would be expected.

4.11.3 Combination of Collocations and New Tower Builds Alternative

No adverse impacts would be expected. The Combination of Collocations and New Tower Builds Alternative would have similar impacts as those described in **Section 4.12.2**. However, under the Combination of Collocations and New Tower Builds Alternative, structures scheduled for renovation to add NAIS components could contain ACM and LBP. Therefore, these facilities will need to be surveyed by the contractor for LBP and ACM prior to commencing these activities. Sampling for ACM and LBP

would occur prior to renovation activities and would be handled in accordance with USEPA and USCG policies.

4.11.4 All Collocations Alternative

No adverse impacts would be expected. The All Collocations Alternative would have similar impacts as those described in **Section 4.12.2**. However, under the All Collocations Alternative, structures scheduled for renovation to add NAIS components could contain ACM and LBP. Therefore, these facilities will need to be surveyed by the contractor for LBP and ACM prior to commencing these activities. Sampling for ACM and LBP would occur prior to renovation activities and would be handled in accordance with the USEPA and USCG policies.

4.12 Socioeconomics and Environmental Justice

Construction expenditure impacts are assessed in terms of direct impacts on the local economy (i.e., hiring of construction workers) and indirect impacts (i.e., purchase of goods and services, personal spending by construction workers). The magnitude of potential impacts can vary greatly, depending on the location of a proposed action. For example, implementation of an action that creates 10 employment positions might go unnoticed in an urban area, but could have considerable impacts in a rural region. The Proposed Action could have a significant effect with respect to the socioeconomic conditions in the surrounding area if it were to

- Change the local business volume, employment, personal income, or population that exceeds the areas's historical annual change
- Adversely affect social services or social conditions, including property values, school enrollment, county or municipal expenditures, or crime rates
- Disproportionately impact minority populations or low-income populations.

4.12.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. No collocated or newly built shore-based RF sites would be established. No impacts on socioeconomics or environmental justice would be expected.

4.12.2 All New Tower Builds Alternative

Socioeconomics. Long-term negligible to minor adverse impacts would be expected. Under the All New Tower Builds Alternative, no significant impacts on socioeconomic resources would be anticipated. Under this alternative, new construction expenditures for the shore-based RF sites would have up-front costs of an estimated \$805,000 per site. While these costs are significant on a nationwide, programmatic level, the construction of new towers is expected to be dispersed around the country so no single area would see the construction of multiple towers. Construction costs from tower construction would be slightly higher in rural areas because construction workers and material would have to travel farther, and might have higher indirect costs (e.g., temporary housing). Overall, the impacts on local economics would be negligible because of low cumulative construction costs and the short, 6-week construction timeline. These costs would have minimal impacts on local employment and the local economy. Placement of a tower is unlikely to change an area's population or population trends.

Construction of towers in medium- to high-density residential areas might have long-term minor adverse impacts based on reduced property values and reduced public safety from accidents associated with the

individual tower. Concerns over property value and safety in residential areas should be anticipated under this alternative. However, the USCG would have some flexibility in the exact siting of NAIS towers.

Environmental Justice. No impacts would be expected. The potential for impacts on minority and low-income populations is based on the evaluation of specific site characteristics. Except in situations where a tower is placed in areas with a disproportionate percentage of low-income or minority populations, no adverse impacts on environmental justice would be expected.

4.12.3 Combination of Collocations and New Tower Builds Alternative

Socioeconomics. Impacts on Socioeconomics under this alternative would be the same as described in **Section 4.12.2**. Under the Collocations and New Tower Builds Alternative, no significant impacts on socioeconomic resources would be anticipated. Expenditures would be less than the All New Tower Builds Alternative because a majority of the sites would be collocated with lower up front construction costs than building all new towers. While these costs are significant on a nationwide, programmatic level, the construction costs of new towers under this alternative would be low and highly dispersed around the country. Socioeconomic impacts from the construction of an individual tower would be the same as under the All New Tower Builds Alternative. Overall, the impacts would be negligible because of low cumulative construction costs and the short, 6-week construction timeline. These costs would have minimal impacts on local employment and the local economy.

Environmental Justice. Impacts on Environmental Justice under this alternative would be the same as described in **Section 4.12.2**.

4.12.4 All Collocations Alternative

Socioeconomics. Under this alternative the USCG would collocate all AIS equipment on existing structures. The impacts on socioeconomics and environmental justice under this alternative would be negligible and would be from the very short installation timeframe, space leasing costs, and periodic maintenance costs. There would be no expenditures that would have more than a negligible effect on economic indicators in areas.

Environmental Justice. Impacts on Environmental Justice under this alternative would be the same as described in **Section 4.12.2**.

4.13 Human Health and Safety

If implementation of the proposed project were to substantially increase risks associated with the safety of construction personnel, contractors, or the local community, or substantially hinder the ability to respond to an emergency, it would represent a significant impact. Impacts were assessed based on the potential impacts of construction and operational activities.

4.13.1 No Action Alternative

Under the No Action Alternative, the USCG would not implement the NAIS project. No collocated or newly built shore-based RF sites would be established. Therefore, the No Action Alternative would have no adverse impact on public safety although the beneficial impacts gained by implementation of the Proposed Action would not be realized.

4.13.2 All New Tower Builds Alternative

Short-term minor adverse impacts would be expected during construction projects associated with the All New Tower Builds Alternative. Implementation of the All New Tower Builds Alternative would slightly increase the short-term risk associated with construction contractors performing work at the chosen project sites during the normal workday because the level of such activity would increase. Contractors would be required to establish and maintain safety programs. The construction of the proposed shore-based RF site and access road would not pose a safety risk to other personnel or to activities within the vicinity of the chosen project area. Work areas surrounding construction activities would be fenced and appropriate signs posted to further reduce safety risks to the public. No impacts regarding fire hazards or public safety would be expected to occur within the vicinity of the construction areas.

The proposed operating power of the radio transmitters at an NAIS site would be a maximum of 50 watts, with frequencies ranging from approximately 156 to 414 MHz. Based on this operating power, it is reasonable to assume that the potential for harmful exposure to RF radiation would be extremely low. In addition, the change in broadcast frequencies resulting from the technology upgrades would not significantly affect the safety factor. At each tower, only two of the four antennas would transmit signals; the other two antennas would receive signals, and receiving signals poses no exposure risk. The transmitters would not operate continuously; they would only generate radio waves while being used to communicate with vessels. The risk of exposure is further minimized by the fact that the towers would be between 150 and 200 feet tall. The distance between the antennas and human populations would be too great to present a significant exposure risk. There is currently no research that proves that harmful biological impacts can result from exposure to low-level RF radiation (FCC 1999). A significant impact could occur if exposure limits to the occupational or general population exceeded the maximum PELs; however, the USCG would design the towers and would implement safety measures to ensure that exposure limits are not exceeded. To protect maintenance workers, NAIS tower sites would be temporarily shut down during maintenance activities that would occur immediately next to an antenna. In addition, the proposed communication towers would meet guidelines set forth in USCG COMDTINST M10550.25A, *Electronics Manual*.

The data provided by implementation of the proposed NAIS project would support all of the nation's maritime interests—from the safety of ports through collision avoidance, to the safety of the nation through detection and classification of vessels when they are still thousands of miles offshore. Long-term beneficial impacts on public safety (reduced loss of human life and property) from an operating NAIS and the avoidance of a terrorist attack would be expected. The following public safety benefits would also be expected.

Navigation Safety. Data available through implementation of the proposed NAIS project would be used to enhance navigation safety through its use in support of vessel traffic management, mobility, and AtoN missions. NAIS would increase situational awareness and optimize vessel traffic flow by identifying vessels and their intentions, assisting in target tracking, simplifying the exchange of navigation information, and providing additional pertinent information to assist in collision avoidance and voyage planning, such as local navigation warnings, AtoN outages, and emergency chart corrections.

The data from NAIS would also be used to analyze and assess navigational requirements or improvements that might be necessary for navigational safety, mobility, and AtoN management. Benefits from such monitoring and analysis include more effective ships routing, waterway management, port and harbor planning, and increased safety-related information exchange.

If implemented, NAIS would have the ability to provide vessel traffic management services beyond those currently existing in locations outside of VTS areas. This would include tracking and communications

capability required to manage vessel movements during an emergency or high-density traffic situation. It could also include monitoring of compliance with existing vessel traffic management regulations, such as vessel routing schemes, regulated navigation areas, mandatory ship reporting systems, safety and security zones, transits of high-value assets, management of marine events, and regattas, and other such requirements (USCG 2006).

Vessel Movement Anomaly Detection. NAIS data would be provided to systems that perform analyses to identify anomalies in the behavior of tracked vessels (e.g., erratic course/speed, loitering, estimated time of arrival, or sailing plan deviations, apparent disabling of the AIS transceiver). AIS information will be used for all maritime security purposes including enforcement of security zones, protection of critical assets and infrastructure, and other risk-reduction measures. NAIS capability would be used to monitor the normal movement of AIS-equipped vessel traffic to better identify anomalies and to monitor the location and movement of vessels of particular interest, including those which might present a threat as well as high-value vessels that might be threatened (USCG 2006).

Correlation of AIS Data with Other Information. AIS data will be correlated with information received by other means and contained in other systems to provide operational commanders with complete MDA information. AIS data would be provided to appropriate systems to be automatically correlated with data such as watch lists, cargo data, or other data sets for the detection of vessels of interest for law enforcement, counterterrorism, or other operations (USCG 2006).

SAR Operations. NAIS data would be used for SAR operations. During a distress, it is often necessary to coordinate a response with private vessels that are in the vicinity of the incident. With the use of AIS tracking data, SAR coordinators can more easily identify, communicate, plan, and work with other responding vessels to prosecute a SAR response. AIS-equipped vessels in distress in an area of AIS coverage would be easier to locate and identify through the capabilities provided by NAIS (USCG 2006).

Transmission of Standard AIS Messages. The USCG would have the ability to transmit standard AIS messages, including safety- and security-related text messages to AIS-equipped vessels in specific areas. Appropriate commands would have the ability to send a variety of messaging, such as sending individual messages to specific vessels or periodic or repeated messages to all ships in a geographic area, including interrogation and assignment messages (USCG 2006).

Maritime Incident Investigation. NAIS data would be used to investigate maritime incidents (such as collisions, grounding, criminal acts, and environmental accidents) by providing a detailed record of the actual event. This could also include previous transits over a period of years of the vessel or vessels involved in the incident (USCG 2006).

4.13.3 Combination of Collocations and New Tower Builds Alternative

The Combination of Collocations and New Tower Builds Alternative would have similar impacts on safety as those described in **Section 4.13.1**. Collocation facilities would already house communication towers which transmit radio waves. Current RF radiation associated with the ongoing missions at collocated facilities would continue at existing levels. It is anticipated that the proposed NAIS towers would not substantially increase RF radiation at collocated facilities.

The public safety benefits of NAIS are described in **Section 4.13.2**.

4.13.4 All Collocations Alternative

The All Collocations Alternative would have similar impacts on safety as those described in **Section 4.13.1**. However, under the Combination of Collocations and New Tower Builds Alternative, NAIS sites would be constructed on property which would likely already house communication towers which transmit radio waves. Current RF radiation associated with the ongoing mission at collocated facilities would continue at existing levels. It is anticipated that the proposed NAIS sites would not substantially increase RF radiation at collocated facilities.

The public safety benefits of NAIS are described in **Section 4.13.2**.

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5. Cumulative and Other Impacts

5.1 Introduction

A discussion of the potential cumulative impacts of a proposed action and alternatives is required by NEPA and agency-implementing regulations. The CEQ defines cumulative impacts as the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR 1508.7). Informed decisionmaking can be served through consideration of cumulative impacts.

Cumulative impacts analysis captures the impacts that result from a proposed action, in combination with the combined impacts of other similar past, present, or reasonably foreseeable future actions, regardless of the entity that implements them. Cumulative impacts are considered in the time and geographic contexts. In the case of this analysis, the relevant timeframe context includes the implementation and operational phases of the proposed action. The geographic context is the large geographic area being considered. As discussed in **Section 1.2.5**, the Proposed Action involves a large geographic area, spanning coastal areas and selected inland waterways, as well as offshore locations, in essentially the entire United States plus other strategic locations. Given this large geographic area of potential impacts, the potential impacts from constructing individual towers becomes diluted.

When applying the concept of cumulative impacts to a programmatic analysis, some additional consideration must be given to existing uncertainty associated with specific locations that will be selected in the future for the installation of AIS equipment and associated infrastructure development, as applicable. In addition, the concept of “reasonably foreseeable” has been defined as “sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision.” *City of Shoreacres v. Waterworth*, 420 F.3d 440 (5th Cir. 2005), quoting *Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir. 1992). This interpretation of “reasonably foreseeable” should be carried forward in assessing cumulative impacts in the context of this programmatic analysis. The reasonably foreseeable standard has an important role in constraining cumulative impact analysis to a discussion of impacts that are more likely than not, as opposed to impacts that are only speculative.

In part to accommodate the issues of uncertainty, the PEIS incorporates the concept of “tiering.” CEQ encourages the use of tiering “to eliminate repetitive discussions of the same issues and focus on issues ripe for decisions at each level of environmental review” (40 CFR 1502.20). Tiering is applied to environmental documentation of general matters and broad concepts (e.g., national programs or policy statements) with subsequent site-specific actions intended to be addressed by subsequent narrower site-specific environmental analyses (e.g., an environmental assessment of a tower construction project identified some time in the future). Such subsequent environmental analyses are intended to incorporate the PEIS by reference and concentrate solely on the site-specific issues then ripe for analysis (40 CFR 1508.28).

Given the relatively small footprint of potential construction projects or equipment installations under the proposed implementation of the NAIS project, the wide geographic separation of locations affected by these projects, and the ongoing uncertainty relative to the specific sites to be selected and the types of infrastructure to be utilized, cumulative impact assessment is particularly relevant to the site-specific environmental documentation to be tiered off of this PEIS. However, some generalizations can be formulated and are presented below.

5.2 Reasonably Foreseeable Future Actions

5.2.1 Other USCG Programs

Within the USCG, cumulative impacts would be assessed within the context of how implementation of the proposed NAIS project would combine with other existing or developing USCG data transmission/collection and tower program impacts to produce an additive effect. Relevant USCG programs were discussed in **Section 2** and are summarized below.

It is the practice of the USCG to collocate antenna sites and share telecommunication infrastructure for systems from different programs whenever technically feasible. Therefore, it would be anticipated that NAIS equipment would be integrated into existing sites for the USCG programs described below, where possible, or would be collocated with new sites as they develop. In such a case, because infrastructure would be shared, incremental cumulative impacts from adding the NAIS component to these sites would be a small subset of the overall site development plan and thus considered to be a negligible cumulative impact. Further, site and infrastructure sharing could be viewed as environmentally beneficial as compared to the impact of developing discrete equipment locations constructed for a single purpose.

National Distress and Response System Modernization Project (Rescue 21). The National Distress and Response System (NDRS), the USCG's short range VHF-FM radio system, consists of approximately 300 remotely controlled VHF radios and antenna high-level sites located throughout the terrestrial regions of the continental United States (including the Great Lakes and all major inland bays and waterways), Alaska, Hawaii, the Caribbean, and Guam. The NDRS forms the backbone of the USCG's Short Range Communication System. It uses VHF-FM radios to provide two-way voice communications coverage in coastal areas and navigable inland waterways where commercial or recreational traffic exists. The primary mission of the NDRS is to provide the USCG with a means to monitor the international VHF-FM distress frequency and to coordinate SAR response operations. Its secondary mission is to provide command and control communications for virtually all USCG missions.

Currently the NDRS consists of approximately 300 remotely controlled VHF radios and antenna high-level sites, and the USCG estimates that 377 sites are needed to provide full coverage of the coastal zone and inland waterways (USCG 2002). Modernization of the NDRS was Congressionally mandated by the *Department of Transportation and Related Agencies Appropriations Bill, 2002*. This bill states that the NDRS modernization would be fully deployed by Fiscal Year 2006 (USCG 2002).

Nationwide Differential Global Positioning System. The purpose of the National Differential Global Positioning System (NDGPS) is to provide accurate positioning and location information to travelers, emergency response units, and other customers. The system provides 1- to 3-meter navigation accuracy. This will improve collision notification systems, enable cooperative vehicle-highway collision-avoidance systems, and provide more accurate in-vehicle route guidance systems.

The USCG is a key member of the seven-agency partnership for the NDGPS. The other members of the project are the U.S. Air Force, Federal Railroad Administration, USACE, Federal Highway Administration, NOAA, and the Office of the Secretary of the U.S. Department of Transportation. Under Phase I of the proposed expansion, at least one reference station would provide a usable NDGPS transmission to a global positioning system user anywhere in the continental United States and portions of Alaska by the year 2000. Under Phase II, differential corrections from at least two reference stations (dual coverage) would be available anywhere in the continental United States by 2002. Reference station operation and maintenance are also considered during the 15-year life of NDGPS, as are actions that occur during decommissioning (DOT 1999).

Ports and Waterways Safety Systems. PAWSS is a major acquisition project to build new VTS where necessary and replace existing systems. It is also a process that reaches out to port stakeholders to comprehensively assess safety and identify needed corrective actions. The PAWSS VTS project is a national transportation system that collects, processes, and disseminates information on the marine operating environment and maritime vessel traffic in major U.S. ports and waterways. The PAWSS VTS mission is monitoring and assessing vessel movements within a Vessel Traffic Service Area, exchanging information regarding vessel movements with vessel and shore-based personnel, and providing advisories to vessel masters. Other USCG missions are supported through the exchange of information with appropriate USCG units. A major goal of the PAWSS VTS is to use AIS and other technologies that enable information gathering and dissemination in ways that add no additional operational burden to the mariner (USCG 2005).

Integrated Deepwater Systems Program (“Deepwater Program”). Many of the USCG’s most critical missions—countering terrorist threats, rescuing mariners in distress, catching drug smugglers, stopping illegal migrants, and protecting the marine environment—demand forces that are able to operate effectively across a broad geographic spectrum, from overseas operating areas to U.S. EEZ, coastal, and port regions. USCG deepwater cutters and aircraft are designed to operate throughout these diverse environments. They comprise the first line of the USCG’s layered defense against threats to America’s homeland and maritime security.

Current USCG Deepwater assets are aging and technologically obsolete. They lack essential speed, interoperability, sensor, and communication capabilities, which in turn limit their overall mission effectiveness and efficiency. To address these shortfalls, the USCG established the Deepwater Program to replace and modernize its aging force of cutters and aircraft, and their supporting command-and-control and logistics systems. These new assets, which possess common systems and technologies, common operational concepts, and a common logistics base, will give the USCG a significantly improved MDA, as well as the improved ability to intercept and engage activities that pose a direct threat to U.S. sovereignty and security. The Deepwater Program is the largest and most innovative acquisition in the USCG’s history and is expected to be completed in approximately 20 years.

The Deepwater Program will ensure that the USCG and the nation has cutters, aircraft, and command-and-control systems that can capably defend against maritime threats far out to sea, before they can reach U.S. citizens, territory, or vital interests.

5.2.2 Other Communications Towers

Communications towers, such as cellular telephone transmission towers, have proliferated in recent years and can be seen in business parks, industrial areas, neighborhoods, shopping malls, and along rural highways. Towers follow major highways and are found in cities, suburbs, and towns across America. While towers are seen everywhere today, cellular companies are under pressure to expand their networks’ geographical boundaries due to increasing demand for wireless communications coverage (Wikle 2002).

This proliferation of antennas is the result of an increasing demand for wireless services and new technology (Tuesley 1999). In the United States, demand for wireless service translated into approximately 1,950,000 subscribers in 2005 (CTIA 2005). There was an approximate 85 percent increase in the number of cellular telephone service subscribers in the United States between 1995 and 2005. In 2001, the Cellular Telecommunications Industry Association (CTIA) reported that there were approximately 128,000 cellular telephone communications towers installed throughout the United States (CTIA 2005 and Wikle 2002). In June 2005, the CTIA reported that this number had grown to approximately 178,025 cellular telephone communications towers (CTIA 2005), which is a 20 percent increase since 2001.

5.3 Cumulative Impact Analysis by Resource Area

Cumulative impacts assessment is relevant to all resource categories analyzed in **Section 4** of this PEIS. However, assessing cumulative impacts for many resource areas on a regional or national basis for unknown future NAIS shore-based RF sites would be purely speculative at the PEIS level. Therefore, the following cumulative impacts discussion of individual resource categories is focused solely on those categories that were identified as having a likelihood for potential cumulative impacts.

Biological Resources. Within this category, there is particular concern with respect to potential cumulative impacts of communications towers on migratory birds. A detailed discussion of the potential impacts on migratory birds from the proposed implementation of the NAIS project is presented in **Section 4.6.2**. According to a USFWS representative, “The Service believes that the large number of towers that already exist probably does constitute a cumulative impact on migratory birds, and with the proliferation of towers that is expected over the next decade or so, that impact is going to increase exponentially. The Service feels that cumulative impacts are already significant and are probably going to become more significant ...” (Willis 1999).

On a national basis, any new impacts on migratory birds due to implementation of the proposed NAIS project could likewise be considered as a cumulative impact when viewed in context of the thousands of towers across the United States that cause similar impacts (USFWS 2000). On a regional basis, the proposed implementation of the NAIS project could have additional cumulative impacts on particular species or groups of species where new NAIS towers are within particular flyways. For example, a new NAIS tower serving an inland waterway within a particular flyway could have direct adverse impacts on a certain species of bird using that flyway. Within the same flyway, an additional new NAIS tower sited on the shoreline could have additional, cumulative impacts on the particular species as that species makes its way north or south during its migrations.

Mitigation of cumulative impacts on migratory birds would be accomplished by those means identified in **Section 4.6.2** relating to tower height, lighting, type of structure, or site location, among other factors.

Cultural Resources. A detailed discussion of the potential impacts on cultural resources from the proposed implementation of the NAIS project is presented in **Section 4.7**. With respect to cumulative cultural resource impacts, it is unlikely that multiple, newly installed NAIS shore-based RF structures would cumulatively impact any single cultural resource. This conclusion is based upon the fact that NAIS would be implemented within a broad geographic area, as described in **Section 5.1**. In the unlikely event that the All Tower Builds Alternative was implemented, the USCG estimates that approximately 450 new shore-based RF structures would need to be installed to achieve the required nationwide coverage. As these 450 new shore-based RF sites would be spaced along 95,000 miles of coastline and inland waterways, it is unlikely that multiple NAIS shore-based RF sites would be installed close enough to one another to cause a cumulative impact on any discrete cultural resource.

Cumulative cultural resource impacts could occur from the proposed implementation of the NAIS project in two different ways. First, installation of new AIS equipment, either on existing structures, or on newly built towers, could lead to cumulative impacts on a discrete cultural resource where the particular resource is already impacted by similar types of equipment, such as the visual cluttering of a cultural resource by cellular communications towers. Secondly, installing new AIS equipment at or near a particular category of cultural resource in multiple sites nationwide could also lead to a cumulative impact on that category of cultural resource. For example, installing one new AIS receiver on a single historic bridge could have an adverse effect on that particular bridge. Installing AIS receivers on multiple historic bridges nationwide could lead to cumulative impacts on historic bridges as a category.

Mitigating cumulative impacts on cultural resources would be accomplished through the mitigation of individual cultural resource impacts at the site-specific implementation level. Specific information about specific potential mitigation measures is presented in **Sections 3.7 and 4.7**.

Visual Resources. A discussion of the broad issues associated with visual resources and impacts from communications towers is presented in **Sections 3.9 and 4.9**. If visual impacts from the proposed implementation of the NAIS project are identified at multiple sites, the potential for significant cumulative visual impacts increases. Cumulative visual impacts could also result where a new NAIS tower contributes to the visual clutter caused by other existing towers in a discrete area.

In the course of the proposed implementation of the NAIS project, the USCG would give consideration to the potential negative cumulative impacts on visual resources that could result from installing NAIS equipment on new towers. The USCG would address this issue on a site-specific basis during the implementation phase for NAIS. Any mitigation measures would be identified and addressed in the site-specific environmental documentation that will be prepared in follow-on environmental studies, as required, that would complement the analysis in this PEIS.

5.4 The Relationship Between Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity and Irreversible or Irretrievable Commitment of Resources

NEPA regulations require that the relationship between short-term use of the environment and the impacts of such use might have on the maintenance and enhancement of long-term productivity of the affected environment be addressed. Impacts that narrow the range of beneficial uses of the environment are of particular concern. Such impacts can arise from the possibility that choosing one development option reduces future flexibility in pursuing other options, or from the possibility that giving over a parcel of land or other resource to a certain use eliminates the possibility of other uses being performed at the site. It is anticipated that implementation of the Proposed Action would not result in any impacts that would significantly narrow the range of future beneficial uses of the environment because it would not pose any long-term risks to health, safety, or the general welfare of the public communities surrounding USCG facilities. Rather, the proposed implementation of the NAIS project would be a benefit and alleviate long-term risks to health, safety, and general welfare.

NEPA regulations also require an analysis of irreversible or irretrievable impacts resulting from implementation of proposed actions or alternatives. Resources that are irreversibly or irretrievably committed to a project are those that are typically used on a long-term basis that cannot be recovered. These resources are irretrievable in that they would be used for one project when they could have been used for other purposes. Another impact that falls under the category of irretrievable commitment of resources is the destruction of natural resources that could limit the range of potential uses of the particular resource.

The proposed implementation of the NAIS project would require commitment of nonrenewable resources both for construction and long-term operations and maintenance. These resources include water, energy, lumber, sand and gravel, and metals. Use of these resources would represent an incremental effect on the regional consumption of these commodities. In addition, the NAIS project, if implemented, would commit work-force time for construction, engineering, environmental review and compliance, operation, and maintenance. All of these activities represent commitments of resources that could have been applied to projects other than NAIS. The following is a discussion of the irreversible and irretrievable commitments of resources by resource area.

There would be no irreversible or irretrievable commitment of resources with respect to noise, air quality, visual resources, land use, hazardous substances, socioeconomic resources (other than labor discussed above), or environmental justice. Where any potential irreversible or irretrievable commitments of resources are identified, they would only apply to new shore-based RF sites, especially towers that could be built under the Combination of Collocations and New Tower Builds Alternative and the All New Tower Builds Alternative. It is assumed any new shore-based RF site would be permanent once installed.

Earth Resources. Commitment of an area of land for a tower site would be permanent and would therefore result in an irretrievable commitment of earth resources. **Sections 3.4 and 4.4** present a detailed discussion of the earth resources potentially affected by the Proposed Action. Any effect implementation of the Proposed Action has on the earth resources would be an irreversible or irretrievable commitment of resources.

Water Resources. Commitment of an area of land for a new NAIS shore-based RF site could have permanent impacts on water resources, depending on the location of the site. **Sections 3.5 and 4.5** present a detailed discussion of the water resources potentially affected by the Proposed Action and alternatives. Any impact implementation of the Proposed Action has on water resources, including use of water as a resource for construction, would be an irreversible or irretrievable commitment of resources.

Biological Resources. **Sections 3.6, 4.6, and 5.3** discuss the potential impacts of RF tower structures on migratory birds. Any birds killed at proposed NAIS tower sites and resulting impacts on bird populations would be an irreversible or irretrievable commitment of resources. Any impacts on other biological resources would likely be localized and incremental, although permanent.

Cultural Resources. Ground-disturbing activities associated with the implementation of the proposed NAIS project would have the potential to result in irretrievable commitment of archaeological resources if present. Any visual impacts on historic buildings and structures through implementation of the proposed action or alternatives would be considered permanent, although it is possible that such impacts could be reversed should a site be abandoned and the tower and associated ancillary facilities and appurtenances removed.

Infrastructure. Energy consumed and waste generated and disposed of as a result of the proposed implementation of the NAIS project would be permanent, in that consumed energy through construction or operation of a facility would not be replaced and space used in solid waste management facilities for disposal of material associated with project implementation or operations would not be reversed. Transportation and drainage-related resources changed in some way through the implementation of the proposed action or future operations would be permanent.

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APPENDIX A

INTERNATIONAL AIS STANDARDS AND DOMESTIC AIS REGULATIONS

Appendix A

Carriage Requirements

Safety of Life at Sea Conventions (SOLAS)

{as amended 12/13/02}

Chapter V, Regulation 19

2.4 All ships of 300 gross tonnage and upwards engaged on international voyages and cargo ships of 500 gross tonnage and upwards not engaged on international voyages and passenger ships irrespective of size shall be fitted with an automatic identification system (AIS), as follows:

- .1 ships constructed on or after 1 July 2002;
- .2 ships engaged on international voyages constructed before 1 July 2002:
 - .2.1 in the case of passenger ships, not later than 1 July 2003;
 - .2.2 in the case of tankers, not later than the first survey for safety equipment on or after 1 July 2003;
 - .2.3 in the case of ships, other than passenger ships and tankers, of 50,000 gross tonnage and upwards, not later than 1 July 2004;
 - .2.4 in the case of ships, other than passenger ships and tankers, of 300 gross tonnage and upwards, but less than 50,000 gross tonnage, not later than the first safety equipment survey¹ after 1 July 2004 or by 31 December 2004, whichever occurs earlier; and
- .3 ships not engaged on international voyages constructed before 1 July 2002, not later than 1 July 2008;
- .4 the Administration may exempt ships from the application of the requirements of this paragraph when such ships will be taken permanently out of service within two years after the implementation date specified in subparagraphs .2 and .3;
- .5 AIS shall:
 - .5.1 provide automatically to appropriately equipped shore stations, other ships and aircraft information, including the ship's identity, type, position, course, speed, navigational status and other safety-related information;
 - .5.2 receive automatically such information from similarly fitted ships;
 - .5.3 monitor and track ships; and
 - .5.4 exchange data with shore-based facilities;
- .6 the requirements of paragraph 2.4.5 shall not be applied to cases where international agreements, rules or standards provide for the protection of navigational information; and
- .7 AIS shall be operated taking into account the guidelines adopted by the Organization. Ships fitted with AIS shall maintain AIS in operation at all times except where international agreements, rules or standards provide for the protection of navigational information.

¹ The first safety equipment survey means the first annual survey the first periodical survey or the first renewal survey for safety equipment, whichever is due first after 1 July 2004 and, in addition, the case of ships under construction, the initial survey. [See SOLAS 1/8]

Title 46, U.S. Code

{P. Law 107-295 enacted 11/25/02}

§ 70114. Automatic identification system

(a) SYSTEM REQUIREMENTS.—

(1) Subject to paragraph (2), the following vessels, while operating on the navigable waters of the United States, shall be equipped with and operate an automatic identification system under regulations prescribed by the Secretary:

(A) A self-propelled commercial vessel of at least 65 feet overall in length.

(B) A vessel carrying more than a number of passengers for hire determined by the Secretary.

(C) A towing vessel of more than 26 feet overall in length and 600 horsepower.

(D) Any other vessel for which the Secretary decides that an automatic identification system is necessary for the safe navigation of the vessel.

(2) The Secretary may—

(A) Exempt a vessel from paragraph (1) if the Secretary finds that an automatic identification system is not necessary for the safe navigation of the vessel on the waters on which the vessel operates; and

(B) Waive the application of paragraph (1) with respect to operation of vessels on navigable waters of the United States specified by the Secretary if the Secretary finds that automatic identification systems are not needed for safe navigation on those waters.

(b) REGULATIONS.—The Secretary shall prescribe regulations implementing subsection (a), including requirements for the operation and maintenance of the automatic identification systems required under subsection (a).

§ 70117. Civil Penalties

(e) PHASE-IN OF AUTOMATIC IDENTIFICATION SYSTEM.—

(1) SCHEDULE.—Section 70114 of title 46, United States Code, as enacted by this Act, shall apply as follows:

(A) On and after January 1, 2003, to any vessel built after that date.

(B) On and after July 1, 2003, to any vessel built before the date referred to in subparagraph (A) that is—

(i) a passenger vessel required to carry a certificate under the International Convention for the Safety of Life at Sea, 1974 (SOLAS);

(ii) a tanker; or

(iii) a towing vessel engaged in moving a tank vessel.

(C) On and after December 31, 2004, to all other vessels built before the date referred to in subparagraph (A).

Title 33, Code of Federal Regulations

{as amended 07/01/03,, 07/16/03, and 10/22/03}

§ 164.46 Automatic Identification System (AIS)

- (a) The following vessels must have a properly installed, operational, type approved AIS as of the date specified:
- (1) Self-propelled vessels of 65 feet or more in length, other than passenger and fishing vessels, in commercial service and on an international voyage, not later than December 31, 2004.
 - (2) Notwithstanding paragraph (a)(1) of this section, the following, self-propelled vessels, that are on an international voyage must also comply with SOLAS, as amended, Chapter V, regulation 19.2.1.6, 19.2.4, and 19.2.3.5 or 19.2.5.1 as appropriate (Incorporated by reference, see § 164.03):
 - (i) Passenger vessels, of 150 gross tonnage or more, not later than July 1, 2003;
 - (ii) Tankers, regardless of tonnage, not later than the first safety survey for safety equipment on or after July 1, 2003;
 - (iii) Vessels, other than passenger vessels or tankers, of 50,000 gross tonnage or more, not later than July 1, 2004; and
 - (iv) Vessels, other than passenger vessels or tankers, of 300 gross tonnage or more but less than 50,000 gross tonnage, not later than the first safety survey for safety equipment on or after July 1, 2004, but no later than December 31, 2004.
 - (3) Notwithstanding paragraphs (a)(1) and (a)(2) of this section, the following vessels, when navigating an area denoted in table 161.12(c) of § 161.12 of this chapter, not later than December 31, 2004.
 - (i) Self-propelled vessels of 65 feet or more in length, other than fishing vessels and passenger vessels certificated to carry less than 151 passengers-for-hire, in commercial service;
 - (ii) Towing vessels of 26 feet or more in length and more than 600 horsepower, in commercial service;
 - (iii) Passenger vessels certificated to carry more than 150 passengers-for-hire.

Note to § 164.46(a): “Properly installed” refers to an installation using the guidelines set forth in IMO SN/Circ.227 (incorporated by reference, see § 164.03). Not all AIS units are able to broadcast position, course, and speed without the input of an external positioning device (e.g. dGPS); the use of other external devices (e.g. transmitting heading device, gyro, rate of turn indicator) is highly recommended, however, not required except as stated in § 164.46(a)(2). “Type approved” refers to an approval by an IMO recognized Administration as to comply with IMO Resolution MSC.74(69), ITU-R Recommendation M.1371-1, and IEC 61993-2 (Incorporated by reference, see § 164.03). “Length” refers to “registered length” as defined in 46 CFR part 69. “Gross tonnage” refers to tonnage as defined under the International Convention on Tonnage Measurement of Ships, 1969.
- (b) The requirements for Vessel Bridge-to-Bridge radiotelephones in §§ 26.04(a) and (c), 26.05, 26.06 and 26.07 of this chapter also apply to AIS. The term “effective operating condition” used in § 26.06 of this chapter includes accurate input and upkeep of AIS data fields.
- (c) The use of a portable AIS is permissible only to the extent that electromagnetic interference does not affect the proper function of existing navigation and communication equipment on board and such that only one AIS unit may be in operation at any one time.
- (d) The AIS Pilot Plug, on each vessel over 1,600 gross tons on an international voyage, must be available for pilot use, easily accessible from the primary conning position of the vessel, and near a 120 Volt, AC power, 3-prong receptacle.

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APPENDIX B

PUBLIC INVOLVEMENT

**(NOI, INTERESTED PARTY LETTER, MAILING LIST, SCOPING RESPONSES, NOA,
INTERESTED PARTY LETTER, MAILING LIST, PUBLIC COMMENTS AND RESPONSES ON
THE DRAFT PEIS)**

PUBLIC INVOLVEMENT

(NOI, INTERESTED PARTY LETTER, MAILING LIST, SCOPING RESPONSES)

4. Alkyl(C8+)amine, Alkenyl (C12+) acid ester mixture
5. Aluminium chloride (30% or less)/ Hydrochloric acid (20% or less) solution
6. 2-(2-Aminoethoxy) ethanol
7. 2-Amino-2-hydroxymethyl-1,3-propanediol solution (40% or less)
8. Ammonium bisulphite solution (70% or less)
9. Ammonium thiocyanate (25% or less)/Ammonium thiosulphate (20% or less) solution
10. Benzyl chloride
11. N,N-bis(2-hydroxyethyl) oleamide
12. Brake fluid base mix: Poly(2-8)alkylene (C2-C3) glycols/ Polyalkylene (C2-C10)
13. glycols monoalkyl (C1-C4) ethers and their borate esters
14. Butene oligomer
15. Butyl stearate
16. Calcium alkyl (C9) phenol sulphide/ Polyolefin phosphorusulphide mixture
17. Calcium long-chain alkaryl sulphonate (C11-C50)
18. Calcium long-chain alkyl phenolic amine (C8-C40)
19. Calcium nitrate/Magnesium nitrate/ Potassium chloride solution
20. Calcium nitrate solutions (50% or less)
21. Camphor oil
22. Caramel solutions
23. Carbolic oil
24. Cashew nut shell oil (untreated)
25. Chlorinated paraffins (C14-C17) (with 50% chlorine or more, and less than 1% C13 or shorter chains)
26. Coal tar
27. Coal tar naphtha solvent
28. Coal tar pitch (molten)
29. Cobalt naphthenate in solvent naphtha
30. Coconut oil fatty acid methyl ester
31. Creosote (coal tar)
32. Creosote (wood)
33. Cresylic acid, sodium salt solution
34. Decyl acetate
35. 1,6-Dichlorohexane
36. 2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution
37. 1,3-Dichloropropane
38. Diethylene glycol diethyl ether
39. Diethylene glycol phthalate
40. Diglycidyl ether of bisphenol
41. 1,4-Dihydro-9,10-dihydroxyanthracene, disodium salt solution
42. Diisononyl adipate
43. Dinonyl phthalate
44. Diphenylamine, reaction product with 2,2,4-Trimethylpentene
45. Diphenylmethane diisocyanate
46. Ditridecyl adipate
47. Ditridecyl phthalate
48. Dodecenylsuccinic acid, dipotassium salt solution
49. Dodecylamine/Tetradecylamine mixture
50. Dodecyl diphenyl ether disulphonate solution
51. Ethyl amyl ketone
52. N-Ethylbutylamine
53. Ethyl butyrate
54. Ethylene glycol methyl butyl ether
55. Ethylene-Vinyl acetate copolymer (emulsion)
56. o-Ethylphenol
57. Ethyl propionate
58. Ferric hydroxyethylethylenediaminetriacetic acid, trisodium salt solution
59. Fish solubles (water-based fish meal extract)
60. Fluorosilicic acid (20-30%) in water solution
61. Fumaric adduct of rosin, water dispersion
62. Glycerine (83%), Dioxanedimethanol (17%) mixture
63. Glycerol polyalkoxylate
64. Icosa (oxypropane-2,3-diyl)s
65. Isopropylamine (70% or less)
66. Latex, ammonia (1% or less), inhibited
67. Latex: Carboxylated styrene-Butadiene copolymer; Styrene-Butadiene rubber
68. Ligninsulphonic acid, sodium salt solution
69. Long-chain alkaryl sulphonic acid (C16-C60)
70. Long-chain polyetheramine in alkyl (C2-C4) benzenes
71. Long-chain polyetheramine in aromatic solvent
72. Magnesium long-chain alkaryl sulphonate (C11-C50)
73. Methyl heptyl ketone
74. 3-Methyl-3-methoxybutyl acetate
75. Naphthenic Acids
76. Nitroethane, 1-Nitropropane (each 15% or more) mixture
77. o- or p-Nitrotoluenes
78. Nonyl acetate
79. Octyl decyl adipate
80. Oleylamine
81. Palm kernel acid oil
82. Palm oil fatty acid methyl ester
83. Pentaethylenehexamine
84. Phosphate esters, alkyl (C12-C14) amine
85. Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether
86. Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether acetate
87. Polyalkylene oxide polyol
88. Polybutene
89. Polyether (molecular weight 2000+)
90. Polyethylene polyamines
91. Polyglycerin, sodium salt solution (containing less than 3% sodium hydroxide)
92. Polyglycerol
93. Polyolefin amide alkeneamine/ molybdenum oxysulphide mixture
94. Polyolefin amide alkeneamine polyol
95. Polyolefin aminoester salts (mw 2000+)
96. Poly(5+)propylene
97. Poly(tetramethylene ether) glycol (mw 600-3000)
98. Potassium chloride solution (10% or more)
99. Potassium salt of polyolefin acid
100. n-Propyl chloride
101. Propylene-Butylene copolymer
102. Propylene dimer
103. Pyrolysis gasoline
104. Rosin soap (disproportionated) solution
105. Sodium alkyl (C14-C17) sulphonates (60-65% solution)
106. Sodium aluminate solution
107. Sodium petroleum sulphonate
108. Sodium tartrates/Sodium succinates solution
109. Sulpho hydrocarbon long chain (C18+) alkylamine mixture
110. Sulphurized polyolefinamide alkene (C28-C250) amine
111. Tall oil (crude and distilled)
112. Tall oil fatty acid (resin acids less than 20%)
113. Tall oil fatty acid, barium salt
114. Tall oil soap (disproportionated) solution
115. Tallow fatty acid
116. Trimethylhexamethylenediamine (2,2,4- and 2,4,4-isomers)
117. Trimethylhexamethylene diisocyanate (2,2,4-and 2,4,4-isomers)
118. Trimethylolpropane polyethoxylate
119. Trimethyl phosphite
120. Urea/Ammonium mono- and dihydrogen phosphate/Potassium chloride solution
121. Urea formaldehyde resin solution
122. White spirit, low (15-20%) aromatic

Dated: November 17, 2005.

Howard L. Hime,

Acting Director of Standards, Marine, Safety, Security, and Environmental Protection, U.S. Coast Guard.

[FR Doc. 05-23234 Filed 11-22-05; 8:45 am]

BILLING CODE 4910-15-P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

[USCG-2005-22837]

Nationwide Automatic Identification System (NAIS); Preparation of Programmatic Environmental Impact Statement

AGENCY: U.S. Coast Guard (USCG or Coast Guard), Department of Homeland Security (DHS).

ACTION: Notice of intent; notice of public meeting; request for comments.

SUMMARY: The Coast Guard announces that it intends to prepare a Programmatic Environmental Impact Statement (PEIS) as part of the environmental planning process for the Nationwide Automatic Identification System (NAIS) project. The NAIS project, a USCG and DHS Level 1 investment and major systems acquisition, was initiated as a component of implementing the Maritime Transportation Security Act of 2002. Implementation of the NAIS, in part, involves installing Automatic Identification System (AIS) equipment and related support systems on and around communications towers or other structures along 95,000 miles of coastline and inland rivers.

The NAIS project is being conducted to provide the USCG with the capability to receive and distribute information from shipboard Automatic Identification System (AIS) equipment in order to enhance Maritime Domain Awareness (MDA). The project will provide detection and identification of vessels carrying AIS equipment approaching or operating in the maritime domain where little or no vessel tracking currently exists.

AIS is an international standard, approved by the International Maritime Organization (IMO), for ship-to-ship, ship-to-shore and shore-to-ship communication of information, including vessel position, speed, course, destination, and other data of critical interest for maritime safety and security. The information provided by this system will support national maritime interests—from the safety of ports through collision avoidance, to the safety of the nation through detection and classification of vessels when they are still thousands of miles offshore.

Publication of this notice begins a scoping process that identifies and determines the scope of environmental issues to be addressed in the PEIS. This notice requests public participation in the scoping process and provides information on how to participate.

DATES: The USCG will hold a public meeting concerning the scope of the PEIS. The public meeting will be held on Thursday, December 22, 2005, at the USCG Headquarters building in Washington, DC. The public meeting will be held from 2 p.m. to 4 p.m. and will be preceded by an open house from 1 p.m. to 2 p.m. The public meeting may end later than the stated time, depending on the number of persons wishing to speak.

Comments and related material must reach the Docket Management Facility by December 23, 2005.

ADDRESSES: The public meeting and open house will be held in room number 2415 of U.S. Coast Guard Headquarters (Transport Building), 2100 Second Street SW., Washington, DC 20593.

You may submit comments identified by Coast Guard docket number USCG–2005–22837 to the Docket Management Facility at the U.S. Department of Transportation (DOT). To avoid duplication, please use only one of the following methods:

(1) *Web Site:* <http://dms.dot.gov>.

(2) *Mail:* Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590–0001.

(3) *Fax:* 202–493–2251.

(4) *Delivery:* Room PL–401 on the Plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is 202–366–9329.

(5) Federal eRulemaking Portal: <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: If you have questions on this notice, please call or e-mail Mr. David Wiskochil, NAIS Project Support Team, at 202–475–3118 or dwiskochil@comdt.uscg.mil, respectively. If you have questions on viewing or submitting material to the docket, please call Ms. Andrea M. Jenkins, Program Manager, Docket Operations, at 202–366–0271.

SUPPLEMENTARY INFORMATION:

Request for Comments

The Coast Guard requests public comments and other relevant information on environmental issues related to the proposed NAIS project. The scheduled public meeting is not the only opportunity you have to comment. In addition to or instead of providing comments at the meeting, you can submit comments to the Docket Management Facility during the public comment period (see **DATES**). The USCG will consider all comments and material received during the comment period.

All comments received will be posted, without change, to <http://dms.dot.gov> and will include any personal information you have provided. The USCG has an agreement with the Department of Transportation (DOT) to use the Docket Management Facility. Please see DOT's "Privacy Act" paragraph below.

Submitting comments: If you submit a comment, please include your name and address, identify the docket number for this notice (USCG–2005–22837) and

give the reason for each comment. You may submit your comments by electronic means, mail, fax, or delivery to the Docket Management Facility at the address under **ADDRESSES**; but please submit your comments by only one means. If you submit them by mail or delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit them by mail and would like to know that they reached the Facility, please enclose a stamped, self-addressed postcard or envelope. The USCG will consider all comments received during the comment period.

Viewing comments and documents: To view comments, go to <http://dms.dot.gov> at any time, click on "Simple Search," enter the last five digits of the docket number for this rulemaking, and click on "Search." You may also visit the Docket Management Facility in room PL–401 on the Plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Privacy Act: Anyone can search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review the Department of Transportation's Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477), or you may visit <http://dms.dot.gov>.

Public Meeting and Open House

The Coast Guard invites you to learn about the proposed NAIS project at an informational open house, and to identify and comment on environmental issues related to the proposed program at a public meeting. Your comments will help the Coast Guard identify and refine the scope of the environmental issues to be addressed in the PEIS.

In order to allow everyone a chance to speak at the public meeting, the Coast Guard may limit speaker time, or extend the meeting hours, or both. When you rise to speak, you must identify yourself, and any organization you represent, by name. Your remarks will be recorded or transcribed for inclusion in the public docket.

You may submit written material at the public meeting, either in place of or in addition to speaking. Written material must include your name and address, and will be included in the public docket.

The USCG's public meeting location at USCG Headquarters is wheelchair-accessible. If you plan to attend the

open house or public meeting, and need special assistance such as sign language interpretation or other reasonable accommodation, please notify the Coast Guard (see **FOR FURTHER INFORMATION CONTACT**) at least 3 business days in advance. Include your contact information as well as information about your specific needs.

Background and Purpose

The Maritime Transportation Security Act (MTSA) of 2002 (46 U.S.C. 70113) directed the Secretary of the Department of Homeland Security to "implement a system to collect, integrate, and analyze information concerning vessels operating on or bound for waters subject to the jurisdiction of the United States." Furthermore, Congress appropriated funds to the Coast Guard for "the acquisition and installation * * * of the shore-based universal AIS coverage system in ports nationwide." The Coast Guard will implement such a system in support of MDA through the proposed NAIS project.

AIS is an international standard (International Telecommunications Union Recommendation ITU-R M.1371-1) for ship-to-ship, ship-to-shore and shore-to-ship communication of information, including vessel position, speed, course, destination and other data of critical interest for maritime safety and security. AIS equipment is required domestically and internationally aboard major commercial vessels. AIS is a communication system that relies upon vessels to properly transmit their position, identification, speed, and other navigational information.

Certain vessels are currently subject to carriage requirements for AIS equipment. Despite the nation's critical homeland security need to track these vessels, USCG does not have the network of receivers and transmitters necessary to capture, display, and use this AIS information except in a few select port areas. The information provided by this system will support all of the nation's maritime interests—from the safety of ports through collision avoidance, to the safety of the nation through detection and classification of vessels when they are still thousands of miles offshore. The NAIS project will provide the United States with the ability to fully utilize the IMO international standard and requirements outlined in MTSA of 2002.

Although mandated by Congress, consideration of the NAIS project includes analysis of the proposed project's natural and human environmental impacts. The Coast Guard is the lead agency for

determining the scope of this review, and in this case the Coast Guard has determined that review must include preparation of a PEIS. This notice of intent is required by 40 CFR 1508.22, and briefly describes the proposed action and possible alternatives and our proposed scoping process. You can address any questions about the proposed action, the scoping process, or the PEIS to the Coast Guard NAIS Project Office (see **FOR FURTHER INFORMATION CONTACT**).

Proposed Action and Alternatives

The Proposed Action to be analyzed in the PEIS is the broad scope of implementation of the NAIS project. The PEIS will provide a general level of analysis of alternatives and environmental impacts because specific implementation sites and methods are not currently known. The PEIS will serve as a top tier environmental analysis of the general project of installing a nationwide AIS-based vessel detection, identification, tracking and communication system. Following completion of the PEIS, the USCG will conduct site-specific environmental analysis coincident with project implementation, once specific sites become known. The following alternatives for establishing shore-based antenna sites (e.g., towers) will be evaluated in the PEIS: Use of existing or currently proposed government sites; Lease of commercial sites; Construction of new sites. The preferred alternative is to implement a combination of the shore-based antenna site alternatives. The PEIS will also discuss the No Action Alternative as required under NEPA.

Scoping Process

Public scoping is an early and open process for identifying and determining the scope of issues to be addressed in the PEIS. Scoping begins with this notice, continues through the public comment period (see **DATES**), and ends when the Coast Guard has completed the following actions:

- Invites the participation of Federal, State, and local agencies, any affected Indian tribe and other interested persons;
- Determines the actions, alternatives, and impacts described in 40 CFR 1508.25;
- Identifies and eliminates from detailed study those issues that are not significant or that have been covered elsewhere;
- Allocates responsibility for preparing PEIS components;

- Indicates any related environmental assessments or environmental impact statements that are not part of the PEIS;
- Other relevant environmental review and consultation requirements;
- Indicates the relationship between timing of the environmental review and other aspects of the proposed program; and
- At its discretion, exercises the options provided in 40 CFR 1501.7(b).

Once the scoping process is complete, the Coast Guard will prepare a draft PEIS, and will publish a **Federal Register** notice announcing its public availability. (If you want that notice to be sent to you, please contact the Coast Guard Project Office point of contact identified in **FOR FURTHER INFORMATION CONTACT**). You will have an opportunity to review and comment on the draft PEIS. Additionally, the Coast Guard anticipates holding a public meeting in May, 2006 in Washington, DC to present the draft PEIS and receive public comments regarding the document. The Coast Guard will consider all comments received and then prepare the final PEIS. As with the draft PEIS, the Coast Guard will announce the availability of the final PEIS and once again give you an opportunity for review and comment.

Summary of the Proposed NAIS Project

The general NAIS concept of operations is to provide AIS functionality in support of all national maritime missions, particularly navigation safety and maritime security. NAIS is expected to consist of a system of AIS receivers, transmitters, transceivers, repeaters and other equipment located on shoreside installations and remote platforms potentially including buoys, offshore platforms, aircraft and spacecraft as needed to receive, distribute, and use the information transmitted by vessels that operate AIS equipment and transmit data to these vessels.

NAIS will send and receive AIS messages, via a very high frequency (VHF) data link, to and from AIS equipped vessels, Aids to Navigation, and search and rescue (SAR) aircraft. Nationwide AIS will leverage several types of platforms to support AIS receive and transmit infrastructure. While some support receive-only capabilities (e.g., satellites, buoys, and aircraft), others may support receive and transmit capabilities (e.g., towers and platforms). AIS message data will be transported between system components over a wide-area network (WAN) and diverse, remote site connectivity (e.g., leased analog circuits, microwave).

NAIS will process (e.g., validate, filter, etc.) and store the data. Some NAIS functions may be implemented by enhancing existing systems. These systems, while not part of NAIS, are included in the context of the systems' operations. Primarily, it is expected that these systems (e.g., Ports and Waterways Safety System [PAWSS], Sector Command Centers [SCC], Maritime Information Safety and Law Enforcement [MISLE], Vessel Traffic Services [VTS]) will provide data processing functions (e.g., vessel tracking correlation, intelligence processing, anomaly detection) and user interfaces necessary to meet all the requirements for fully using AIS data. Some users of NAIS capabilities (e.g., Deepwater assets and other government agencies) may indirectly access AIS data via other systems.

NAIS will complement other surveillance and intelligence systems greatly aiding the essential process of identifying vessels requiring further investigation and action. NAIS information will be displayed in the USCG national maritime COP and shared, along with correlated data and intelligence as appropriate, with other DHS and federal agencies. Unclassified portions of the COP will also be available to local port partners in support of security and safety operations. This information will be invaluable to agencies, such as Customs and Border Patrol (CBP), Immigration and Customs Enforcement (ICE), and the Transportation Security Administration (TSA), as it will provide real-time location data on all major cargo and other commercial vessels in the maritime domain.

Dated: November 9, 2005.

J.P. Currier,

Rear Admiral, United States Coast Guard, Assistant Commandant for Acquisition.

[FR Doc. 05-23233 Filed 11-22-05; 8:45 am]

BILLING CODE 3510-22-P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

Agency Information Collection Activities: Proposed Collection; Comment Request

AGENCY: Federal Emergency Management Agency, U.S. Department of Homeland Security.

ACTION: Notice and request for comments.

SUMMARY: The Federal Emergency Management Agency, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed revised information collections. In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)), this notice seeks comments concerning the use of the Emergency Management Institute Resident Course Evaluation Form which is used to identify problems with course materials, evaluate the quality of course delivery, facilities and instructors.

SUPPLEMENTARY INFORMATION: The Emergency Management Institute (EMI) develops courses and administers resident and nonresident training programs in areas such as natural hazards, technical hazards, instructional methodology, professional development, leadership, exercise design and evaluation, information technology, public information, integrated emergency management, and train-the-trainer. A significant portion of the training is conducted by State emergency management agencies under cooperative agreements with FEMA.

In order to meet current information needs of EMI staff and management, the EMI uses this course evaluation form to identify problems with course materials, delivery, facilities and instructors. This is a resident evaluation form. EMI staff

will use the information to monitor and recommend changes in course materials, student selection criteria, training experience, and classroom environment. Reports will be generated and distributed to EMI management and staff. Without the information it will be difficult to determine the need for improvements and the degree of student satisfaction with each course.

The respondents are students attending EMI resident courses at either the National Emergency Training Center (NETC) or at an off-site location. The evaluation form will be administered at the end of the course and will take no more than 10 minutes to complete. Contractors will scan the evaluation forms and generate the data reports using a computer program developed by a FEMA program analyst contractor. Evaluation forms are destroyed in accordance with FEMA's records retention schedule.

Collection of Information

Title: Emergency Management Institute Residential Course Evaluation Form.

Type of Information Collection: Revision of a currently approved collection.

OMB Number: 1660-0034.

Form Number: 95-41.

Abstract: Students attending the Emergency Management Institute resident program courses at FEMA's NETC will be asked to complete a course evaluation form. The information will be used by EMI staff and management to identify problems with course materials, evaluate the quality of the course delivery, facilities, and instructors. The data received will enable them to recommend changes in course materials, student selection criteria, training experience and classroom environment.

Affected Public: State, Local, or Tribal Government, Individuals or Households, and Federal Government.

Estimated Total Annual Burden Hours: 1,671 hours.

FEMA forms	Number of respondents (A)	Frequency of response (B)	Hours per response (minutes) (C)	Annual burden hours (A x B x C)
95-41	10,027	Per course	10	1,671
Total	10,027	10	1,671

Estimated Cost: There is no cost to respondents for this information collection.

Comments: Written comments are solicited to (a) evaluate whether the

proposed data collection is necessary for the proper performance of the agency, including whether the information shall have practical utility; (b) evaluate the accuracy of the agency's estimate of the

burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) enhance the quality, utility, and clarity of the information to be



16475
November 23, 2005

Dear Interested Party:

The United States Coast Guard (USCG) is announcing its intent to prepare a Programmatic Environmental Impact Statement (PEIS) for the establishment of a Nationwide Automatic Identification System (NAIS) (see Enclosure). Preparation of the PEIS is being conducted in accordance with the National Environmental Policy Act (NEPA) of 1969 [Section 102(2)(c) and its implementing regulations (40 Code of Federal Regulations Part 1500–1508)], and USCG Commandant's Instruction M16475.1D (*NEPA Implementing Procedures and Policy for Considering Environmental Impacts*).

The NAIS Project, a USCG and Department of Homeland Security investment and major systems acquisition, was initiated in response to the Maritime Transportation Security Act of 2002. The NAIS Project is being conducted to provide the USCG with the capability to receive and distribute information between shipboard and shore-side Automatic Identification System (AIS) equipment in order to enhance Maritime Domain Awareness (MDA). The project will help the USCG detect and identify vessels carrying AIS equipment approaching or operating in the maritime domain of the United States. In addition to MDA, NAIS potentially has applications in other USCG missions, including vessel traffic management, maritime safety and mobility, search and rescue, and environmental protection and response.

NAIS is expected to consist of a system of radio frequency (RF) antennas, AIS receivers, transmitters, transceivers, repeaters and other equipment located on shore-based installations and remote platforms potentially including buoys, offshore platforms, aircraft and spacecraft as needed to receive, distribute, and use the information transmitted by vessels that operate AIS equipment and transmit data to these vessels. The area of operation is expected to encompass the continental U.S. and U.S. Territories (including the Great Lakes, Western Rivers, Alaska, Hawaii, Puerto Rico, Guam and other waters thereof extending up to 2,000 nautical miles off-shore).

The Proposed Action to be analyzed in the PEIS is the broad scope of implementation of the NAIS Project. The PEIS will provide a general level of analysis of alternatives and environmental impacts because specific implementation sites and methods are not currently known. The USCG would use the PEIS to tier site-specific environmental analysis during implementation, once specific sites become known. The following alternatives for establishing shore-based antenna sites will be evaluated in the PEIS: Use of existing or currently proposed government sites; lease of commercial sites; and construction of new sites. The preferred alternative is to implement a combination of the shore-based antenna site alternatives. The PEIS will also discuss the No Action Alternative as required under NEPA.

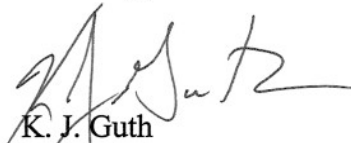
We would like to hear from the public and encourage you to submit comments and related materials. We will consider comments and related materials received by December 23, 2005. Comments may be submitted to Department of Transportation's Docket Management Facility. Please refer to the enclosed Notice of Intent for detailed instructions for submitting comments. In choosing from these means, please give due regard to the continuing difficulties and delays associated with delivery of mail through the U.S. Postal Service to Federal facilities.

We also invite the public to an informational open house and scoping meeting to be held December 22, 2005, at the USCG Headquarters building in Washington, DC. The public meeting will be held from 2:00 p.m. to 4:00 p.m. and will be preceded by an open house from 1:00 p.m. to 2:00 p.m. Please refer to the enclosed Notice of Intent for additional details.

The PEIS as well as comments and associated materials received from the public will become part of the public docket and will be available for inspection or copying in Room PL-401 on the Plaza Level of the Nassif Building, 400 Seventh Street SW, Washington DC between 9 a.m. and 5 p.m., Monday through Friday, except for Federal holidays. You can view this docket, including comments, on the Internet at: <http://dms.dot.gov> (click on "Simple Search", enter the last five digits of the docket number, "22837," and click on "Search").

If you have any questions, feel free to contact Mr. David Wiskochil, NAIS Project Support Team, at 202-475-3118 or dwiskochil@comdt.uscg.mil.

Sincerely,



K. J. Guth
Captain, U.S. Coast Guard
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Enclosure: NAIS Programmatic Environmental Impact Statement Notice of Intent, as published in the *Federal Register*

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U.S. Coast Guard Maintenance &
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Norfolk, VA 23510-9104

U.S. Coast Guard Civil Engineering
Unit, Oakland
2000 Embarcadero
Suite 200
Oakland, CA 94606-5000

U.S. Coast Guard Maintenance &
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Alameda, CA 94501-5100

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Unit, Miami
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Unit, Cleveland
1240 E. 9th Street
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Cleveland, OH 44199-2060

U.S. Coast Guard Civil Engineering
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DECLARATION OF PUBLICATION OF SAN FRANCISCO CHRONICLE

Lori Gomez

declares that:

The annexed advertisement has been regularly published
in the

SAN FRANCISCO CHRONICLE

which is and was at all times herein mentioned established as newspaper of general circulation in the City and County of San Francisco, State of California, as that term is defined by Section 6000 of the Government Code.

SAN FRANCISCO CHRONICLE

(Name of Newspaper)

901 Mission Street

San Francisco, CA 94103

From

December 4, 2005

To

December 4, 2005

Namely, on

December 4, 2005

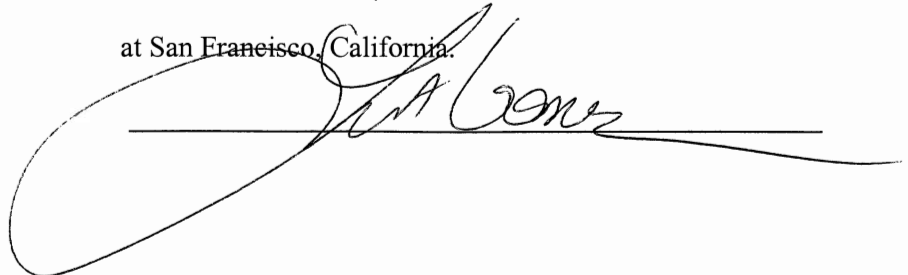
(Dates of Publication)

I declare under penalty of perjury that the foregoing is true and correct.

Executed on

12/27/05

at San Francisco, California.



**810
PUBLIC NOTICES (NON-GOV.)**

Notice of Intent to Prepare a Programmatic Environmental Impact Statement (PEIS) for the Nationwide Automatic Identification System (NAIS)

The U.S. Coast Guard (USCG) announces that it intends to prepare a PEIS as part of the environmental planning process for the NAIS project, a USCG and Department of Homeland Security major systems acquisition. The project was initiated as a component of implementing the Maritime Transportation Security Act of 2002. Implementation of the NAIS, involves installing Automatic Identification System equipment and related support systems on and around communications towers or other structures along 95,000 miles of coastline and inland rivers. The USCG is in the scoping process for preparation of a PEIS, and invites public comment. You may submit comments identified as docket no. USCG-2005-22837 to the

**810
PUBLIC NOTICES (NON-GOV.)**

Docket Management Facility at the U.S. Department of Transportation (DOT). Comments are requested by December 23, 2005. Please use only one of the following methods:
(1) Web Site: <http://dms.dot.gov>.
(2) Mail: Docket Management Facility, U.S. DOT, 400 Seventh Street, SW., Washington, DC 20590-0001.
(3) Fax: 202-493-2251.
(4) Delivery: Room PL-401 on the Plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is 202-366-9329.
(5) Federal eRulemaking Portal: <http://www.regulations.gov>. Comments become part of the public record for this action. You may also view this docket on the Internet at <http://dms.dot.gov>. If you have questions, call the NAIS Project Support Team at 202-475-3118.

**Notice of Intent and Informational
Open House and Public Meeting
Programmatic Environmental Impact
Statement (PEIS) for the Nationwide
Automatic Identification System (NAIS)**

The U.S. Coast Guard (USCG) announces that it intends to prepare a PEIS as part of the environmental planning process for the NAIS project, a USCG and Department of Homeland Security major systems acquisition. The project was initiated as a component of implementing the Maritime Transportation Security Act of 2002. Implementation of the NAIS, in part, involves installing Automatic Identification System equipment and related support systems on and around communications towers or other structures along 95,000 miles of coastline and inland rivers.

The USCG is in the scoping process for preparation of a PEIS, and invites public comment. The USCG will hold a public meeting on December 22, 2005, in room number 2415 of USCG Headquarters, 2100 Second Street SW, Washington, DC 20593. The public meeting will be held from 2 p.m. to 4 p.m. and will be preceded by an open house from 1 p.m. to 2 p.m.

You may submit comments identified as docket no. USCG-2005-22837 to the Docket Management Facility at the U.S. Department of Transportation (DOT). Comments are requested by December 23, 2005. Please use only one of the following methods:

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- (2) Mail: Docket Management Facility, U.S. DOT, 400 Seventh Street, SW., Washington, DC 20590-0001.
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Open House and Public Meeting
Programmatic Environmental Impact
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- (2) Mail: Docket Management Facility, U.S. DOT, 400 Seventh Street, SW., Washington, DC 20590-0001.
- (3) Fax: 202-493-2251.
- (4) Delivery: Room PL-401 on the Plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is 202-366-9329.
- (5) Federal eRulemaking Portal: <http://www.regulations.gov>.

Comments become part of the public record for this action. You may also view this docket on the Internet at <http://dms.dot.gov>. If you have questions, please call the NAIS Project Support Team at 202-475-3118.

SPECIAL NOTICE

PREPARATION OF PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR A NATIONWIDE AUTOMATIC IDENTIFICATION SYSTEM

On November 23, 2005, the U.S. Coast Guard (USCG) published a Notice of Intent; Notice of Public Meeting; and Request for Comments in the Federal Register (Volume 70, Number 225, page 70862) concerning the preparation of a Programmatic Environmental Impact Statement (PEIS) as part of the environmental planning process for a Nationwide Automatic Identification System (NAIS).

The NAIS project was initiated as a component of implementing the Maritime Transportation Security Act of 2002. Implementation of the NAIS, in part, involves installing Automatic Identification System (AIS) equipment and related support systems on and around communications towers or other structures along 95,000 miles of coastline and inland rivers. The NAIS project is being conducted to provide the USCG with the capability to receive and distribute information from shipboard AIS equipment in order to enhance Maritime Domain Awareness. The project will provide detection and identification of vessels carrying AIS equipment approaching or operating in the maritime domain where little or no vessel tracking currently exists.

Publication of this notice begins a scoping process that identifies and determines the scope of environmental issues to be addressed in the PEIS. This notice requests public participation in the scoping process and provides information on how to participate. The section of the Federal Register containing the PEIS notice can be accessed via the Internet at <http://dmses.dot.gov/docimages/p83/373427.pdf>



State of New Jersey

Department of Environmental Protection

Bradley M. Campbell
Commissioner

Richard J. Codey
Acting Governor

Environmental Regulation
Office of Pollution Prevention and Right To Know
401 E. State St., 3rd floor, Trenton, NJ 08625-0423
Tel.(609) 292-3600
Fax (609) 777-1330

2005 DEC 12 PM 2:37
DEPT OF ENVIRONMENTAL PROTECTION

December 5, 2005

Docket Management Facility
U.S. Department of Transportation
406 Seventh Street, SW
Washington, D.C. 20590-0001

RE: **USCG – 2005 – 22837 - 2**
Nationwide Automatic Identification System

Dear Sir or Madam:

Thank you for your letter regarding assessing potential environmental impacts associated with the proposed establishment of a Nationwide Automatic Identification System (NAIS). Your letter announces the intent to prepare a Programmatic Environmental Impact Statement (PEIS) pursuant to the United States Coast Guard (USGC) / National Environmental Policy Act (NEPA) review process. The New Jersey Department of Environmental Protection's (NJDEP) Office of Permit Coordination and Environmental Review is responsible for coordinating the Departmental review of environmental documents prepared pursuant to the requirements of the NEPA.

We have no scoping comments on the notice of intent to prepare the PEIS. Please send six copies of the completed draft PEIS directly to the Office of Permit Coordination and Environmental Review to insure a timely, comprehensive review of the document. Also send six copies of any future New Jersey site specific NAIS NEPA documents directly to our Office.

Thank you for giving us the opportunity to review the notice of intent to prepare the PEIS.

Sincerely,

Kenneth C. Koschek
Supervising Environmental Specialist
Office of Permit Coordination and
Environmental Review

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In Reply Refer To:
 FWS/R2/OKES/
 2006-FA-0011
 ER 05/1006

United States Department of the Interior

FISH AND WILDLIFE SERVICE
 Division of Ecological Services
 222 South Houston, Suite A
 Tulsa, Oklahoma 74127
 918/581-7458 / (FAX) 918/581-7467



371830

December 8, 2005

Docket Management Facility
 U. S. Department of Transportation
 400 Seventh Street, S. W.
 Washington, D. C. 20590-0001

USCG-2005-22837-3

2005 DEC 16 A 10:32
 U.S. DEPARTMENT OF TRANSPORTATION
 Docket Management Facility

Dear Sir/Madam:

The Oklahoma Ecological Services Field Office of the U. S. Fish and Wildlife Service (Service) has reviewed the Notice of Intent to prepare a Programmatic Environmental Impact Statement (PEIS) for the Nationwide Automatic Identification System (NAIS) project published in the November 23, 2005, *Federal Register* (docket number USCG-2005-22837). We understand that the PEIS will serve as the top tier environmental analysis of the general NAIS project, and that site-specific analyses also would be conducted when specific sites are identified. We offer the following comments and recommendations for consideration by the U. S. Coast Guard (USCG) as they identify the scope of environmental issues to be addressed in the PEIS.

The NAIS project is a component of the Maritime Transportation Security Act of 2002. The project involves installing Automatic Identification System (AIS) equipment and related support systems on and around communication towers or other structures along 95,000 miles of coastline and inland rivers. The project would provide the USCG with the capability to receive and distribute information from vessels carrying AIS equipment, including vessel position, speed, course, destination and other data of critical interest to support national maritime interests and enhance Maritime Domain Awareness (MDA). Alternatives for establishing shore-based antenna sites include the 1) use of existing or currently proposed government sites, 2) lease of commercial sites, 3) construction of new sites, and 4) combination of the antenna site alternatives.

The Service is becoming increasingly concerned about the effect of communications towers on migratory birds. Tower characteristics such as height, physical design (*e.g.*, guyed, self supporting lattice, or monopole), lighting, and site location are factors in the equation concerning tower-induced bird mortality. We are particularly concerned about guyed towers over 200-feet tall. These towers are expected to have a greater impact on migratory birds than shorter, free-standing towers and co-located towers. The narrow diameter guy wires are apparently difficult for migrating birds to see both night and day, and tall guyed towers impact a much greater

volume of airspace than shorter non-guyed towers. The Federal Aviation Administration also requires aviation warning lighting for towers 200-feet tall and taller, and these lights have been reported to confuse and attract birds migrating in inclement weather conditions, which can compound bird mortality problems.

To avoid and minimize unnecessary impacts to migratory birds, we encourage the USCG to consider 1) co-locating AIS equipment on existing structures, 2) the use of self-supporting or monopole towers instead of new guyed towers, and 3) the use of unlighted towers less than 200-foot tall whenever possible. We suggest that all new towers be located in previously cleared areas, urban or suburban developed areas, road or utility rights-of-way, landscaped areas, or essentially any area that has already been disturbed and would require little or no clearing of native vegetation. We recommend avoiding construction of new towers in or near areas of high migratory bird use such as wildlife management areas (WMA), national wildlife refuges (NWR), wetlands and riparian corridors.

The McClellan-Kerr and Gruber WMAs and the Sequoyah NWR occur along the McClellan-Kerr Arkansas River Navigation System in Oklahoma. Information (including some maps) for each WMA in Oklahoma is provided on the Oklahoma Department of Wildlife Conservation's website <<http://www.wildlifedepartment.com/wmas2.htm>>. Information regarding the location of NWRs in Oklahoma can be found on the Service's website <<http://www.fws.gov/ifw2es/Oklahoma/refuges.htm>>. National Wetlands Inventory (NWI) maps provide information on the occurrence of wetlands. The NWI maps can be acquired from the appropriate State distribution center, one of six USGS Earth Science Information Center regional offices, or by calling the USGS national toll-free number: 1-800-USA-MAPS.

We appreciate the opportunity to provide comments. If you have any questions about these comments, please contact Richard Stark at 918-581-7458, extension 240.

Sincerely,



Jerry J. Brabander
Field Supervisor

cc: Team Leader, Office of Environmental Policy and Compliance,
Washington, D. C.
Director, Natural Resources Section, ODWC,
Oklahoma City, OK

K.J. Guth
Captain, US Coast Guard
2100 Second St, SW
Washington, DE 20593-0001

Re: PEIS for a Nationwide Automatic Identification System (GC06.004)

Dear Mr. Guth:

The Delaware Coastal Management Program (DCMP) is in receipt of your notice of intent to prepare a programmatic environmental impact statement for the establishment of a nationwide automatic identification system (NAIS). The proposed programmatic environmental impact statement will require a Coastal Zone Federal Consistency certification concurrence from this office if any of the proposed alternatives will have a likely impact on our coastal resources, including impacts to navigation and the Port of Wilmington. Application information and a complete list of Delaware's approved coastal zone management policies are available on-line at: <http://www.dnrec.state.de.us/dnrec2000/Divisions/Soil/dcmp/2004%20Policy%20Document.pdf>.

Please continue coordination with this office as you develop the programmatic environmental impact statement for this project. If you have any questions or state-specific data needs, please contact me at (302) 739-9283 or via email at susan.love@state.de.us.

Sincerely,

Susan E. Love
Delaware Coastal Management Program

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In Reply Refer To:
FWS/DHRC/BAPHC/ER05/1006

Ms. Andrea M. Jenkins
U.S. Department of Transportation
Docket Management Facility
400 Seventh Street, S.W.
Washington, D.C. 20590-0001

Dear Ms. Jenkins:

The Fish and Wildlife Service (Service) has reviewed the subject Notice of Intent (NOI) (Federal Register, November 23, 2005), published by the Department of Homeland Security, United States Coast Guard, to prepare a Programmatic Environmental Impact Statement (PEIS) as part of it's planning process for the Nationwide Automatic Identification System. The NOI provides a brief discussion of the proposed action and alternatives under consideration. Based upon the information provided, we have prepared the following comments pursuant to the: (1) Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.); (2) Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.); (3) Migratory Bird Treaty Act, 16 U.S.C. 703; and (4) Bald and Golden Eagle Protection Act, 16 U.S.C. 668 and other applicable Executive Orders, regulations and policies.

1. The Service concurs with the proposed priority order for selecting antenna sites, utilizing: (1) existing or currently proposed government sites; (2) lease commercial sites; and (3) construct new sites.
2. Construction of new sites should be kept to the absolute minimum necessary to accomplish the homeland security purpose. We concur with and support the proposal that new sites will undergo additional site-specific environmental review.
3. Use of existing sites, whether government or not, should be accompanied by an evaluation of impacts to fish and wildlife resources, including, threatened and endangered species, migratory birds, and aquatic animal species and habitats.

Finally, in some instances it may be necessary to retrofit already existing, approved, or proposed sites/structures to be consistent with the most current recommendations for avoidance/minimization of impacts to fish and wildlife species (e.g., type and color of strobe lights, height restrictions, guy wires, consideration for stream fluvial geomorphology for structures in/near streams). We would be happy to provide technical assistance on any activities determined to be necessary to accomplish retrofitting projects.

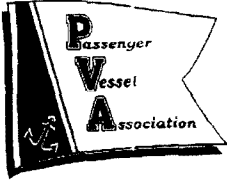
We appreciate the opportunity to comment on the Notice of Intent to prepare a PEIS for the Nationwide Automatic Identification System and anticipate future opportunities to provide additional information as site-specific environmental documents are prepared. If you have any questions, please contact me at (703) 358-2183.

Sincerely,

/s/

Dave Stout
Acting Chief,
Division of
Habitat and Resource
Conservation

379164



Statement by Passenger Vessel Association

801 North Quincy Street, Suite 200

Arlington VA 22203

Phone: 703-807-0100

Fax: 703-807-0103

Email: pva@vesselalliance.com

www.passengervessel.com

PASSENGER

VESSEL

ASSOCIATION

81-10-V-12-000 (07)

01/27/05

[USCG-2005-22837] -6

December 23, 2005

Nationwide Automatic Identification System (NAIS); Preparation of Programmatic Environmental Impact Statement

801 N. Quincy Street
Suite 200
Arlington,
VA 22203

The Passenger Vessel Association is the national trade association for U.S.-flagged passenger vessels of all types. It represents the interests of owners and operators of dinner cruise vessels, sightseeing and excursion vessels, passenger and vehicular ferries, private charter vessels, whalewatching and eco-tour operators, windjammers, gaming vessels, amphibious vessels, and overnight cruise ships.

Phone
(800) 807-8360
(703) 807-0100

PVA has been in operation for over 30 years. We currently have more than 600 vessel and associate members. Our vessel-operating members range from small family businesses with a single boat to companies with several large vessels in different locations to governmental agencies operating ferries.

Fax:
(703) 807-0103

Our associate members are key suppliers to the passenger vessel industry, including marine architects, vessel builders and decorators, insurance companies, publishers, food supply companies, computer software vendors, marine equipment suppliers, engine manufacturers, and others.

Email
pva@vesselalliance.com

Certain PVA members already must comply with current AIS carriage regulations. These include the relatively few PVA members that operate in international service and the larger number of members that operate vessels with a passenger capacity of 150 or more in Coast Guard-designated Vessel Traffic System areas.

Website
www.passengervessel.com

PVA appreciates that this docket deals with the environmental planning process for the Nationwide Automatic Identification System (NAIS) project. As you state, "Implementation of the NAIS, in part, involves installing Automatic Identification System (AIS) equipment and related support systems on and around communications towers or other structures along 95,000 miles of coastline and inland rivers. The NAIS project is being conducted to provide the USCG with the capability to receive and distribute information from shipboard Automatic Identification System (AIS) equipment in order to enhance Maritime Domain Awareness (MDA). PVA's comments today want to connect this shoreside development process with your ongoing rulemaking to expand the AIS carriage requirement.

Your October 31 announcement of your semiannual Unified Regulatory Agenda predicts an Interim Final Rule on expanded AIS carriage in February 2006.

You expect to expand the AIS carriage requirement to all waters of the United States (not just those areas with Vessel Traffic Systems, as is the case now) and to apply to all passenger vessels carrying 50 passengers or more (the current passenger carriage threshold is 150 passengers or more) or on all passenger vessels at least 65 feet in length regardless of passenger capacity.

You believe that the AIS portion of the rulemaking will affect an estimated 17,400 vessels.

The Passenger Vessel Association has repeatedly pointed out that the Coast Guard's own figures demonstrate a dramatically negative cost-benefit ratio for the applicability of AIS carriage to domestic passenger vessels. When it issued the first AIS rule, the Coast Guard suggested that the cost-benefit ratio for an expanded AIS requirement would be even worse with respect to domestic passenger vessels. It is true that the cost of AIS units has come down since that initial cost-benefit ratio was computed, but PVA is confident that the cost-benefit ratio for domestic passenger vessels is still profoundly negative, particularly with the expansion of the carriage requirement to smaller capacity passenger vessels. Nonetheless, the Coast Guard proceeded with the first rulemaking and is apparently determined to proceed with the expanded carriage rule saying that unquantifiable security benefits provide justification. In other words, the Coast Guard is asserting that security considerations trump the negative cost-benefit ratio for domestic passenger vessels.

But what security is going to be provided if the Coast Guard has no shoreside reception facilities for AIS transmissions, other than in the VTS zones? Your informational meeting of December 22, 2005, made clear that the process of putting these reception facilities in place is going to stretch out over a period of years. In fact, your

Dec 23 05 04:39p

written material distributed at that meeting indicated that the nationwide system would be fully deployed and operational no earlier than the year 2014!

Without adequate reception facilities, the Coast Guard's security justification rings hollow. No additional security will be provided by an expanded AIS carriage rule anytime in the next few years.

Why should the private sector be forced to incur costs now for AIS equipment that will transmit signals which the Coast Guard can not pick up? In such a situation, repeating the terms "security" or "maritime domain awareness" is laughable.

The Coast Guard should proceed expeditiously with its program to install the landside receiving stations necessary to receive AIS transmissions. However, during the substantial time it takes to accomplish this goal, it should defer any requirement for additional vessels to install and carry AIS equipment.

Furthermore, in your rulemaking on the expanded AIS carriage requirement and in the development of the NAIS, the Coast Guard should take into account that MTSA does not require all domestic vessels to carry AIS. Congress deliberately wrote into the AIS provision of MTSA authority for the Coast Guard to designate certain waters or geographic areas in which no vessel needs to use AIS. Presumably, these areas will be those that have relatively little maritime traffic (thus obviating the need for AIS for navigational purposes) or those places in which there are few facilities or targets that might be the venue for a security incident. Congress would not have included such an exemption provision in MTSA had it not anticipated the Coast Guard making use of it. Furthermore, MTSA also permits the Coast Guard to approve a request by the owner or operator of an individual vessel for a waiver of the AIS requirement. The existence of these MTSA exemption provisions should be taken into account in the development of the NAIS system. By eliminating geographic areas from the AIS carriage requirement, the NAIS can be implemented with fewer shore facilities, at a more reasonable cost to the taxpayer and the Coast Guard, and in a shorter time frame than currently envisioned.

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STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



December 21, 2005

Docket Management Facility
U.S. Department of Transportation
400 Seventh Street, SW.,
Washington, DC 20590-0001

Att: K. J. Guth
Captain, U.S. Coast Guard
Project Manager, Nationwide AIS Project

Re: Docket USCG-2005-22837, Nationwide Automatic Identification System (NAIS)

Dear Captain Gath:

This is in response to your notice, received on November 28, 2005, of the U.S. Coast Guard's (USCG) intent to prepare a Programmatic Environmental Impact Statement (PEIS) for the establishment of a Nationwide Automatic Information System (NAIS). The NAIS Project would help the USCG detect and identify vessels carrying AIS equipment approaching or operating in the U.S. maritime domain, and would also assist in other USCG missions. The NAIS, as presently envisioned, would consist of a system of radio frequency antennas, AIS receivers, transmitters, transceivers, repeaters and other equipment located on shore-based installations and remote platforms potentially including buoys, offshore platforms, aircraft and spacecraft needed to receive, distribute, and use the information transmitted by vessels that operate AIS equipment and transmit data to these vessels.

Your letter was circulated to all Bureaus of the Department of Environmental Protection (DEP). Because no specific facilities or construction activities have been identified, we have no specific comments at this time. However, please be advised that the Department's Office of Long Island Sound Programs administers the coastal regulatory program for the State of Connecticut. At such time as activities are planned that would directly or indirectly affect coastal resources or uses in Connecticut waters, the U.S. Coast Guard must submit a determination of consistency with the applicable provisions of Connecticut's approved Coastal Management Program in accordance with Section 307(c)(1) of the Coastal Zone Management Act of 1972, as amended, Subpart C of 15 Code of Federal Regulations (CFR) Part 930, and Section II, Part VII(c) of the State of Connecticut Coastal Management Program and Final Environmental Impact Statement. In addition, any proposed activities in Connecticut waters that would be subject to a U.S. Army Corps of Engineers Section 404 permit would also require issuance by Connecticut DEP of a Section 401 Water Quality Certificate pursuant to the Federal Clean Water Act.

Please contact Tom Ouellette of this Office at 860-424-3034 if you have any

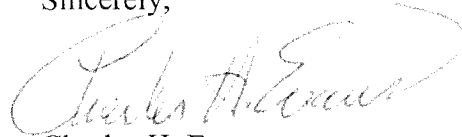
K. J. Guth, Capt., U.S. Coast Guard

-2-

December 21, 2005

questions regarding the process for review of direct federal activities in Connecticut waters.

Sincerely,

A handwritten signature in cursive script, appearing to read "Charles H. Evans".

Charles H. Evans

Director

Office of Long Island Sound Programs

CHE/TO/to

cc: David Fox, CT DEP

3 36106

13806-05-22837-8



Maryland Department of Planning

Robert L. Ehrlich, Jr.
Governor
Michael S. Steele
Lt. Governor

Anthony E. Scott
Secretary
Florence E. Barham
Deputy Secretary

November 29, 2005

Captain K. J. Guth
Project Manager, Nationwide AIS Project
United States Coast Guard
2100 Second Street, S.W.
Washington, DC 20593-0001

STATE CLEARINGHOUSE REVIEW PROCESS

State Application Identifier: MD20051129-0959

Reviewer Comments Due By: December 23, 2005

Project Description: Scoping prior to Programmatic Environmental Impact Statement concerning the establishment of the National Automatic Identification System; seek to enable Applicants to accomplish their mission

Project Location: United States of America

Clearinghouse Contact: Bob Rosenbush

Dear Captain Guth:

Thank you for submitting your project for intergovernmental review. Participation in the Maryland Intergovernmental Review and Coordination (MIRC) process helps ensure project consistency with plans, programs, and objectives of State agencies and local governments. MIRC enhances opportunities for approval and/or funding and minimizes delays by resolving issues before project implementation.

The following agencies and/or jurisdictions have been forwarded a copy of your project for their review: the Maryland Department(s) of Transportation, the Environment, Maryland Historical Trust, Natural Resources, State Police; the Maryland Office(s) of Maryland Military Department, Governor's Office of Homeland Security; and the Maryland Department of Planning. They have been requested to contact your agency directly by **December 23, 2005** with any comments or concerns and to provide a copy of those comments to the State Clearinghouse for Intergovernmental Assistance. Please be assured that after **December 23, 2005** all MIRC requirements will have been met in accordance with Code of Maryland Regulations (COMAR 14.24.04). The project has been assigned a unique State Application Identifier that should be used on all documents and correspondence.

A "Project Survey" form is enclosed with this letter. Please complete and return it within 14 days of the date of this letter. If you need assistance or have questions, contact the State Clearinghouse staff noted above at 410-767-4490 or through e-mail at brosenbush@mdp.state.md.us. Thank you for your cooperation with the MIRC process.

Sincerely,

Linda C. Janey, J.D., Director
Maryland State Clearinghouse for Intergovernmental Assistance

LCJ:BR

Enclosure(s)

cc: David Wiskochil - USCG

Michelle Martin - MDOT*

Joane Mueller - MDE*

Beth Cole - MHT*

Ray Dintaman - DNR*

William Ebare - MDSP*

Bill Riley - MILT*

Dennis Schrader - GOHS*

Joe Fassone - MDPE*

Jim Noonan - MDPI*

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North Carolina
Department of Administration

Michael F. Easley, Governor

Gwynn T. Swinson, Secretary

November 29, 2005

Mr. David Wiskochil
U.S. Coast Guard
2100 Second Street, S.W.
Commandment G-OPD
Washington, DC 20593-0001

Dear Mr. Wiskochil:

Subject: Scoping - Establishment of a Nationwide Automatic Identification System (NAIS) with capabilities to receive and distribute information between shipboard & shoreside.

The N. C. State Clearinghouse has received the above project for intergovernmental review. This project has been assigned State Application Number 06-E-0000-0181. Please use this number with all inquiries or correspondence with this office.

Review of this project should be completed on or before 12/29/2005. Should you have any questions, please call (919)807-2425.

Sincerely,

A handwritten signature in cursive script that reads "Chrys Baggett".

Ms. Chrys Baggett
Environmental Policy Act Coordinator

Mailing Address:
1301 Mail Service Center
Raleigh, NC 27699-1301

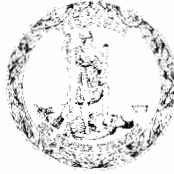
Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail: Chrys.Baggett@ncmail.net

Location Address:
116 West Jones Street
Raleigh, North Carolina

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380103

USCG-05-22831-10



COMMONWEALTH of VIRGINIA

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

Kathleen S. Kilpatrick
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
TDD: (804) 367-2386
www.dhr.virginia.gov

December 13, 2005

Captain K.J. Guth
US Coast Guard
2100 Second Street, S.W.
Washington, DC 20593-0001

RE: Nationwide Automatic Identification System
DHR file no. 2005-1712

Dear Captain Guth:

We have received a copy of the notice published in the Federal Register regarding the preparation of Programmatic Environmental Impact Statement for the Nationwide Automatic Identification System. We have no comments on this project at this time since it is not yet clear if the Commonwealth of Virginia will be impacted by this project. However, the project activities involved certainly have the potential to affect cultural resources. Therefore, we look forward to consulting with the Coast Guard pursuant to Section 106 of the National Historic Preservation Act should the decision be made to implement this program in the Commonwealth of Virginia.

Sincerely,

A handwritten signature in black ink, appearing to read "Kristin Hill".

Kristin Hill, Architectural Historian
Office of Review and Compliance

Administrative Services
10 Courthouse Avenue
Petersburg, VA 23803
Tel: (804) 863-1624
Fax: (804) 862-6196

Capital Region Office
2801 Kensington Ave.
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

Tidewater Region Office
14415 Old Courthouse Way, 2nd Floor
Newport News, VA 23608
Tel: (757) 886-2807
Fax: (757) 886-2808

Roanoke Region Office
1030 Penmar Ave., SE
Roanoke, VA 24013
Tel: (540) 857-7585
Fax: (540) 857-7588

Winchester Region Office
107 N. Kent Street, Suite 203
Winchester, VA 22601
Tel: (540) 722-3427
Fax: (540) 722-7535

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330109

USCG-05-22837-11

Department of Parks and Recreation

Dipattamenton Plaset Yan Dibuetision

Government of Guam

490 Chalan Palasyo

Agana Heights, Guam 96910

Director's Office: (671) 475-6296/97; Fax (671)477-0997

Parks Division: (671) 475-6288/89

Guam Historic Resources Division: (671) 475-6294/95/72;

Fax (671) 477-2822

Thomas A. Morrison
Director

Gregory A. Matanane
Deputy Director



In reply refer to:
RC2006-395F

December 22, 2005

K.J. Guth
Captain, U.S. Coast Guard
Project Manager, Nationwide AIS Project
U.S. Department of Homeland Security
United States Coast Guard
2100 Second Street, S.W.
Washington, DC 20593-0001

Subject: Programmatic Environmental Impact Statement, Nationwide Automatic Identification System.

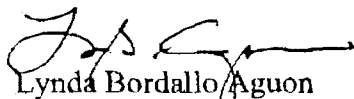
Dear Captain Guth:

We are in receipt of your letter dated November 23, 2005 regarding your intent to prepare a Programmatic Environmental Impact Statement (PEIS) for the establishment of a Nationwide Automatic Identification System (NAIS) and have the following comments.

The proposed NAIS which will be installation of antennas, receivers, transmitters, transceivers, repeaters and other equipment on shore may have the potential to affect significant cultural resources. The coastal areas of Guam are known through previous archaeological studies to contain prehistoric as well as historic properties. Once the PEIS is prepared or when the on shore-based locations for the NAIS supporting equipment are chosen, consultation with our office pursuant Section 106 of the National Historic Preservation Act of 1966, as amended, and 36 CFR 800.

If you have any questions please contact me or Vic April, Territorial Archaeologist, at (671) 457-6294/95/72 or email address at laguon@mail.gov.gu or vicapril@mail.gov.gu

Sincerely,


Lynda Bordallo Aguon
State Historic Preservation Office

Post-It® Fax Note	7671	Date	12/27/05	# of pages	1
To	KJ. Guth	From	L. Aguon		
Co./Dept.	US Coast Guard	Co.	DPR Historic Resources Div		
Phone #	(202) 475-3329	Phone #	(671) 475-6294/95		
Fax #	(202) 475-3908	Fax #	(671) 477-2822		

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380131

USCG-05-22837-12

State of Delaware
Historical and Cultural Affairs

21 The Green
Dover, DE 19901-3611

Phone: (302) 736,5400

Fax: (302) 739,5660

Wednesday, December 07, 2005

Captain K. J. Guth
United States Coast Guard
Project Manager
Nationwide AIS project

Re: Section 106 Compliance and the potential impacts of the Automatic Identification System
on historic properties

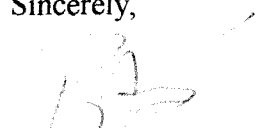
Dear Captain Guth:

Thank you for your letter of notification of the NEPA process and the AIS project. This Office is charged with managing the section 106 process of the Nation Historic preservation Act of 1966. If your program will involve the type of activities that are considered an undertaking from the section 106 process, this Office would be interested in consulting with you. The section 106 process is designed to avoid the potential impacts to historic properties.

From your letter, it appears the activities that may affect historic properties could be the shore based installations, or, any activities that may affect an historic aid to navigation, such as a lighthouse.

Please contact Mr. Craig Lukezic at craig.lukezic@state.de.us if you have any questions.

Sincerely,


Timothy S. Slavin
Director

Cc Steven Marz, Deputy Director, Division of Historical and Cultural Affairs
Craig Lukezic, Archaeologist



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380134

USCG-C5 22837-13



December 14, 2005

TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

Capt. K. J. Guth
U. S. Coast Guard
2100 Second Street, S.W.
Washington, DC, 20593-0001

RE: USCG, NAIS PROGRAM, UNINCORPORATED, MULTI COUNTY

Dear Capt. Guth:

In response to your request, received on Thursday, December 1, 2005, we have reviewed the documents you submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicant for federal assistance to consult with the appropriate State Historic Preservation Office before they carry out their proposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800. You may wish to familiarize yourself with these procedures (Federal Register, December 12, 2000, pages 77698-77739) if you are unsure about the Section 106 process.

Considering available information, we find that the project as currently proposed **MAY AFFECT PROPERTIES THAT ARE ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER OF HISTORIC PLACES.** You should continue consultation with our office, designated consulting parties and invite them to participate in consultation, and provide us with appropriate survey documentation for review and comment. Please direct questions and comments to Joe Garrison (615) 532-1550-103. We appreciate your cooperation.

Sincerely,

Herbert L. Harper
Executive Director and
Deputy State Historic
Preservation Officer

HLH/jyg

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DEPT. OF TRANSPORTATION
DOCKETS

2005 JAN -6 P 2:35

The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

December 19, 2005

Captain K.J. Guth
Project Manager, Nationwide AIS Project
Docket Management Facility
U.S. Department of Transportation
400 Seventh Street, SW.
Washington, D.C. 20590-0001

-14

RE: USCG's Nationwide Automatic Identification System (NAIS). USCG #2005-22837, MHC #RC.38345.

Dear Captain Guth:

MHC has received the copy of the announcement of the intent to prepare a Programmatic Environmental Impact Statement by the United States Coast Guard concerning the project referenced above. The proposed project involves the installation of a system of radio frequency antennas, receivers, transmitters, transceivers, repeaters and other related equipment located on shore-based installations and remote platforms throughout the continental U.S. and U.S. Territories.

MHC looks forward to further consultation with the USCG during the environmental review process. For Massachusetts projects, please submit additional information including USGS locus maps and scaled project plans showing existing and proposed conditions.

These comments are offered to assist in compliance with Sections 106 and 110 of the National Historic Preservation Act of 1966 (36 CFR 800). Please feel free to contact either Edward L. Bell or Gregory R. Dubell at this office if you have any questions or need additional information.

Sincerely,

Brona Simon
State Archaeologist
Deputy Historic Preservation Officer
Acting Executive Director
Massachusetts Historical Commission

xc: Janet Hale, Historic Preservation Officer, Department of Homeland Security
Advisory Council on Historic Preservation
Victor Mastone, Massachusetts Board of Underwater Archaeological Resources
Massachusetts Coastal Zone Management

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381670



State of Louisiana

Department of Environmental Quality



KATHLEEN BABINEAUX BLANCO
GOVERNOR

December 22, 2005

MIKE D. McDANIEL, Ph.D.
SECRETARY

Docket Management Facility
U.S. Department of Transportation
400 Seventh St., S.W.
Washington, DC 20590-0001

RE: DEQ0612190084; Docket Number USCG-2005-22837 - 15
Proposed Intent to Prepare a Programmatic Environmental
Impact Statement (PEIS) for the Establishment of a nationwide
Automatic Identification System (NAIS)

To Whom It May Concern:

The Department of Environmental Quality, Office of Environmental Assessment and Office of Environmental Services has received your request for comments on the above referenced project.

There were no objections based on the limited information submitted to us. However, the following comments have been included and/or attached. Should you encounter a problem during the implementation of this project, please make the appropriate notification to this Department.

The Office of Environmental Services recommends that you investigate the following requirements that may influence your proposed project:

1. If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System application may be necessary.
2. LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact Yvonne Baker at (225) 219-3111 to determine if your proposed improvements require one of these permits.
3. All precautions should be observed to control nonpoint source pollution from construction activities.
4. If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps to inquire about the possible necessity for permits. If a Corps permit is required, part of the application process may involve a Water Quality Certification from LDEQ.
5. All precautions should be observed to protect the groundwater of the region (SEE ATTACHMENT).



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OFFICE OF MANAGEMENT AND FINANCE • P.O. BOX 4303 • BATON ROUGE, LOUISIANA 70821-4303


AN EQUAL OPPORTUNITY EMPLOYER



December 22, 2005
Page 2

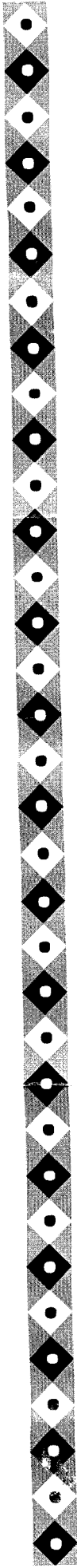
Please forward all future requests to the Louisiana Department of Environmental Quality, Office of Management and Finance, Contracts & Grants, P. O. Box 4303, Baton Rouge, LA 70821-4303, and we will expedite your request as quickly as possible. Should you need any additional information please call me at (225) 219-3815.

Sincerely,



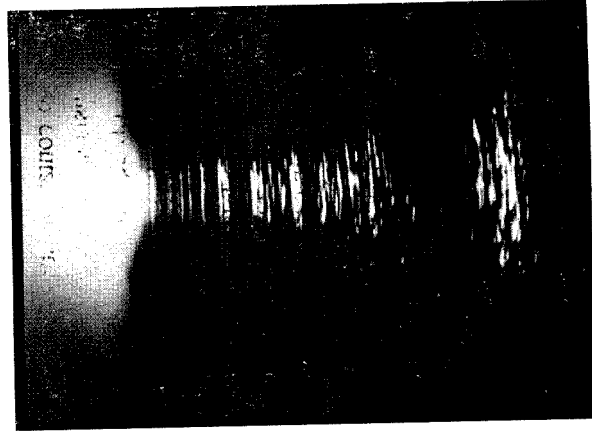
Lisa L. Miller
Contracts & Grants

llm:vhn
Enclosure



LDWPP Goals

- ◆ Educate Louisiana communities about their drinking water sources and the importance of protecting them.
- ◆ Educate Louisiana communities about actions they can take to protect their drinking water sources.
- Maintain drinking water protection through continued community activism.



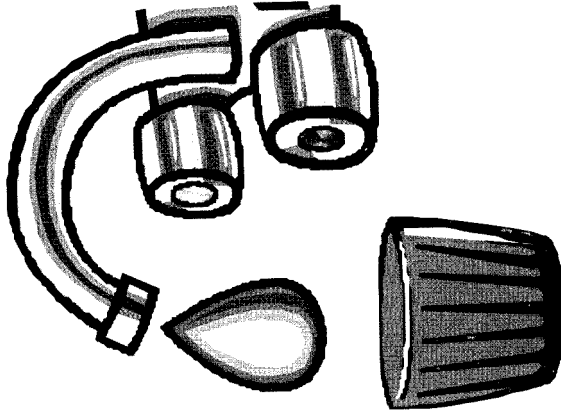
We need your help!

Help Louisiana protect its drinking water. We need volunteers to serve on local committees dedicated to the protection of our drinking water sources. You can help us and your community by volunteering to give presentations at local schools, participating in local Hazardous Waste Collection Days, and passing on information about how to protect drinking water sources to your family, friends, and neighbors. For more information, please contact the DEQ Drinking Water Protection Team.

Louisiana Department of Environmental Quality Office of Environmental Assessment Aquifer Evaluation and Protection Section Post Office Box 4314 Baton Rouge, Louisiana 70821-4314 Phone: 1-888-763-5424 Website: www.deq.state.la.us/evaluation/aeps Email: evaluation@deq.state.la.us
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This is a fifth printing of this public document, published at a total cost of \$3,106.56 for 5000 copies by the Louisiana Department of Environmental Quality, P.O. Box 4314, Baton Rouge, Louisiana 70821-4314 to provide the public with environmental information under the authority of La. R.S. 30:2011. The material was printed in accordance with the standards for printing by state agencies established pursuant to R.S. 43:31 of the Revised Louisiana Statutes.

Louisiana Drinking Water



Protection Program

Drinking Water Protection Program

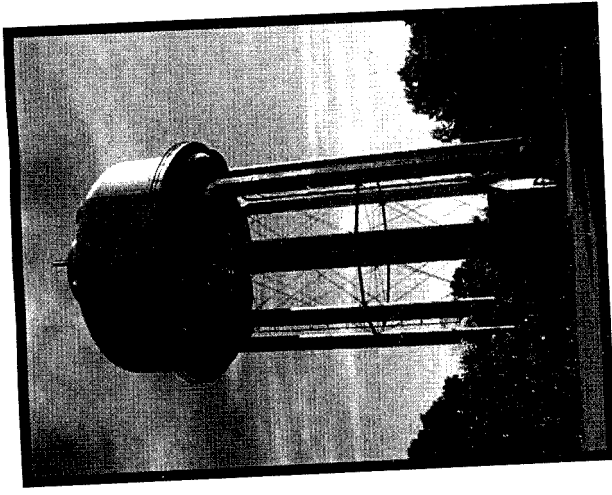


The Louisiana Drinking Water Protection Program (LDWPP) is a voluntary program designed to assist Louisiana communities in protecting their drinking water. The goals of the program are to increase public awareness on the importance of protecting drinking water sources, to educate communities on actions that can be taken locally to protect drinking water sources, and to maintain drinking water protection through continued community activism.

The LDWPP uses information reported during the Source Water Assessment Program (SWAP). The purpose of the SWAP was to assess drinking water sources' potential susceptibility to contamination. Through the SWAP, the Louisiana Department of Environmental Quality (LDEQ) mapped the locations of all public supply wells, surface water intakes, and potential sources of contamination (PSOCs) in the state. PSOC's may include gas stations, dry cleaners or other facilities that sell, store, use or dispose of chemicals. Chemicals, if not handled properly, have the potential to contaminate our surface water and ground water. (Two-thirds of Louisiana residents get drinking water from ground water sources.) Other factors that could affect drinking water sources' susceptibility to contamination were considered, such as well depth or age of surface water intakes.

DEQ issued a final report to each system assessed through the SWAP. The report ranked each system's susceptibility to contamination. The susceptibility to contamination rankings are used by the LDWPP team to prioritize which systems to work with first.

The LDWPP team visits water systems and encourages them to write contingency plans that provide the water system personnel with a plan of action in the case of a loss of the normal water supply. The team enlists the help of local volunteers to form citizen committees to assist them in educating area businesses and the general public about the importance of protecting our drinking water. All stakeholders are encouraged to implement best management practices (BMPs). BMPs are measures taken to prevent or reduce the possibility of contamination, such as the proper use and disposal of chemicals.



The LDWPP team along with citizen committees encourage local governments to adopt drinking water protection ordinances and to use the SWAP results in planning and zoning. The committees also decide what topics to address and how, based on the drinking water protection needs of their community. The LDWPP team uses brochures, videos, road signs, press releases, public service announcements, promotional materials, public presentations, youth educational materials, and collaborations with other organizations to help spread the word to the public.

The LDWPP team wants to make everyone aware of their drinking water sources and how important it is to protect them. Water is easy to contaminate but difficult and expensive to clean up. We all need to do our part to ensure that the water we drink remains clean and pure.

381803

USCG-05-22837-1k



Matt Blunt
Governor

Michael N. Keathley
Commissioner

State of Missouri
OFFICE OF ADMINISTRATION
Intergovernmental Relations
Post Office Box 809
Jefferson City, 65102
573/751-1851

12/02/05

K.J. Guth
Captain, U.S. Coast Guard
US Coast Guard
2100 Second Street, S.W.
Washington, DC 20593-0001

Dear Mr. Guth:

Subject: 0512006
 Assistance

The Missouri Federal Assistance Clearinghouse, in cooperation with state and local agencies interested or possibly affected, has completed the review on the above project application.

None of the agencies involved in the review had comments or recommendations to offer at this time. This concludes the Clearinghouse's review.

A copy of this letter is to be attached to the application as evidence of compliance with the State Clearinghouse requirements.

Sincerely,

A handwritten signature in cursive script that reads "Sara VanderFeltz".

Sara VanderFeltz
Administrative Assistant

cc:

U.S. Department of
Homeland Security

United States
Coast Guard



Commandant
United States Coast Guard

2100 Second Street, S.W.
Washington, DC 20593-0001
Staff Symbol: G-AIS
Phone: (202) 475-3329
Fax: (202) 475-3908

051 2006
16475

November 23, 2005

Dear Interested Party:

The United States Coast Guard (USCG) is announcing its intent to prepare a Programmatic Environmental Impact Statement (PEIS) for the establishment of a Nationwide Automatic Identification System (NAIS) (see Enclosure). Preparation of the PEIS is being conducted in accordance with the National Environmental Policy Act (NEPA) of 1969 [Section 102(2)(c) and its implementing regulations (40 Code of Federal Regulations Part 1500-1508)], and USCG Commandant's Instruction M16475.1D (*NEPA Implementing Procedures and Policy for Considering Environmental Impacts*).

The NAIS Project, a USCG and Department of Homeland Security investment and major systems acquisition, was initiated in response to the Maritime Transportation Security Act of 2002. The NAIS Project is being conducted to provide the USCG with the capability to receive and distribute information between shipboard and shore-side Automatic Identification System (AIS) equipment in order to enhance Maritime Domain Awareness (MDA). The project will help the USCG detect and identify vessels carrying AIS equipment approaching or operating in the maritime domain of the United States. In addition to MDA, NAIS potentially has applications in other USCG missions, including vessel traffic management, maritime safety and mobility, search and rescue, and environmental protection and response.

NAIS is expected to consist of a system of radio frequency (RF) antennas, AIS receivers, transmitters, transceivers, repeaters and other equipment located on shore-based installations and remote platforms potentially including buoys, offshore platforms, aircraft and spacecraft as needed to receive, distribute, and use the information transmitted by vessels that operate AIS equipment and transmit data to these vessels. The area of operation is expected to encompass the continental U.S. and U.S. Territories (including the Great Lakes, Western Rivers, Alaska, Hawaii, Puerto Rico, Guam and other waters thereof extending up to 2,000 nautical miles off-shore).

The Proposed Action to be analyzed in the PEIS is the broad scope of implementation of the NAIS Project. The PEIS will provide a general level of analysis of alternatives and environmental impacts because specific implementation sites and methods are not currently known. The USCG would use the PEIS to tier site-specific environmental analysis during implementation, once specific sites become known. The following alternatives for establishing shore-based antenna sites will be evaluated in the PEIS: Use of existing or currently proposed government sites; lease of commercial sites; and construction of new sites. The preferred alternative is to implement a combination of the shore-based antenna site alternatives. The PEIS will also discuss the No Action Alternative as required under NEPA.

381807

USCG-05-22837-17



FLORIDA DEPARTMENT OF STATE
David E. Mann
Secretary of State
DIVISION OF HISTORICAL RESOURCES

Captain K.J. Guth
United States Coast Guard
2100 Second Street S.W.
Washington, DC 20593-0001

December 20, 2005

RE: DHR Project File Number: 2005-12754
Received by DHR November 28, 2005
16475 - *Preparation of a Programmatic Environmental Impact Statement for the Establishment of a Nationwide Automatic Identification System (NAIS)*

Dear Captain Guth:

Our office received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended and *36 CFR Part 800: Protection of Historic Properties*. The State Historic Preservation Officer is to advise Federal agencies as they identify historic properties (listed or eligible for listing, in the *National Register of Historic Places*), assess effects upon them, and consider alternatives to avoid or minimize adverse effects.

It is the opinion of this agency that because of the project nature it is considered unlikely that historic properties will be affected. Therefore, the proposed 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,

Frederick P. Gaske, Director, and
State Historic Preservation Officer

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

- | | | | |
|--|--|---|---|
| <input type="checkbox"/> Director's Office
(850) 245-6300 • FAX: 245-6436 | <input type="checkbox"/> Archaeological Research
(850) 245-6444 • FAX: 245-6436 | <input checked="" type="checkbox"/> Historic Preservation
(850) 245-6333 • FAX: 245-6437 | <input type="checkbox"/> Historical Museums
(850) 245-6400 • FAX: 245-6433 |
| <input type="checkbox"/> Southeast Regional Office
(954) 467-4990 • FAX: 467-4991 | <input type="checkbox"/> Northeast Regional Office
(904) 825-5045 • FAX: 825-5044 | <input type="checkbox"/> Central Florida Regional Office
(813) 272-3843 • FAX: 272-2340 | |

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383927

USCG-05-22837-19



Maryland Department of Planning

Robert L. Ehrlich, Jr.
Governor
Michael S. Steele
Lt. Governor

Audrey E. Scott
Secretary
Florence E. Burian
Deputy Secretary

January 6, 2006

Captain K. J. Guth
Project Manager, Nationwide AIS Project
United States Coast Guard
2100 Second Street, S.W.
Washington, DC 20593-0001

STATE CLEARINGHOUSE REVIEW – ADDITIONAL REVIEWER COMMENTS RECEIVED

State Application Identifier: MD20051129-0959

Project Description: Scoping prior to Programmatic Environmental Impact Statement concerning the establishment of the National Automatic Identification System: seek to enable Applicants to accomplish their mission

Project Location: United States of America

Clearinghouse Contact: Bob Rosenbush

Dear Captain Guth:

We are forwarding the enclosed comments made by the Maryland Historical Trust, a division of this Department, regarding the referenced project for your information. The Maryland Historical Trust stated that the United States Coast Guard must complete the Section 106 consultation (as required by the National Historic Preservation Act) for this undertaking, as project planning proceeds.

Should you have any questions, contact the State Clearinghouse staff person noted above at 410-767-4490 or through e-mail at brosenbush@mdp.state.md.us. Your cooperation and attention to the review process is appreciated

Sincerely,

A handwritten signature in cursive script that reads 'Linda C. Janey'.

Linda C. Janey, J.D., Director
Maryland State Clearinghouse for Intergovernmental Assistance

LCJ:BR
Enclosure (Comments Received)
cc: David Wiskochil - USCG
Beth Cole - MHT

05-0959_OLRR.OTH.doc

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383931

USEG-05-22837-20



STATE OF ARKANSAS
**Department of Finance
and Administration**

OFFICE OF INTERGOVERNMENTAL SERVICES

1515 West Seventh Street, Suite 417
Post Office Box 8031
Little Rock, Arkansas 72203-8031
Phone: (501) 682-1074
Fax: (501) 682-5206
<http://www.state.ar.us/dfa>

January 10, 2006

Mr. David Wiskochil
NAIS Project Support Team
U. S. Department of Homeland Security
United States Coast Guard
2100 Second Street, S. W.
Washington, D. C. 20593-0001

RE: U. S. Coast Guard announcing its intent to prepare a Programmatic Environmental Impact Statement

Dear Mr. Wiskochil:

The State Clearinghouse has received the above document pursuant to the Arkansas Project Notification and Review System.

To carry out the review and comment process, this document was forwarded to members of the Arkansas Technical Review Committee. Resulting comments received from the Technical Review Committee which represents the position of the State of Arkansas are attached.

The State Clearinghouse wishes to thank you for your cooperation with the Arkansas Project Notification and Review System.

Sincerely,

A handwritten signature in black ink, appearing to read "Tracy L. Copeland".

Tracy L. Copeland, Manager
State Clearinghouse

TLC/th
Enclosure
CC: Randy Young, ANRC



Arkansas Natural Resources Commission



J. Randy Young, PE
Executive Director

101 East Capitol, Suite 350
Little Rock, Arkansas 72201
<http://www.anrc.arkansas.gov/>

Phone: (501) 682-1611
Fax: (501) 682-3991
E-mail: anrc@arkansas.gov

Mike Huckabee
Governor

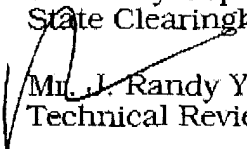
MEMORANDUM

RECEIVED

JAN 10 2006

INTERGOVERNMENTAL
SERVICES
STATE CLEARINGHOUSE

TO: Mr. Tracy Copeland, Manager
State Clearinghouse

FROM:  Mr. J. Randy Young, P.E., Chairman
Technical Review Committee

SUBJECT: The United States Coast Guard (USCG) is Announcing
Its Intent to Prepare a Programmatic Environmental Impact
Statement for the Establishment of a Nationwide Automatic
Identification System

DATE: January 9, 2006

Members of the Technical Review Committee have reviewed the above referenced project; the Nationwide Automatic Identification System (NAIS) is being conducted to provide the United States Coast Guard with the capability to receive and distribute information between shipboard and shore-side Automatic Identification System equipment in order to enhance Maritime Domain Awareness. The project will help the Coast Guard detect and identify vessels carrying Automatic Identification System equipment approaching or operating in the maritime domain of the US. In addition to Maritime Domain Awareness, Nationwide Automatic Identification System potentially has application in other Coast Guard mission, including vessel traffic management, maritime safety and mobility, search and rescue, and environmental protection and response. NAIS is expected to consist of a system of radio frequency antennas, AIS receivers, transmitters, transceivers, repeaters and other equipment located on shore-based installations and remote platforms potentially including buoys, offshore platforms, aircraft and spacecraft as needed to receive, distribute, and used the information transmitted by vessels that operated AIS equipment and transmit data to these vessels. The area of operation is expected to encompass the continental US and US Territories, including the Great Lakes, Western Rivers, Alaska, Hawaii, Puerto Rico, Guam and other waters thereof extending up to 2,000 nautical miles off-shore.

The Committee supports this project. Agency comments are included for your review.

The opportunity to comment is appreciated.
JRY/ddavis

An Equal Opportunity Employer



STATE OF ARKANSAS

OFFICE OF INTERGOVERNMENTAL SERVICES

Department of Finance and Administration

1515 West Seventh Street, Suite 412
Post Office Box 8031
Little Rock, Arkansas 72203-8031
Phone: (501) 682-1074
Fax: (501) 682-5206
http://www.state.ar.us/dfa

Handwritten date: 1/19/20

MEMORANDUM

TO: All Technical Review Committee Members
FROM: Tracy L. Copeland, Manager State Clearinghouse
DATE: November 29, 2005
SUBJECT: THE UNITED STATES COAST GUARD(USCG) IN ANNOUNCING ITS INTENT TO PREPARE A PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR THE ESTABLISHMENT OF A NATIONWIDE AUTOMATIC IDENTIFICATION SYSTEM.

Please review the above stated document under provisions of Section 404 of the Clean Water Act, Section 102(2) of the National Environmental Policy Act of 1969 and the Arkansas Project Notification and Review System.

Your comments should be returned by December 14, 2005 to - Mr. Randy Young, Chairman, Technical Review Committee, 101 E. Capitol, Suite 350, Little Rock, AR 72203.

If you have no reply within that time we will assume you have no comments and will proceed with the sign-off.

NOTE: It is imperative that your response be in to the ASWCC office by the date requested. Should your Agency anticipate having a response which will be delayed beyond the stated deadline for comments, please contact Ms. Debby Davis of the ASWCC at (501) 682-1611 or the State Clearinghouse Office.

- Support
Do Not Support (Comments Attached)
Comments Attached
Support with Following Conditions
No Comments
Non-Degradation Certification Issues (Applies to ADEQ Only)

RECEIVED
05 NOV 29 PM 2:47
NATIONAL RESOURCES COMMISSION

Name(print) Robert Agency ANRC Date 12-29-05
Telephone Number



STATE OF ARKANSAS

OFFICE OF INTERGOVERNMENTAL SERVICES

Department of Finance and Administration

1515 West Seventh Street, Suite 412
Post Office Box 8031
Little Rock, Arkansas 72203-8031
Phone: (501) 682-1074
Fax: (501) 682-5206
http://www.state.ar.us/dfa

MEMORANDUM

TO: All Technical Review Committee Members
FROM: Tracy L. Copeland, Manager State Clearinghouse
DATE: November 29, 2005
SUBJECT: THE UNITED STATES COAST GUARD(USCG) IN ANNOUNCING ITS INTENT TO PREPARE A PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR THE ESTABLISHMENT OF A NATIONWIDE AUTOMATIC IDENTIFICATION SYSTEM.

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Support Do Not Support (Comments Attached)
Comments Attached Support with Following Conditions
No Comments Non-Degradation Certification Issues (Applies to ADEQ Only)

Name(print) Steve Jones Agency ADEQ Date 11-28
Telephone Number 501-682-7311



Department of Finance and Administration

1515 West Seventh Street, Suite 412
Post Office Box 8031
Little Rock, Arkansas 72203-8031
Phone: (501) 682-1074
Fax: (501) 682-5206
http://www.state.ar.us/dfa

MEMORANDUM

TO: All Technical Review Committee Members
FROM: Tracy L. Copeland, Manager - State Clearinghouse
DATE: November 29, 2005
SUBJECT: THE UNITED STATES COAST GUARD(USCG) IN ANNOUNCING ITS INTENT TO PREPARE A PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR THE ESTABLISHMENT OF A NATIONWIDE AUTOMATIC IDENTIFICATION SYSTEM.

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Your comments should be returned by December 14, 2005 to - Mr. Randy Young, Chairman, Technical Review Committee, 101 E. Capitol, Suite 350, Little Rock, AR 72203.

If you have no reply within that time we will assume you have no comments and will proceed with the sign-off.

NOTE: It is imperative that your response be in to the ASWCC office by the date requested. Should your Agency anticipate having a response which will be delayed beyond the stated deadline for comments, please contact Ms. Debby Davis of the ASWCC at (501) 682-1611 or the State Clearinghouse Office.

- Support
Do Not Support (Comments Attached)
Comments Attached
Support with Following Conditions
No Comments
Non-Degradation Certification Issues (Applies to ADEQ Only)

Name(print) BILL PRIOR Agency A.G.C Date 11-30-05
Telephone Number 683-0117



STATE OF ARKANSAS

OFFICE OF INTERGOVERNMENTAL SERVICES

Department of Finance and Administration

1515 West Seventh Street, Suite 412
Post Office Box 8031
Little Rock, Arkansas 72203-8031
Phone: (501) 682-1074
Fax: (501) 682-5206
http://www.state.ar.us/dfa

Handwritten initials

MEMORANDUM

TO: All Technical Review Committee Members
FROM: Tracy L. Copeland, Manager State Clearinghouse
DATE: November 29, 2005

SUBJECT: THE UNITED STATES COAST GUARD(USCG) IN ANNOUNCING ITS INTENT TO PREPARE A PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR THE ESTABLISHMENT OF A NATIONWIDE AUTOMATIC IDENTIFICATION SYSTEM.

RECEIVED
05 NOV 30 AM 11:30
ARKANSAS DEPARTMENT OF HEALTH
DIVISION OF ENGINEERING

Please review the above stated document under provisions of Section 404 of the Clean Water Act, Section 102(2) of the National Environmental Policy Act of 1969 and the Arkansas Project Notification and Review System.

Your comments should be returned by December 14, 2005 to - Mr. Randy Young, Chairman, Technical Review Committee, 101 E. Capitol, Suite 350, Little Rock, AR 72203.

If you have no reply within that time we will assume you have no comments and will proceed with the sign-off.

NOTE: It is imperative that your response be in to the ASWCC office by the date requested. Should your Agency anticipate having a response which will be delayed beyond the stated deadline for comments, please contact Ms. Debby Davis of the ASWCC at (501) 682-1611 or the State Clearinghouse Office.

- Support Do Not Support (Comments Attached)
Comments Attached Support with Following Conditions
X No Comments Non-Degradation Certification Issues (Applies to ADEQ Only)

Name (print) HAROLD R. BIRRELL Division of Engineering Date 12-01-05
Arkansas Department of Health
Telephone Number 501-661-2623 4815 West Markham
Little Rock, AR 72205-3867



STATE OF ARKANSAS

OFFICE OF INTERGOVERNMENTAL SERVICES

Department of Finance and Administration

1515 West Seventh Street, Suite 412
Post Office Box 8031
Little Rock, Arkansas 72203-8031
Phone: (501) 682-1074
Fax: (501) 682-5206
http://www.state.ar.us/dfa

MEMORANDUM

TO: All Technical Review Committee Members
FROM: Tracy L. Copeland, Manager - State Clearinghouse
DATE: November 29, 2005
SUBJECT: THE UNITED STATES COAST GUARD(USCG) IN ANNOUNCING ITS INTENT TO PREPARE A PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR THE ESTABLISHMENT OF A NATIONWIDE AUTOMATIC IDENTIFICATION SYSTEM.

RECEIVED
05 DEC - 5 AM 10:10
NATIONAL ENVIRONMENTAL POLICY ACT COMMISSION

Please review the above stated document under provisions of Section 404 of the Clean Water Act, Section 102(2) of the National Environmental Policy Act of 1969 and the Arkansas Project Notification and Review System.

Your comments should be returned by December 14, 2005 to - Mr. Randy Young, Chairman, Technical Review Committee, 101 E. Capitol, Suite 350, Little Rock, AR 72203.

If you have no reply within that time we will assume you have no comments and will proceed with the sign-off.

NOTE: It is Imperative that your response be in to the ASWCC office by the date requested. Should your Agency anticipate having a response which will be delayed beyond the stated deadline for comments, please contact Ms. Debby Davis of the ASWCC at (501) 682-1611 or the State Clearinghouse Office.

- Support
Do Not Support (Comments Attached)
Comments Attached
Support with Following Conditions
No Comments
Non-Degradation Certification Issues (Applies to ADEQ Only)

Name(print) George Chubbart Agency AEC Date 12-2-05
Telephone Number 296-1861



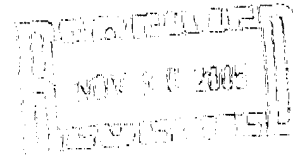
STATE OF ARKANSAS

OFFICE OF INTERGOVERNMENTAL SERVICES

Department of Finance and Administration

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Post Office Box 8031
Little Rock, Arkansas 72203-8031
Phone: (501) 682-1074
Fax: (501) 682-5206
http://www.state.ar.us/dfa

MEMORANDUM



TO: All Technical Review Committee Members
FROM: Tracy L. Copeland, Manager - State Clearinghouse
DATE: November 29, 2005
SUBJECT: THE UNITED STATES COAST GUARD(USCG) IN ANNOUNCING ITS INTENT TO PREPARE A PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR THE ESTABLISHMENT OF A NATIONWIDE AUTOMATIC IDENTIFICATION SYSTEM.

Please review the above stated document under provisions of Section 404 of the Clean Water Act, Section 102(2) of the National Environmental Policy Act of 1969 and the Arkansas Project Notification and Review System.

Your comments should be returned by December 14, 2005 to - Mr. Randy Young, Chairman, Technical Review Committee, 101 E. Capitol, Suite 350, Little Rock, AR 72203.

If you have no reply within that time we will assume you have no comments and will proceed with the sign-off.

NOTE: It is imperative that your response be in to the ASWCC office by the date requested. Should your Agency anticipate having a response which will be delayed beyond the stated deadline for comments, please contact Ms. Debby Davis of the ASWCC at (501) 682-1611 or the State Clearinghouse Office.

- Support
Do Not Support (Comments Attached)
Comments Attached
Support with Following Conditions
No Comments
Non-Degradation Certification Issues (Applies to ADEQ Only)

Name(print) Kevin DONAH Agency ADEQ Date 11-30-05
Telephone Number 501-682-0645



STATE OF ARKANSAS

OFFICE OF INTERGOVERNMENTAL SERVICES

Department of Finance and Administration

1515 West Seventh Street, Suite 412
Post Office Box 8031
Little Rock, Arkansas 72203-8031
Phone: (501) 682-1074
Fax: (501) 682-5206
http://www.state.ar.us/dfa

MEMORANDUM

TO: All Technical Review Committee Members
FROM: Tracy L. Copeland, Manager - State Clearinghouse
DATE: November 24, 2005
SUBJECT: THE UNITED STATES COAST GUARD(USCG) IN ANNOUNCING ITS INTENT TO PREPARE A PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR THE ESTABLISHMENT OF A NATIONWIDE AUTOMATIC IDENTIFICATION SYSTEM.

Please review the above stated document under provisions of Section 404 of the Clean Water Act, Section 102(2) of the National Environmental Policy Act of 1969 and the Arkansas Project Notification and Review System.

Your comments should be returned by December 14, 2005 to - Mr. Randy Young, Chairman, Technical Review Committee, 101 E. Capitol, Suite 350, Little Rock, AR 72203.

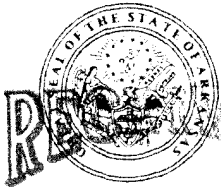
If you have no reply within that time we will assume you have no comments and will proceed with the sign-off.

NOTE: It is imperative that your response be in to the ASWCC office by the date requested. Should your Agency anticipate having a response which will be delayed beyond the stated deadline for comments, please contact Ms. Debby Davis of the ASWCC at (501) 682-1611 or the State Clearinghouse Office.

- Support
Do Not Support (Comments Attached)
Comments Attached
Support with Following Conditions
No Comments
Non-Degradation Certification Issues (Applies to ADEQ Only)

Name(print) Robert K. Leonard Agency AGFC Date 12-14-05
Telephone Number 978-7301

HARRIS



STATE OF ARKANSAS

OFFICE OF INTERGOVERNMENTAL SERVICES

Department of Finance and Administration

1515 West Seventh Street, Suite 412
Post Office Box 8031
Little Rock, Arkansas 72203-8031
Phone: (501) 682-1074
Fax: (501) 682-5206
http://www.state.ar.us/dfa

DEC 15 2005

INTERGOVERNMENTAL
SERVICES
STATE CLEARINGHOUSE

MEMORANDUM

TO: All Technical Review Committee Members

FROM: Tracy L. Copeland, Manager ^{TLC} State Clearinghouse

DATE: November ~~28~~²⁹, 2005

SUBJECT: THE UNITED STATES COAST GUARD(USCG) IN ANNOUNCING ITS INTENT TO PREPARE A PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR THE ESTABLISHMENT OF A NATIONWIDE AUTOMATIC IDENTIFICATION SYSTEM.

RECEIVED
AHTD
NOV 30 2005
ENVIRONMENTAL
DIVISION

Please review the above stated document under provisions of Section 404 of the Clean Water Act, Section 102(2) of the National Environmental Policy Act of 1969 and the Arkansas Project Notification and Review System.

Your comments should be returned by December 14 ~~13~~, 2005 to - Mr. Randy Young, Chairman, Technical Review Committee, 101 E. Capitol, Suite 350, Little Rock, AR 72203.

If you have no reply within that time we will assume you have no comments and will proceed with the sign-off.

NOTE: It is imperative that your response be in to the ASWCC office by the date requested. Should your Agency anticipate having a response which will be delayed beyond the stated deadline for comments, please contact Ms. Debby Davis of the ASWCC at (501) 682-1611 or the State Clearinghouse Office.

Support Do Not Support (Comments Attached)

Comments Attached Support with Following Conditions

No Comments Non-Degradation Certification Issues (Applies to ADEQ Only)

RECEIVED
DEC 15 2005
INTERGOVERNMENTAL
SERVICES
STATE CLEARINGHOUSE

Name(print) John L. Harris Agency AHTD Date 12/8/05
 Telephone Number (501) 569-2281

383948

USCG-05-22 837-22

December 28, 2005

K. J. Guth
Captain, U.S. Coast Guard
Project Manager, Nationwide AIS Project
2100 Second Street, SW
Washington, D.C. 20593-0001

Re: AHC 2006-0235; Establish Nationwide Automatic Identification System, Alabama, Statewide

Dear Captain Guth:

The Alabama Historical Commission is in receipt of the above referenced document. Thank you for forwarding this notice; we will add it to our files. Please be aware that our office will need to review a completed Project Review Consultation form for each project area on a case-by-case basis. Please note that the form requests that you forward photographs of the project area as well as a USGS topographic quadrangle with the project area clearly marked. We have enclosed this form for your convenience. Upon review of this form, our office will issue comments for each action.

We appreciate your commitment to helping us preserve Alabama's non-renewable resources. Should you have any questions, please contact Amanda McBride of this office and include the AHC tracking number referenced above.

Very truly yours,



Elizabeth Ann Brown
Deputy State Historic Preservation Officer

EAB/ALM/alm

Enclosure: PRC form

468 South Perry Street
Montgomery, Alabama
36130-0900

tel 334 242-3184
fax 334 240-3477

Alabama Historical Commission
468 S. Perry St.
Montgomery, AL 36130-0900
334-242-3184

PROJECT REVIEW CONSULTATION

APPLICANT _____ PROJECT COUNTY _____

ADDRESS _____ CITY _____ STATE _____ ZIP _____

CONTACT PERSON _____ TELEPHONE _____

ADDRESS _____ CITY _____ STATE _____ ZIP _____

FEDERAL PROGRAM _____ TYPE OF ASSISTANCE _____

SIGNATURE _____ DATE _____

I. GENERAL INFORMATION

1. Project description _____

2. Has the identical project been previously submitted for review? If yes, enclose a copy of the State Historic Preservation Officer's comments. (Y/N): _____

3. Give the project's Township, Range, and Section description.

TOWNSHIP _____ RANGE _____ SECTION _____

4. How many acres are in the project area? _____

5. Attach a clearly labeled copy of a USGS topographic map indicating the precise location of the project. (Be sure to include the name of the quad sheet from which it came.)

6. Please provide at least one representative photograph of the project area, and be sure to include directional information (facing east, northwest, etc.).

II. STANDING STRUCTURE INFORMATION

1. Will the project involve the rehabilitation, relocation, or demolition of any structure over 50 years old? (Y/N) _____

2. If yes, what was the date of construction? _____
3. Attach photographs of the front and rear elevations.
4. Have plans and specifications for the rehabilitation, relocation, or demolition been completed? If yes, enclose a copy of those plans. (Y/N) _____
5. Are there any structures over 50 years old that are adjacent to or within sight of any of the boundaries of the proposed project? (Y/N) _____
6. If yes, what was the date of construction? _____
7. If applicable, enclose a brief contextual overview of information relating to the historic background of any structure, site, or districts within the project area or pertaining to any adjacent structures, sites or districts. (i.e. Its relationship to any historic events, persons, industries or commerce.)
8. Attach photographs of any structures over 50 years old adjacent to the project area.
9. Is the rehabilitation, relocation, or demolition located within or near a nationally designated historic district, site or structure? If yes, give the name of the district, site or structure. (Y/N) _____

Name: _____

III. SITE INFORMATION

1. To your knowledge, has a cultural resource assessment been conducted in the proposed project area? If yes, enclose a copy of the archaeologist's report. (Y/N) _____
2. Has the ground at the project location been disturbed other than by agriculture? If yes, please describe the ground disturbance. (Y/N) _____

3. Describe the present use and condition of the property. _____

IV ADDITIONAL INFORMATION

Please elaborate on the above questions and/or include any additional information you feel may be helpful in the review process of your project. Attach additional pages if necessary.

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386082



North Carolina Department of Administration

Michael F. Easley, Governor

Gwynn T. Swinson, Secretary

January 20, 2006

Mr. David Wiskochil
U.S. Coast Guard
2100 Second Street, S.W.
Commandment G-OPD
Washington, DC 20593-0001

USCG-2005-22837-24

Dear Mr. Wiskochil:

Re: SCH File # 06-E-0000-0181; Scoping; Establishment of a Nationwide Automatic Identification System (NAIS) with capabilities to receive and distribute information between shipboard & shoreside.

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are the comments made by agencies in the course of this review.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

A handwritten signature in cursive script that reads "Chrys Baggett/5/06".

Ms. Chrys Baggett
Environmental Policy Act Coordinator

Attachments

Mailing Address:
1301 Mail Service Center
Raleigh, NC 27699-1301

Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail Chrys.Baggett@ncmail.net

Location Address:
116 West Jones Street
Raleigh, North Carolina




North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

MEMORANDUM

TO: Chrys Baggett
State Clearinghouse

FROM: Melba McGee 
Environmental Review Coordinator

SUBJECT: 06-0181 Scoping USCG Nationwide Automatic Identification System

DATE: January 6, 2006



The Department of Environment and Natural Resources has reviewed the proposed information. The attached comments are for the applicant's information.

Thank you for the opportunity to review.

Attachments



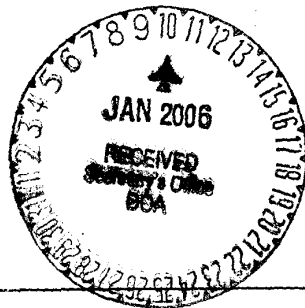
Reviewing Office: W&R
 Project Number: 06-0181 Due Date: 12/20/12

INTERGOVERNMENTAL REVIEW - PROJECT COMMENTS

After review of this project it has been determined that the DENR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of this form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (Statutory Time Limit)
<input type="checkbox"/>	Permit to construct & operate wastewater treatment facilities, sewer system extensions & sewer systems not discharging into state surface waters.	Application 90 days before begin construction or award of construction contracts. On-site inspection. Post-application technical conference usual.	30 days (90 days)
<input type="checkbox"/>	NPDES-permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begin activity. On-site inspection preapplication conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90 - 120 days (N/A)
<input type="checkbox"/>	Water Use Permit	Preapplication technical conference usually necessary	30 days (N/A)
<input type="checkbox"/>	Well Construction Permit	Complete application must be received and permit issued prior to the installation of a well.	7 days (15 days)
<input type="checkbox"/>	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Preapplication conference usual. Filing may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/>	Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.0100, 2Q.0300, 2H.0600)	N/A	60 days
<input checked="" type="checkbox"/>	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900	N/A	60 days (90 days)
<input checked="" type="checkbox"/>	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 2D.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-733-0820.		
<input type="checkbox"/>	Complex Source Permit required under 15 A NCAC 2D.0800		
<input type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres to be disturbed. Plan filed with proper Regional Office (Land Quality Section) at least 30 days before beginning activity. A fee of \$50 for the first acre or any part of an acre.		20 days (30 days)
<input type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be addressed with respect to the referenced Local Ordinance.		30 days
<input type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with NCDOT's approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable stormwater conveyances and outlets.		
<input type="checkbox"/>	Mining Permit	On-site inspection usual. Surety bond filed with DENR. Bond amount varies with type mine and number of acres of affected land. Any are mined greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input type="checkbox"/>	North Carolina Burning permit	On-site inspection by N.C. Division of Forest Resources if permit exceeds 4 days	1 day (N/A)
<input type="checkbox"/>	Special Ground Clearance Burning Permit-22 counties in coastal N.C. with organic soils.	On-site inspection by N.C. Division of Forest Resources required "if more than five acres of ground clearing activities are involved. Inspections should be requested at least ten days before actual burn is planned."	1 day (N/A)
<input type="checkbox"/>	Oil Refining Facilities	N/A	90 - 120 day (N/A)

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (Statutory Time Limit)
<input type="checkbox"/>	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, certify construction is according to DENR approved plans. May also require permit under mosquito control program, and a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage of the total project cost will be required upon completion.	30 days (60 days)
<input type="checkbox"/>	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with DENR running to State of N.C. conditional that any well opened by drill operator shall, upon abandonment, be plugged according to DENR rules and regulations.	10 days (N/A)
<input type="checkbox"/>	Geophysical Exploration Permit	Application filed with DENR at least 10 days prior to issue of permit. Application by letter. No standard application form.	10 days (N/A)
<input type="checkbox"/>	State Lakes Construction Permit	Application fees based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property.	15 - 20 days (N/A)
<input type="checkbox"/>	401 Water Quality Certification	N/A	55 days (130 days)
<input type="checkbox"/>	CAMA Permit for MAJOR development	\$250.00 fee must accompany application	60 days (130 days)
<input type="checkbox"/>	CAMA Permit for MINOR development	\$50.00 fee must accompany application	22 days (25 days)
<input type="checkbox"/>	Several geodetic monuments are located in or near the project area. If any monument needs to be moved or destroyed, please notify: N.C. Geodetic Survey, Box 27687 Raleigh, N.C. 27611		
<input type="checkbox"/>	Abandonment of any wells, if required must be in accordance with Title 15A, Subchapter 2C.0100.		
<input type="checkbox"/>	Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.		
<input type="checkbox"/>	Compliance with 15A NCAC 2H 1000 (Coastal Stormwater Rules) is required.		45 days (N/A)
*	Other comments (attach additional pages as necessary, being certain to cite comment authority)		



REGIONAL OFFICES

Questions regarding these permits should be addressed to the Regional Office marked below.

- | | | |
|---|--|--|
| <input type="checkbox"/> Asheville Regional Office
59 Woodfin Place
Asheville, N.C. 28801
(828) 251-6208 | <input type="checkbox"/> Mooresville Regional Office
919 North Main Street
Mooresville, N.C. 28115
(704) 663-1699 | <input type="checkbox"/> Wilmington Regional Office
127 Cardinal Drive Extension
Wilmington, N.C. 28405
(910) 395-3900 |
| <input type="checkbox"/> Fayetteville Regional Office
225 Green Street, Suite 714
Fayetteville, N.C. 28301
(910) 486-1541 | <input type="checkbox"/> Raleigh Regional Office
3800 Barrett Drive, P.O. Box 27687
Raleigh, N.C. 27611
(919) 571-4700 | <input type="checkbox"/> Winston-Salem Regional Office
585 Woughtown Street
Winston-Salem, N.C. 27107
(336) 771-4600 |
| <input type="checkbox"/> Washington Regional Office
943 Washington Square Mall
Washington, N.C. 27889
(252) 946-6481 | | |



North Carolina Wildlife Resources Commission

Richard B. Hamilton, Executive Director

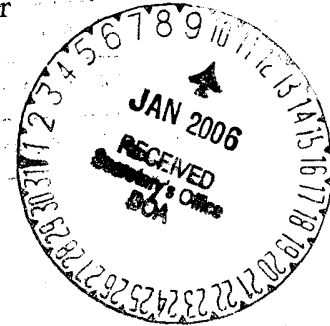
MEMORANDUM

TO: Melba McGee
Office of Legislative and Intergovernmental Affairs, DENR

FROM: Steven H. Everhart, PhD *Steve Everhart*
Southern Coastal Coordinator
Habitat Conservation Program

DATE: December 19, 2005

SUBJECT: PEIS Scoping, USCG Nationwide Automatic Identification System (NAIS), Proj. No. # 06-0181,
Due Date: 12/26/2005.



This memorandum responds to a request from the USCG for our concerns regarding impacts on fish and wildlife resources resulting from the subject project. Biologists with the N. C. Wildlife Resources Commission (NCWRC) have reviewed the proposed improvements. Our comments are provided in accordance with certain provisions of the North Carolina Environmental Policy Act (G.S. 113A-1 through 113A-10; 1 NCAC 25) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d).

The applicant proposes to install a system of radio frequency antennas, AIS receivers, transmitters, transceivers, repeaters and other equipment located on shore-based installations and remote platforms potentially including buoys, offshore platforms, aircraft, and spacecraft as need to received, distribute, and use the information transmitted by vessels that operate AIS equipment and transmit data to these vessels. Currently, the specific implementation sites and methods are not known.

Since the specific sites and methods are not currently known, we cannot make specific recommendations regarding impacts to fish and wildlife resources. However, to help facilitate document preparation and the review process, our general informational needs are outlined below:

1. Please include a description of any streams or wetlands affected by the project. The need for channelizing or relocating portions of streams crossed and the extent of such activities.
2. Cover type maps showing wetland acreages impacted by the project. Wetland acreages should include all project-related areas that may undergo hydrologic change as a result of ditching, other drainage, or filling for project construction. Wetland identification may be accomplished through coordination with the U. S. Army Corps of Engineers (COE). If the COE is not consulted, the person delineating wetlands should be identified and criteria listed.
3. Mitigation for avoiding, minimizing or compensating for direct and indirect degradation in habitat quality as well as quantitative losses that result from each of the four alternatives for reject water disposal.

4. Discuss the cumulative impacts of secondary development facilitated by the proposed project. Such discussion should weigh the economic benefits of such growth against the costs of associated environmental degradation.
 - (a) Include specific measures that will be used to address stormwater and sedimentation at the source. Include specific requirements for both residential and industrial developments and Best Management Practices (BMPs) that will be required.
 - (b) Include specific measures that will be used to protect stream corridors, riparian habitat, and a minimum of the 100-year floodplain from filling and development. Commitments by the project sponsors to protect area streams with riparian buffers through purchase or conservation easement are of particular interest.
5. Description of fishery and wildlife resources within the project area, including a listing of federally or state designated threatened, endangered, or special concern species. A listing of designated plant species can be developed through consultation with:

The Natural Heritage Program
N. C. Division of Parks and Recreation
1615 Mail Service Center
Raleigh, N. C. 27699-1615
(919) 733-7795

and,

NCDA Plant Conservation Program
P. O. Box 27647
Raleigh, N. C. 27611
(919) 733-3610

Thank you for the opportunity to provide input in the early planning stages for this project. If we can further assist your office, please contact me at (910) 796-7436.



North Carolina Department of Environment and Natural Resources
Division of Coastal Management

Michael F. Easley, Governor

Charles S. Jones, Director

William G. Ross Jr., Secretary

December 20, 2005

Melba McGee
Environmental Coordinator
Office of Legislative & Intergovernmental Affairs
Department of Environment and Natural Resources
1601 Mail Service Center
Raleigh, NC 27699-0001



SUBJECT: Comments Regarding the Proposed Environmental Assessment for a Planned US Coast Guard Nationwide Automatic Identification System, Coastal North Carolina (SCH#06-0181, DCM#20050122)

Dear Ms. McGee:

Thank you for the opportunity to review and provide comments on the proposed programmatic environmental impact statement (PEIS) for a planned US Coast Guard Nationwide Automatic Identification System (NAIS) that could potentially be located in North Carolina. The proposed project, as described in the review request, is the establishment of an Automatic Identification System (AIS) to detect and identify vessels carrying AIS equipment approaching or operating in the maritime domain of the United States. The NAIS system is expected to consist of a system of AIS receives, transmitters, repeaters, and other equipment located on shoreside installations, remote platforms, aircraft, and spacecraft. The purpose of this review is to identify the environmental and regulatory issues that the proposed environmental programmatic environmental impact statement will need to evaluate.

According to the review request, the USCG will use the PEIS to tier site-specific environmental analysis during implementation once specific sites become known. The scoping comments provided by DCM, to facilitate the entire environmental review process, are focused on the concluding analysis that would be required by the Coast Guard when it develops the site-specific environmental documents and the required consistency determination for project components that are anticipated to have a coastal effect. The proposed NAIS system would be considered to have a coastal effect if any project components would have an effect on any coastal use or coastal resource as detailed in 15 CFR 930.11. In situations where the PEIS is unable to provide site-specific detail, the PEIS will need to identify the types of site-specific information that must be collected and analyzed by the subsequent environmental documents. DCM's comments begin on the next page.

400 Commerce Avenue, Morehead City, North Carolina 28557-3421
Phone: 252-808-2808 \ FAX: 252-247-3330 \ Internet: www.nccoastalmanagement.net

An Equal Opportunity \ Affirmative Action Employer - 50% Recycled \ 10% Post Consumer Paper

- The proposed action described in the PEIS and as further defined by subsequent environmental documents will be subject to one or more consistency reviews by DCM under the Federal Coastal Zone Management Act of 1972 as amended should there be a coastal effect within the State of North Carolina¹. Pursuant to 15 CFR 930.37 a Federal agency may use its NEPA documents as a vehicle for its consistency determination provided that all the requirements of 15 CFR 930.39 are met by the NEPA document². We would encourage the USCG to visit DCM's webpage at <http://www.nccoastalmanagement.net/Permits/consist.htm> for additional details and submission samples.
- North Carolina's coastal zone management program consists of, but is not limited to, the Coastal Area Management Act, Chapter 7 of Title 15A of North Carolina's Administrative Code, the State's Dredge and Fill Law, and the land use plan³ of the County and/or local municipality in which the proposed project is located. Pursuant to 15 CFR 930.39, the consistency determination submission by the USCG must be based on an evaluation of the relevant enforceable policies of the State's coastal management program.
- The standard of review for a proposed Federal activity within an Area of Environmental Concern (AEC) as defined in §113A-113 of the Coastal Area Management Act are Subchapters 7H and 7M of Title 15A of North Carolina's Administrative Code⁴. Proposed Federal activities that are outside of an AEC are usually reviewed under Subchapter 7M of Title 15A of North Carolina's Administrative Code. DCM recommends, if possible, that the PEIS depict for any project components in North Carolina their geographical relationship to any AECs that may exist. DCM also recognizes that at the PEIS phase that specific sites may not yet have been identified. In the event that specific sites have not yet been identified for the PEIS, DCM recommends that the proposed PEIS discuss that the subsequent environmental assessment contain an evaluation of any proposed communication facility's relationship any AEC including a graphical depiction of any AEC line should one exist within the project vicinity.
- DCM has relocated its offices to Morehead City, NC. The new address is 400 Commerce Avenue, Morehead City, NC 28557-3421. The USCG notice to DCM was mailed to the old Raleigh address.
- From the limited description of the proposed project, it appears that the communication facilities may be placed in close proximity to the shoreline and waters of North Carolina. Placing communication facilities in these locations will require careful compliance with North Carolina's coastal management program to avoid habitat areas, to minimize other environmental effects, and to minimize interference with Public Trust rights.
- The proposed project may require other State approvals, such as a 401 Water Quality Certification, Stormwater Plan, and/or an Erosion and Sediment Control Plan. DCM recommends that the proposed PEIS either have a section that discusses the necessity for other

¹ The proposed action, the establishment of the Nationwide Automatic Identification System, may require several consistency reviews by DCM as it moves from the conceptual phase to actual implementation. DCM consistency review would only be necessary should the proposed project have a coastal effect within North Carolina. The USCG may still be required to obtain consistency reviews from other coastal states.

² The USCG may also prepare a national or regional consistency determination pursuant to 15 CFR 930.36(e).

³ DCM recommends that the Coast Guard review the local land use plans to determine whether the proposed communication facilities would be consistent with the local land use plans and whether the local land use plans contain siting and design standards for communication facilities.

⁴ The State's Dredge and Fill Law and the local land use plan are still a part of the standard of review.

State approvals and permits or acknowledges that this issue will be evaluated under a subsequent environmental document. DCM encourages the USCG to obtain any required State permits prior to submitting the final consistency determination that would request the actual construction of the proposed facilities.

- DCM recommends that a biological assessment be prepared on the potential project sites to identify biological constraints (such as wetlands, endangered species habitat, and/or construction moratorium periods) and to recommend mitigation measures for minimizing unavoidable impacts. Pursuant to 15A NCAC 07M .0700 of Chapter 7 of Title 15A of North Carolina's Administrative Code, DCM may only approve a project where there is no reasonable or prudent alternate design or location for the project that would avoid the losses to be mitigated.

In closing, I would like to assure the USCG that the Division of Coastal Management truly appreciates the USCG's dedication to protecting the citizens of the United States, and we look forward to working with the USCG on this proposed project to ensure that the needs of both the USCG and the State of North Carolina are addressed. Thank you for your consideration of the North Carolina Coastal Management Program

Sincerely,



Stephen Rynas, AICP
Federal Consistency Coordinator

cc: Charles S. Jones, Division of Coastal Management
Doug Huggett, Division of Coastal Management
Ted Sampson, Division of Coastal Management
Terry Moore, Division of Coastal Management
Tere Barrett, Division of Coastal Management
Jim Gregson, Division of Coastal Management



North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

MEMORANDUM

TO: Chrys Baggett
State Clearinghouse

FROM: Melba McGee *mw*
Project Review Coordinator

SUBJECT: 06-0181 US Department of Homeland Security

DATE: January 12, 2006



The attached comments were received by this office after the response due date. These comments should be forwarded to the applicant and made a part of our previous comment package.

Thank you for the opportunity to respond.

Attachment

DEC 28 2005

DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

Project # 06-0181
County All Coastal

Inter-Agency Project Review Response

Project Name: US Dept. of Homeland Security Type of Project: Establishment of a Nationwide Automatic Identification System (NAIS) with capabilities to receive & distribute info between shipboard & shoreline.

Comments provided by:

- Regional Program Person
- Regional Supervisor for Public Water Supply Section
- Central Office program person

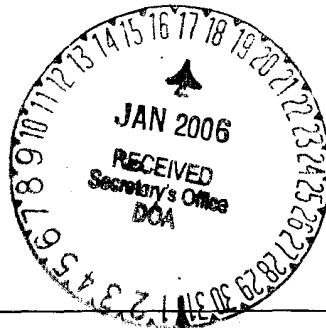
Name: Fred Hill Telephone #: (252) 946-6481 Date Rec'd: 12-15-2005
Date Rev'd: 12-22-2005

Program within Division of Environmental Health:

- Public Water Supply
- Other, Name of Program _____

Response (check all applicable):

- No objection to project as proposed
- No comment
- Insufficient information to complete review
- Comments attached
- See comments below



Locations for shoreside facilities have not been selected, however consideration should be given to existing or potential water sources, treatment and utility distribution piping, with efforts made to avoid conflicting usage.

If such facilities or piping must be constructed or relocated, appropriately engineered plans and specifications should be prepared for review and approval by the appropriate State agency.

Return to :
Public Water Supply Section
Environmental Review Coordinator
for the
Division of Environmental Health

DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

Project Number 06-0181
County All Coastal Counties

Inter-Agency Project Review Response

Project Name US Dept. of Homeland Sec. Type of Project Establishment of a Nationwide Automatic Identification System (NAIS) with capabilities to receive & distribute info between shipboard & shoreline.

- The applicant should be advised that plans and specifications for all water system improvements must be approved by the Division of Environmental Health prior to the award of a contract or the initiation of construction (as required by 15A NCAC 18C .0300et. seq.). For information, contact the Public Water Supply Section, (919) 733-2321.
- This project will be classified as a non-community public water supply and must comply with state and federal drinking water monitoring requirements. For more information the applicant should contact the Public Water Supply Section, (919) 733-2321.
- If this project is constructed as proposed, we will recommend closure of _____ feet of adjacent waters to the harvest of shellfish. For information regarding the shellfish sanitation program, the applicant should contact the Shellfish Sanitation Section at (252) 726-6827.
- The soil disposal area(s) proposed for this project may produce a mosquito breeding problem. For information concerning appropriate mosquito control measures, the applicant should contact the Public Health Pest Management Section at (919) 733-6407.
- The applicant should be advised that prior to the removal or demolition of dilapidated structures, a extensive rodent control program may be necessary in order to prevent the migration of the rodents to adjacent areas. For information concerning rodent control, contact the local health department or the Public Health Pest Management Section at (919) 733-6407.
- The applicant should be advised to contact the local health department regarding their requirements for septic tank installations (as required under 15A NCAC 18A. 1900 et. sep.). For information concerning septic tank and other on-site waste disposal methods, contact the On-Site Wastewater Section at (919) 733-2895.
- The applicant should be advised to contact the local health department regarding the sanitary facilities required for this project.
- If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Environmental Health, Public Water Supply Section, Technical Services Branch, 1634 Mail Service Center, Raleigh, North Carolina 27699-1634, (919) 733-2321.
- For Regional and Central Office comments, see the reverse side of this form.

<u>Jim McRight</u>	<u>PWSS</u>	<u>12/13/05</u>
Reviewer	Section/Branch	Date

386084



MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard • Baltimore Maryland 21230-1718
(410) 537-4120

Robert L. Ehrlich, Jr.
Governor

Kend P. Philbrick
Secretary

Michael S. Steele
Lt. Governor

Jonas A. Jacobson
Deputy Secretary

January 20, 2006

Captain K. J. Guth
Nationwide AIS Project
United States Coast Guard
2100 Second Street, SW
Washington DC 20593

USCG-2005-22837-05

RE: State Application Identifier: MD20051129-0959
Project: Scoping...National Automatic Identification System

Dear Captain Guth:

Thank you for the opportunity to review the above referenced project. The document was circulated throughout the Maryland Department of the Environment (MDE) for review, and the following comments are offered for your consideration.

The U.S. Coast Guard plan to establish an electronic Nationwide Automatic Identification System for ship traffic would appear to have a great deal of benefit to their organization and national security in general. The electronic reporting system would apparently have real time reporting capabilities in order to track ship movements. Given the real time reporting capabilities, and that other information might also be transmitted via the network, provisions for other types of data transmission might be considered for inclusion in the system.

First, the system should be considered as an alternative means of transmitting ballast water management reports that are currently required by all ships entering the nation's ports. Electronic reporting would provide the potential for direct entry into the database maintained for the Coast Guard by the Smithsonian Environmental Research Center. This would have the potential of reducing costs and improving the timeliness of the data.

Captain K. J. Guth
January 20, 2006
Page Two

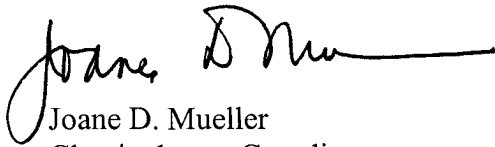
Secondly, a number of state and federal agencies are in the process of preparing a strategy for monitoring the nation's coastal waters. This is being done under the auspices of the National Water Monitoring Council. It would seem likely that at least some ships could be fitted with basic water quality monitoring systems that would produce data that could be used to more precisely and thoroughly monitor key water quality conditions as they traverse our coastal waters. While not all ships would be outfitted for this purpose, the envisioned electronic tracking and reporting system should be constructed to allow for this element to be incorporated.

In the same manner, ships fitted with key weather sensors could also transmit that data via the same system. This data would provide information to a wide array of government, weather, and shipping interests.

In summary, the system needs to be constructed with broader interests in mind than just tracking ships for safety and security purposes. Since the primary cost in establishing the network will be related to the physical elements, the added benefits of incorporating additional data transmission capabilities would make the system much more valuable at minimal extra cost.

Again, thank you for giving MDE the opportunity to review this project. If you have any questions, please feel free to call me at (410) 537-4120.

Sincerely,

A handwritten signature in black ink, appearing to read "Joane D. Mueller", with a long horizontal flourish extending to the right.

Joane D. Mueller
Clearinghouse Coordinator

cc: Bob Rosenbush, State Clearinghouse

PUBLIC INVOLVEMENT

**(NOA, INTERESTED PARTY LETTER, MAILING LIST, PUBLIC COMMENTS AND
RESPONSES ON THE DRAFT PEIS)**

United States Department of Justice
United States Environmental Protection
Agency

Arizona Public Service Company
Constellation Energy Generation Group
Dominion Energy
Dominion Generation
Energy Operations
Excelon Generation Company, LLC
General Electric Energy Nuclear Energy
National Institute of Standards and
Technology
Nuclear Energy Institute
Southern Nuclear Company
USEC, Inc.

Oil and Gas Sector

Federal Energy Regulatory Commission
National Association of Regulatory Utility
Commissioners
National Association of State Energy Officials
United States Department of Agriculture
United States Department of Defense
United States Department of Energy
United States Department of Homeland
Security
United States Department of the Interior
United States Department of State
United States Department of Transportation
United States Environmental Protection
Agency

American Gas Association
American Petroleum Institute
American Public Gas Association
Anadarko Canada Corp.
Anadarko Petroleum Corporation
Association of Oil Pipe Lines
BP
Canadian Association of Petroleum
Producers
Chevron Corporation
ConocoPhillips
Domestic Petroleum Council
Dominion Resources, Inc.
Edison Chouest Offshore, LLC
El Paso Corp.
ExxonMobil
Gas Processors Association
International Association of Drilling
Contractors
Interstate Natural Gas Association of America
Independent Petroleum Association of
America
Leffler Energy
Marathon Petroleum Company, LLC
National Petrochemical & Refiners
Association
National Propane Gas Association
NiSource, Inc.
Newfoundland Ocean Industries Association
Offshore Marine Service Association
Petroleum Marketers Association of America
Rowan Companies, Inc.
Shell Oil Company
Shipley Stores, LLC
U.S. Oil & Gas Association
Valero Energy Corporation
Western States Petroleum Association

Postal and Shipping Sector

United States Department of Defense
United States Department of Health and
Human Services
United States Department of Homeland
Security
United States Department of Justice

DHL
FedEx
United Parcel Service of America, Inc.
United States Postal Service

Transportation Sector

United States Department of Defense
United States Department of Energy
United States Department of Homeland
Security
United States Department of Transportation
American Public Transportation Association
Association of American Railroads
New Jersey Transit

Water Sector Members

Association of State and Interstate Water
Pollution Control Administrators
Association of State Drinking Water
Administrators
United States Army Corps of Engineers
United States Department of Agriculture
United States Department of Defense
United States Department of Health and
Human Services
United States Department of Homeland
Security
United States Department of State
United States Department of the Interior
United States Environmental Protection
Agency
Alexandria Sanitation Authority
American Water
American Water Works Association
Association of Metropolitan Water Agencies
AWWA Research Foundation
Bean Blossom Patricksburg Water
Corporation
Boston Water and Sewer Commission
Breezy Hill Water and Sewer Company
City of Portland Bureau of Environmental
Services
Columbus Water Works
Fairfax Water
Greenville Water System
Los Angeles Department of Water and Power
Manchester Water Works
Milwaukee Water Works
National Association of Clean Water
Agencies
National Association of Water Companies
National Rural Water Association
New York City Department of Environmental
Protection
Pima County Wastewater Management
Department
United Water
Water Environment Federation
Water Environment Research Foundation

[FR Doc. E6-10276 Filed 6-29-06; 8:45 am]

BILLING CODE 4410-10-P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

[USCG-2005-22837]

Nationwide Automatic Identification System, Draft Programmatic Environmental Impact Statement

AGENCY: U.S. Coast Guard, Department
of Homeland Security.

ACTION: Notice of availability; notice of
public meeting; request for public
comments.

SUMMARY: The U.S. Coast Guard (USCG) announces the availability of the draft programmatic environmental impact statement (PEIS) addressing the proposed implementation of the Nationwide Automatic Identification System (NAIS) project. The proposed implementation of the NAIS project would involve installing receivers, transmitters, transceivers, repeaters, and other equipment on towers or other structures at up to 450 sites at locations along 95,000 miles of coastline and inland waterways, as well as the use of selected remote platforms. The USCG requests public comments on the draft PEIS.

DATES: One public meeting concerning the draft PEIS is planned. The public meeting will be held on Wednesday, August 9, 2006 in Washington, DC. The public meeting will begin at 9 a.m. and is scheduled to end at 11 a.m. The public meeting may end earlier or later than the stated time, depending on the number of persons wishing to speak. Comments and related material submitted in response to the request for public comments must reach the Docket Management Facility on or before August 14, 2006.

ADDRESSES: The public meeting will be held at the USCG Headquarters building (Transpoint Building), 2100 Second Street, SW., Washington, DC 20593.

You may submit comments identified by Coast Guard docket number USCG-2005-22837 to the Docket Management Facility at the U.S. Department of Transportation (DOT). To avoid duplication, please use only one of the following methods to submit comments or other materials:

(1) *Web site:* <http://dms.dot.gov>.

(2) *Mail:* Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590-0001.

(3) *Fax:* 202-493-2251.

(4) *Delivery:* Room PL-401 on the Plaza level of the Nassif Building, 400 Seventh Street SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except holidays. The telephone number is 202-366-9329.

(5) *Federal eRulemaking Portal:*
<http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: If you have questions on this notice, please call or e-mail Anita Allen, Ph.D., NAIS Environmental Manager, at 202-474-3292 or aallen@comdt.uscg.mil. If you have questions on viewing the docket, call Ms. Andrea M. Jenkins,

Program Manager, Docket Operations at 202-366-0271.

The draft PEIS is available for viewing online at the DOT's docket management Web site: <http://dms.dot.gov> under docket number 22837. A copy of the draft PEIS can also be obtained on the NAIS project Web site: <http://www.uscg.mil/hq/g-a/AIS/> or by contacting Dr. Allen.

SUPPLEMENTARY INFORMATION:

Public Meeting

We invite you to comment at the public meeting on the proposed action and the evaluation presented in the draft PEIS.

Please notify the USCG prior to the public meeting if you wish to speak at the public meeting (see **FOR FURTHER INFORMATION CONTACT**). In order to allow everyone a chance to speak, the USCG may limit speaker time, or extend the meeting hours, or both. You must identify yourself, and any organization you represent, by name. Your remarks will be recorded or transcribed for inclusion in the public docket. You may submit written material at the public meeting, either in place of or in addition to speaking. Written material must include your name and address.

Verbal and written input will be included in the public docket. Public docket materials will be made available to the public on the Docket Management Facility's Docket Management System (DMS). See "Request for Comments" for information about DMS and your rights under the Privacy Act.

If you plan to attend the public meeting, and need special assistance such as sign language interpretation or other reasonable accommodation, please notify the USCG (see **FOR FURTHER INFORMATION CONTACT**) at least 3 business days in advance. Include your contact information, as well as information about your specific needs.

Request for Comments

As a part of the process to prepare the PEIS, the USCG requests public comments or other relevant information on the draft PEIS. The public meeting is not the only opportunity you have to comment on the draft PEIS. In addition to, or in place of attending the meeting, persons or organizations can submit material to the Docket Management Facility during the public comment period (see **DATES**). The USCG will consider all comments submitted during the public comment period, and subsequently will prepare the final PEIS. The USCG will announce the availability of the final PEIS and once again give interested parties an opportunity to review the document. (If

you want the notice for the final PEIS to be sent to you, please contact the personnel identified in **FOR FURTHER INFORMATION CONTACT**.)

All comments received will be posted, without change, to <http://dms.dot.gov> and will include any personal information you have provided. We have an agreement with the Department of Transportation (DOT) to use the Docket Management Facility. Please see DOT's "Privacy Act" paragraph below.

Submitting comments: If you submit a comment, please include your name and address, identify the docket number for this notice (USCG-2005-22837) and give the reason for each comment. You may submit your comments by electronic means, mail, fax, or delivery to the Docket Management Facility at the address under **ADDRESSES**; but please submit your comments by only one means. If you submit them by mail or delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit them by mail and would like to know that they reached the Facility, please enclose a stamped, self-addressed postcard or envelope. We will consider all comments received during the comment period.

Viewing comments and documents: To view comments, go to <http://dms.dot.gov> at any time, click on "Simple Search," enter the last five digits of the docket number for this rulemaking, and click on "Search." You may also visit the Docket Management Facility in room PL-401 on the Plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Privacy Act: Anyone can search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review the Department of Transportation's Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477), or you may visit <http://dms.dot.gov>.

Proposed Action

The USCG published a notice of intent to prepare a PEIS for the proposed implementation of the NAIS project in the **Federal Register** (70 FR 70862, November 23, 2005). The proposed action requiring environmental review is a DHS Level I investment and USCG major systems acquisition that would involve installing receivers, transmitters, transceivers, repeaters, and other

equipment on towers or other structures at up to 450 sites along 95,000 miles of coastline, other inland waterways, and remote platforms such as satellites, offshore oil and gas platforms and data buoys.

The purpose of the proposed action evaluated in the draft PEIS is to establish a nationwide network of receivers and transmitters to capture, display, exchange, and analyze AIS-generated information. The proposed action would satisfy the USCG's need to enhance homeland security while carrying out its mission to ensure marine safety and security, preserve maritime mobility, protect the marine environment, enforce U.S. laws and international treaties, and perform search and rescue (SAR) operations.

The AIS is an international standard for ship-to-ship, ship-to-shore, and shore-to-ship communication of information, including vessel identity, position, speed, course, destination, and other data of critical interest for navigational safety and maritime security. The proposed implementation of the NAIS project would provide the USCG with the capability to receive and distribute information from shipboard AIS equipment and transmit information to AIS equipped vessels to enhance Maritime Domain Awareness. The proposed project would provide detection and identification of vessels carrying AIS equipment approaching or operating in the maritime domain where little or no vessel tracking currently exists.

Alternatives To the Proposed Action

The technical and operational requirements for NAIS require the system to be operational in both inland navigable waters and the open ocean out to 2,000 nautical miles (NM) offshore. No single implementation alternative could meet the technical and operational requirements of this large and geographically variable area. As a result, the USCG believes that a combination of implementation alternatives would be needed to meet the technical and operational requirements. The proposed implementation of the NAIS project includes using a combination of the following coverage mechanisms:

(1) NAIS Short-Range Coverage—Shore-Based Radio Frequency (RF) Sites. The establishment of shore-based RF sites was the only alternative found by the USCG to be viable for achieving short-range NAIS coverage. Short-range NAIS coverage includes inland navigable waters, and out to 50 nautical miles (NM) offshore. Shore-based RF sites would consist of AIS equipment

mounted on towers, buildings, bridges, or other structures. The USCG anticipates the majority of these sites would be tower-based. The USCG would be faced with the choice of installing AIS equipment at new sites ("new build"); installing AIS equipment adjacent to existing communications equipment ("collocation"); or, program wide, using a combination of the collocation and new build sites for shore-based RF sites.

For the proposed implementation of the NAIS project, the USCG has chosen to bound or bracket the programmatic environmental analysis of the shore-based RF sites by evaluating three potential NAIS siting alternatives: All New Tower Builds, Combination of Collocations and New Tower Builds, and All Collocations.

(2) NAIS Long-Range Coverage—Satellites. For long-range coverage, satellite services could be leased from commercial satellite providers or the government. The USCG is currently assessing technology development to support this capability. The analysis of this alternative assumes that the initial technology development would yield a deployable solution. The satellite system is envisioned to consist of a number of low earth orbit satellites to provide the needed long-range maritime tracking of vessels (i.e., coverage requirement to receive AIS signals with a minimum 4-hour reporting rate out to 2,000 NM offshore).

(3) NAIS Long-Range Coverage—Offshore Platforms and Data Buoys. NAIS long-range coverage could be provided, in part, by using existing offshore platform and data buoy capabilities to provide additional coverage availability. The USCG is currently evaluating the effectiveness of deploying AIS base stations and AIS receivers on various offshore Gulf of Mexico oil and gas platforms and National Oceanic and Atmospheric Administration data buoys. Potential offshore platforms of interest include existing active U.S. Department of the Interior (DOI) Minerals Management Service (MMS)-regulated oil and gas infrastructures in the Gulf of Mexico, Pacific, and Alaska regions.

Dated: June 22, 2006.

J.P. Currier,

*Rear Admiral, United States Coast Guard,
Assistant Commandant for Acquisition.*

[FR Doc. E6-10256 Filed 6-29-06; 8:45 am]

BILLING CODE 4910-15-P

DEPARTMENT OF HOMELAND SECURITY

Bureau of Customs and Border Protection

Agency Information Collection Activities; Protest

AGENCY: Customs and Border Protection, Department of Homeland Security.

ACTION: Proposed collection; comments requested.

SUMMARY: Customs and Border Protection (CBP) of the Department of Homeland Security has submitted the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995: Protest. This is a proposed extension of an information collection that was previously approved. CBP is proposing that this information collection be extended without a change to the burden hours. This document is published to obtain comments from the public and affected agencies. This proposed information collection was previously published in the **Federal Register** (71 FR 19197) on April 13, 2006, allowing for a 60-day comment period. This notice allows for an additional 30 days for public comments. This process is conducted in accordance with 5 CFR 1320.10.

DATES: Written comments should be received on or before July 31, 2006.

ADDRESSES: Written comments and/or suggestions regarding the items contained in this notice, especially the estimated public burden and associated response time, should be directed to the Office of Management and Budget Desk Officer at Nathan.Lesser@omb.eop.gov.

SUPPLEMENTARY INFORMATION: The Bureau of Customs and Border Protection (CBP) encourages the general public and affected Federal agencies to submit written comments and suggestions on proposed and/or continuing information collection requests pursuant to the Paperwork Reduction Act of 1995 (Pub. L. 104-13). Your comments should address one of the following four points:

(1) Evaluate whether the proposed collection of information is necessary for the Proper performance of the functions of the agency/component, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agencies/components estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the collections of information on those who are to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

Title: Protest.

OMB Number: 1651-0017.

Form Number: CBP Form 19.

Abstract: This collection is used by an importer, filer, or any party at interest to petition CBP, or Protest any action or charge, made by the port director on or against any; imported merchandise, merchandise excluded from entry, or merchandise entered into or withdrawn from a bonded warehouse.

Current Actions: This submission is to extend the expiration date without a change to the burden hours.

Type of Review: Extension (without change).

Affected Public: Business.

Estimated Number of Respondents: 3,750.

Estimated Time per Respondent: 6 hours.

Estimated Total Annual Burden Hours: 67,995.

Estimated Total Annualized Cost on the Public: N/A.

If additional information is required contact: Tracey Denning, Bureau of Customs and Border Protection, 1300 Pennsylvania Avenue, NW., Room 3.2.C, Washington, DC 20229, at 202-344-1429.

Dated: June 15, 2006.

Tracey Denning,

Agency Clearance Officer, Information Services Branch.

[FR Doc. 06-5895 Filed 6-29-06; 8:45 am]

BILLING CODE 9111-14-P

DEPARTMENT OF HOMELAND SECURITY

Bureau of Customs and Border Protection

Modification of the CBP NCAP Test Regarding Reconciliation for Entries Under the Dominican Republic-Central America-United States Free Trade Agreement

AGENCY: Customs and Border Protection, Homeland Security.

ACTION: General notice.

SUMMARY: This document announces a modification to the Customs and Border Protection Automated Commercial

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16475

June 30, 2006

Dear Interested Party:

The United States Coast Guard (USCG) announces the availability of the Draft Programmatic Environmental Impact Statement (PEIS) addressing the proposed implementation of the Nationwide Automatic Identification System (NAIS) project. A description of the proposed project is provided in the enclosed Draft PEIS Notice of Availability, as published in the *Federal Register*.

The Draft PEIS was prepared in accordance with the provisions of the National Environmental Policy Act (NEPA) of 1969 (Section 102[2][c]), as implemented by the Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations, Parts 1500-1508), U.S. Department of Homeland Security (DHS) Management Directive 5100.1, *Environmental Program Planning* (MD 5100.1); and Commandant Instruction (COMDTINST) M16475.1D, *National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts*, and other appropriate and applicable regulations. Consistent with NEPA, DHS and USCG policy, the Draft PEIS assesses the potential environmental impacts of the various alternatives for implementing the Proposed Action, including the No Action Alternative.


In making the Draft PEIS available, the USCG is now seeking public comments relating to this document. As part of the PEIS process, the USCG will hold a public meeting on Wednesday, August 9, 2006, in room 2415 of the USCG Headquarters building in Washington, DC. The meeting will begin at 9:00 a.m. and is scheduled to end at 11:00 a.m. The public meeting may end earlier or later than the stated time, depending on the number of persons wishing to speak. The meeting is open to the public, and all interested parties are encouraged to attend. Written and oral comments will be accepted at the public meeting. The public notice initiating the comment process was published in the *Federal Register* on June 30, 2006. A notice is also being published in the *San Francisco Chronicle* and the *Washington Post*.

We would like to hear from the public and encourage you to submit comments and related materials. We will consider all comments received by Monday, August 14, 2006. Comments may be submitted to the DOT Docket Management System (DMS). Please refer to the Federal Register Notice, provided as an enclosure to this letter, for instruction on how to submit comments. In choosing from the means listed in the Federal Register Notice, please give due regard to the continuing difficulties and delays associated with the delivery of mail through the U.S. Postal Service to federal facilities. Comments and material received from the public, as well as the Draft PEIS, will become part of this docket and will be available for inspection or copying at Room PL-401 on the Plaza Level of the Nassif Building, 400 Seventh Street, S.W., Washington, DC between 9 a.m. and 5 p.m. Monday through Friday, except for Federal holidays. You may also view this docket, including this notice and comments, on the DMS web site at

16475
June 30, 2006

<http://dms.dot.gov> and using docket number 22837. If you have questions on viewing the docket, call Ms. Andrea M. Jenkins, Program Manager, Docket Operations at 202-366-0271. If you have questions about the Draft PEIS or would like a copy of the document, you may contact Dr. Anita Allen, NAIS Environmental Manager, at 202-474-3292 or aallen@comdt.uscg.mil. A copy of the draft PEIS can also be obtained on the NAIS project web site: <http://www.uscg.mil/hq/g-a/AIS>.

Sincerely,



J. K. INGALSBE
Commander, U.S. Coast Guard
Deputy Project Manager, Nationwide AIS Project
By direction

Enclosure

Nationwide Automatic Information System

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Hadley, MA 01035-9589

EPA's concerns; therefore, EPA does not object to the proposed action.

Dated: June 28, 2006.

Robert W. Hargrove,

Director, NEPA Compliance Division, Office of Federal Activities.

[FR Doc. E6-10395 Filed 6-30-06; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[ER-FRL-6676-7]

Environmental Impacts Statements; Notice of Availability

Responsible Agency: Office of Federal Activities, General Information (202) 564-7167 or <http://www.epa.gov/compliance/nepa/>

Weekly receipt of Environmental Impact Statements

Filed 6/19/2006 through 6/23/2006 pursuant to 40 CFR 1506.9.

EIS No. 20060260, Final EIS, BLM, AK, East Alaska Draft Resource Management Plan (RMP), Provide a Single Comprehensive Land Use Plan, Implementation, Glennallen Field Office District, AK, Wait Period Ends: 7/31/2006. Contact: Bruce Rogers 907-822-3217.

EIS No. 20060261, Final EIS, NPS, UT, Burr Trail Modification Project, Proposed Road Modification within Capitol Reef National Park, Garfield County, UT, Wait Period Ends: July 31, 2006. Contact: Chris Turk 303-969-2832.

EIS No. 20060262, Draft EIS, SFW, CA, San Joaquin Valley Operations and Maintenance Program Habitat Conservation Plan, Application for Incidental Take Permits, San Joaquin, Stanislaus, Merced, Fresno, Kings, Kern Mariposa, Madera and Tulare Counties, CA, Comment Period Ends: 9/28/2006. Contact: Lori Rinek 916-414-6600.

EIS No. 20060263, Final EIS, BIA, MI, Nottawaseppi Huron Band of Potawatomi Indians (the Tribe), Proposes Fee-to-Trust Transfer and Casino Project, Calhoun County, MI, Wait Period Ends: 7/31/2006. Contact: Terrance Virden 612-725-4510.

EIS No. 20060264, Draft EIS, AFS, WY, Lower Valley Energy (LVE) Natural Gas Pipeline Project. Construction and Operation of a Pressurized Natural Gas Pipeline, Special-Use-Authorization, Big Piney and Jackson Ranger Districts, Bridger-Teton National Forest, Sublette and Teton Counties, WY, Comment Period Ends: 8/14/2006. Contact: Teresa Trulock 307-276-3375.

EIS No. 20060265, Draft EIS, EPA and BIA, ND, Mandan, Hidatsa and Arikara (MHA) Nation's Proposed Clean Fuels Refinery Project, Construct and Operate a New 15,000 Barrel Per Day Clean Fuels Refinery and Grow Hay for Buffalo, Fort Berthold Indian Reservation, Ward County, ND, Comment Period Ends: 8/29/2006. Contact: Dana Allen 303-312-6870. US EPA and U.S. DOI's BIA are Co-Lead Agencies for the above project. Agencies contact are: Diane-Mann-Klager (BIA) 605-226-7621 and Monica Morales (EPA) 303-312-6936.

EIS No. 20060266, Draft EIS, DOT, TX, North Corridor Fixed Gudeway Project, Propose Transit Improvements from University of Houston (UH)—Downtown Station to Northline Mall, Harris County, TX, Comment Period Ends: 8/14/2006. Contact: John Sweek 817-978-0550.

EIS No. 20060267, Final EIS, BLM, CA, Ukiah Resource Management Plan Implementation, Several Counties, CA, Wait Period Ends: 8/14/2006. Contact: Eli Ilano 916-978-4427.

EIS No. 20060268, Draft EIS, FHW, DC, 11th Street Bridges Project, Anacostia Freeway I-295/DC 295, to the Southeast/Southwest Freeway (I-695) Improvements, Funding, NPDES Permit, U.S. Army COE Section 10 and 404 Permits, Washington, DC, Comment Period Ends: 8/28/2006. Contact: Michael Hicks 202-219-3513.

EIS No. 20060269, Draft Supplemental, COE, MD, Masonville Dredged Material Containment Facility, New Information, New Source of Dike Building Material from the Seagirt Dredging Project within the Patapsco River, Funding, Baltimore, MD, Comment Period Ends: 8/14/2006. Contact: Jon Romeo 410-962-6079.

EIS No. 20060270, Second Draft Supplemental, COE, FL, Cope Sable Seaside Sparrow Protection, Interim Operation Plan (IOP), Additional Information Alternative 7, Providing Additional Flood Control Capacity, Implementation, Everglades National Park, Miami-Dade County, FL, Comment Period Ends: 8/14/2006. Contact: Dr. Jon Moulding 904-232-2286.

EIS No. 20060271, Draft EIS, CGD, 00, PROGRAMMATIC—Implementation of the U.S. Coast Guard Nationwide Automatic Identification System Project, Providing Vessel Identification, Tracking and Information Exchange Capabilities to Support National Maritime Interests, Comment Period Ends: 8/14/2006. Contact: Anita Allen 202-475-3292.

EIS No. 20060272, Draft EIS, COE, NC, West Onslow Beach and New River Inlet (Topsail Beach) Shore Protection Project, Storm Damages and Beach Erosion Reduction, Funding, Pender County, NC, Comment Period Ends: 8/14/2006. Contact: Jenny Owens 910-251-4757.

EIS No. 20060273, Draft EIS, RUS, MT, Highwood Generating Station, 250-megawatt Coal Fired Power Plant and 6MW of Wind Generation at a Site near Great Falls, Construction and Operation, Licenses Permit, U.S. Army COE Section 10 Permit, Cascade County, MT, Comment Period Ends: 8/15/2006. Contact: Richard Fristik 202-720-5093.

Amended Notices

EIS No. 20060184, Draft EIS, COE, MD, Masonville Dredge Material Containment Facility (DMCF), Construction from Baltimore Harbor Channel north of Point-Rock Point Line, U.S. Army COE Section 10 and 404 Permits, Baltimore, MD, Comment Period Ends: 8/14/2006. Contact: Jon Romeo 410-962-6079. Revision to FR Published on 5/19/2006: Comment Period extended from 7/7/2006 to 8/14/2006.

EIS No. 20060218, Draft EIS, FHW, NY, Williamsville Toll Barrier Improvement Project, Improvements from New York Thruway, Interstate 90 between Interchange 48A and 50, Funding, Erie and Genesee Counties, NY, Comment Period Ends: August 21, 2006. Contact: Amy Jackson-Grove 518-431-4125. Revision to FR Notice Published 6/2/2006: Correction to Comment Period from 7/24/2006 to 8/21/2006.

EIS No. 20060220, Draft EIS, BLM, ID, Snake River Birds of Prey National Conservation Area, Resource Management Plan, Implementation, Ada, Canyon, Elmore, Owyhee Counties, ID, Comment Period Ends: 8/31/2006. Contact: Mike O'Donnell 208-384-3315. Revision to FR Notice Published 6/2/2006: Extending Comment Period from 8/17/2006 to 8/31/2006.

Dated: June 28, 2006.

Robert W. Hargrove,

Director, NEPA Compliance Division, Office of Federal Activities.

[FR Doc. E6-10394 Filed 6-30-06; 8:45 am]

BILLING CODE 6560-50-P

T e r i e n h d r g f r t i l c i r t n n s d t f g f l d s e t g r n y l g n r j e y y n i t t s n	<p style="text-align: center;">805 PUBLIC NOTICES</p> <p>prior to the date of the Pre-Proposal Meeting and Site Visit.</p> <p>WHERE TO OBTAIN OR SEE RFP DOCUMENTS (Available on or after July 7, 2006)</p> <p>Copies of the RFP may be obtained:</p> <p>(1) By written request to the District's Senior Contract Administrator, Mr. Carl Asbury, 300 Lakeside Drive, 17th Floor, Oakland, CA 94612. Requests may be sent to Fax No. (510) 464-7650.</p> <p>(2) By arranging pick up at the above address. Contact the above individual at (510) 464-6545.</p> <p>Dated at Oakland, California this 5th day of July 2006.</p> <p>/s/ Kenneth A. Duron Kenneth A. Duron, District Secretary San Francisco Bay Area Rapid Transit District 7/8/06</p>	<p style="text-align: center;">805 PUBLIC NOTICES</p> <p>Transportation (DOT). Comments are requested by August 14, 2006. Please use only one of the following methods:</p> <p>(1) Web Site: http://dms.dot.gov.</p> <p>(2) Mail: Docket Management Facility, U.S. DOT, 400 Seventh Street, SW., Washington, DC 20590-0001.</p> <p>(3) Fax: 202-493-2251.</p> <p>(4) Delivery: Room PL-401 on the Plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is 202-366-9329.</p> <p>(5) Federal eRulemaking Portal: http://www.regulations.gov.</p> <p>The Draft PEIS as well as material received from the public will become part of the docket and will be available for inspection or copying at the address specified as (4), above. You may also view this docket on the Internet at http://dms.dot.gov. You can obtain information on the project and download the Draft PEIS for review on the Internet at www.uscg.mil/hq/g-a/ais/. If you have questions, please contact the NAIS Project Support Team at 202-475-3329 or via email at nais@comdt.uscg.mil.</p>
	<p>Notice of Availability and Public Meeting on Draft Programmatic Environmental Impact Statement (PEIS) for Implementation of the Nationwide Automatic Information System (NAIS) Project</p> <p>The U.S. Coast Guard (USCG) announces the availability of the Draft PEIS as part of the environmental planning process for the NAIS project, a U.S. Department of Homeland Security Level I investment. The project was initiated as a component of implementing the Maritime Transportation Security Act of 2002. Implementation of the NAIS, in part, involves installing Automatic Identification System equipment and related support systems on and around communications towers or other structures along 95,000 miles of coastline and inland rivers.</p> <p>The USCG invites public comment on the Draft PEIS. The USCG will hold a public meeting on August 9, 2006, from 9:00 a.m. to 11:00 a.m. in room number 2415 at USCG Headquarters, 2100 Second Street SW., Washington, DC 20593.</p> <p>You may submit comments identified by docket number USCG-2005-22837 to the Docket Management Facility at the U.S. Department of</p>	<p style="text-align: center;">810 PUBLIC NOTICES (NON-GOV.)</p> <p style="text-align: center;">SUMMONS CASE NO. 43537</p> <p>NOTICE TO DEFENDANT: Elman Mankins and His Testate and Intestate Successors and Persons Claiming by through or under Such Decedent, Donna Lee King, and all Persons Unknown, Claiming Any Legal or Equitable Right, Title, Interest, Estate, Lien in Property, etc. and Does 1-10, Inclusive,</p> <p>YOU ARE BEING SUED BY PLAINTIFF: Freda Owens</p> <p>You have 30 CALENDAR DAYS after this summons and legal papers are served on you to file a written response at this court and have a copy served on the plaintiff. A letter or phone call will not protect you. Your written response must</p>

820 Official Notices

820 Official Notices

**Notice of Availability and Public Meeting on
Draft Programmatic Environmental Impact Statement
(PEIS) for Implementation of the Nationwide
Automatic Information System (NAIS) Project**

The U.S. Coast Guard (USCG) announces the availability of the Draft PEIS as part of the environmental planning process for the NAIS project, a U.S. Department of Homeland Security Level I investment. The project was initiated as a component of implementing the Maritime Transportation Security Act of 2002. Implementation of the NAIS, in part, involves installing Automatic Identification System equipment and related support systems on and around communications towers or other structures along 95,000 miles of coastline and inland rivers.

The USCG invites public comment on the Draft PEIS. The USCG will hold a public meeting on August 9, 2006, from 9:00 a.m. to 11:00 a.m. in room number 2415 at USCG Headquarters, 2100 Second Street SW., Washington, DC 20593.

You may submit comments identified by docket number USCG-2005-22837 to the Docket Management Facility at the U.S. Department of Transportation (DOT). Comments are requested by August 14, 2006. Please use only one of the following methods:

- (1) Web Site: <http://dms.dot.gov>.
- (2) Mail: Docket Management Facility, U.S. DOT, 400 Seventh Street, SW., Washington, DC 20590-0001.
- (3) Fax: 202-493-2251.
- (4) Delivery: Room PL-401 on the Plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is 202-366-9329.
- (5) Federal eRulemaking Portal: <http://www.regulations.gov>.

The Draft PEIS as well as material received from the public will become part of the docket and will be available for inspection or copying at the address specified as (4), above. You may also view this docket on the Internet at <http://dms.dot.gov>. You can obtain information on the project and download the Draft PEIS for review on the Internet at www.uscg.mil/hq/g-a/ais/. If you have questions, please contact the NAIS Project Support Team at 202-475-3329 or via email at nais@comdt.uscg.mil.

SPECIAL NOTICE

NOTICE OF AVAILABILITY OF DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR A NATIONWIDE AUTOMATIC IDENTIFICATION SYSTEM

On June 30, 2006, the U.S. Coast Guard (USCG) published a Notice of Availability; Notice of Public Meeting; Request for Public Comments in the Federal Register (Volume 71, Number 126, Pages 37594-37596) concerning the availability of a draft Programmatic Environmental Impact Statement (PEIS) addressing the proposed implementation of a Nationwide Automatic Identification System (NAIS). One public meeting concerning the draft PEIS will be held at USCG Headquarters in Washington, DC, on Wednesday, August 9, 2006 from 9 a.m. to 11 a.m.

The NAIS project was initiated as a component of implementing the Maritime Transportation Security Act of 2002. Implementation of the NAIS, in part, involves installing Automatic Identification System (AIS) equipment and related support systems on and around communications towers or other structures including remote platforms such as satellites, offshore oil and gas platforms, and data buoys to provide coverage along 95,000 miles of coastline and inland waterways.

AIS is an international standard for ship-to-ship, ship-to-shore, and shore-to-ship communication of information, including vessel identity, position, speed, course, destination, and other data of critical interest for navigational safety and maritime security. The proposed implementation of the NAIS project would provide the USCG with the capability to receive and distribute information from shipboard AIS equipment and transmit information to AIS equipped vessels to enhance Maritime Domain Awareness. The proposed project would provide detection and identification of vessels carrying AIS equipment approaching or operating in the maritime domain where little or no vessel tracking currently exists.

The entire Federal Register notice, including procedures for submission of comments can be found via the Internet at <http://dmses.dot.gov/docimages/p86/403315.pdf>.

**Draft PEIS for Implementation of the USCG NAIS
Public/Agency Comments Received – comment period ended 8/17/06**

#	Commentor	Letter Date
1	Leech Lake Band of Ojibwe	12/5/05
2	B. Sachau	7/5/06
3	North Carolina Department of Administration, North Carolina State Clearinghouse	7/7/06
4	California Coastal Commission	7/10/06
5	Maryland Department of Environmental Planning	7/13/06
6	Missouri Office of Administration	7/14/06
7	Hawaii Department of Business, Economic Development & Tourism	7/17/06
8	Commonwealth of Virginia, Department of Environmental Quality	7/20/06
9	Connecticut Commission on Culture & Tourism, State Historic Preservation Office	7/20/06
10	The Department of Arkansas Heritage	7/24/06
11	Florida Department of Environmental Protection	7/26/06
12	New Jersey Department of Environmental Protection	7/27/06
13	South Carolina State Budget and Control Board	7/31/06
14	Commonwealth of Virginia, Department of Historic Resources	8/2/06
15	U.S. Department of the Interior, Fish and Wildlife Service, Kansas Ecological Services Field Office	8/3/06
16	Alabama Historical Commission	8/7/06
17	Florida Department of State, Division of Historical Resources	8/8/06
18	Prince William Sound Regional Citizens' Advisory Council	8/8/06
19	Canal Barge Company, Inc.	8/9/06
20	Commonwealth of Massachusetts, Massachusetts Historical Commission	8/10/06
21	Washington Department of Ecology	8/11/06
22	State of California, Governor's Office of Planning and Research State Clearinghouse and Planning Unit	8/15/06
23	Maryland Department of the Environment	8/18/06

**Draft PEIS for Implementation of the USCG NAIS
Public/Agency Comments Received – comment period ended 8/17/06 (continued)**

#	Commentor	Letter Date
24	Catawba Indian Nation	8/18/06
25	Environmental Protection Agency	8/23/06

COMMENT

RESPONSE

1. Thank you, comment noted.

Leech Lake Band of Ojibwe

10ea24



*George Gogglays, Chairman
Arthur "Archie" LaRose, Secretary/Treasurer*

District I Representative
Barton "Luke" Wilson

District II Representative
Lynan L. Losh

District III Representative
Donald "Mick" Finn

December 2, 2005

Commandant (G-AIS)

U.S. Coast Guard

Attn: K. J. Guth

2100 Second Street SW

Jemal Building, Room 11-0602

Washington, DC 20593

USCG - 2005 - 22887-40

RE: **Proposed PEIS for the establishment of a
Nationwide Automatic Identification System
LL-THPO Number: 05-252-NCRI**

To Whom It May Concern:

Thank you for the opportunity to comment on the above-referenced project. It has been reviewed pursuant to the responsibilities given the Tribal Historic Preservation Officer by the National Historic Preservation Act of 1966, as amended in 1992 and the Procedures of the Advisory Council on Historic Preservation (38CFR800).

I have reviewed the documentation; after careful consideration of our records, I have determined that the Leech Lake Band of Ojibwe does not have any concerns regarding sites of religious or cultural importance in this area.

Should any human remains or suspected human remains be encountered, all work shall cease and the following personnel should be notified immediately in this order: County Sheriff's Office and Office of the State Archaeologist.

You may contact me at (218) 335-2940 if you have questions regarding our review of this project. Please refer to the LL-THPO Number as stated above in all correspondence with this project.

Respectfully submitted,

Gina M. Pappadopolos
Gina M. Pappadopolos
Tribal Historic Preservation Officer

Leech Lake Tribal Historic Preservation Office * Established in 1996
6530 U.S. 2 NW * Cass Lake, Minnesota 56633
(218) 335-2940 * FAX (218) 335-2974
llhpo@hotmail.com

COMMENT

RESPONSE

2.

2. Thank you, comment noted.

From: "jean public
To: aallen@comdt.uscg.mil
Subject: public comment on uscg automatic id system project
Date: Wed, 5 Jul 2006 11:46:16 -0400
Plain Text Attachment [Scan and Save to Computer | Save to Yahoo! Briefcase
]

eis 2006 0271 in federal register of 6/30/06 vol71 no 126 pg 37594

i think this project of identification of every single vessel that is in u.s. waters is a good one.

as far as it being used to rescue stupid boaters who go out on the water when the weather is predicted to be bad, then we need to institute a charge for saving them. we need to start the fines and penalties for causing these issues at \$500,000.00.

i have seen far too many instances of people who needlessly and stupidly took boats out on the water when common sense would tell them NOT to go out.

i think it is time that they pay a high fee for such negligence. the taxpayers are tired of picking them up and paying for that negligence.

i would be much more interested in seeing this project identify each and every vessel in our waters. it is clear that some of these vessels are so negligently run that they are polluting our waters with oil deposition, etc. i have been told the u.s. coast guard cannot identify that pollution. it is time that we do.

and that we fine them and seize their polluting vessels so that they cannot continue to pollute.

b. sachau

COMMENT

RESPONSE

3.

3. Thank you, comment noted.



North Carolina
Department of Administration

Michael F. Easley, Governor

Britt Cobb, Secretary

July 7, 2006

Dr. Anita Allen
U.S. Coast Guard
2100 Second Street, S.W.
Washington DC 20593-0001

Dear Dr. Allen:

Subject: Draft Environmental Impact Statement - Draft Programmatic EIS for Implementation of the U.S. Coast Guard Nationwide Automatic Identification System Project

The N. C. State Clearinghouse has received the above project for intergovernmental review. This project has been assigned State Application Number 07-E-0000-0013. Please use this number with all inquiries or correspondence with this office.

Review of this project should be completed on or before 08/07/2006. Should you have any questions, please call (919)807-2425.

Sincerely,

Handwritten signature of Chrys Baggett in cursive.

Ms. Chrys Baggett
Environmental Policy Act Coordinator

Mailing Address:
1301 Mail Service Center
Raleigh, NC 27699-1301

Telephone: (919)807-2425
Fax: (919)733-9571
State Courier FSI-01-00
e-mail: Chrys.Baggett@ncmail.net

Location Address:
116 West Jones Street
Raleigh, North Carolina

An Equal Opportunity/Affirmative Action Employer

COMMENT

4.

Page 1 of 2

From: mdelaplaine@coastal.ca.gov [<mailto:mdelaplaine@coastal.ca.gov>]
Sent: Tuesday, July 11, 2006 5:49 PM
To: Allen, Anita
Cc: Larry Simon
Subject: RE: NAIS Programmatic DEIS - FR notice 6/30/06, p. 37594 - USCG
Docket-2005-22837

Thanks. That helps. Then we have no comments at this time (other than, keep us apprised of any projects that might be in or might affect the California coastal zone). - Mark

-----Original Message-----

From: A.Allen@comdt.uscg.mil [<mailto:A.Allen@comdt.uscg.mil>]
Sent: Tuesday, July 11, 2006 1:19 PM
To: Mark Delaplaine
Subject: RE: NAIS Programmatic DEIS - FR notice 6/30/06, p. 37594 - USCG
Docket-2005-22837

Mark-

We have not selected any sites yet. We are hoping to collocate on existing towers and other structures to the maximum extent possible and still meet technical/operational requirements. We will be conducting formal siting studies as part of the implementation process and will complete tiered NEPA documents for each port. The type of document will be dependent on the final implementation plan selected for a specific port. For example, if we can achieve operational requirements with only collocations, we will complete a port-level categorical exclusion. If new construction is required, we will complete either an EA or EIS depending on the magnitude of expected impacts. Current engineering suggests that we should not have to construct any new towers in excess of 200 feet above ground level except in extreme circumstances. We will keep the public informed of our progress via the website and will be in touch with state and local agencies as we move into their jurisdictions for studies, applicable environmental documentation and permits, as well as construction/installation.
Hope this helps.

Anita

-----Original Message-----

From: Mark Delaplaine [<mailto:mdelaplaine@coastal.ca.gov>]
Sent: Tuesday, July 11, 2006 12:25 PM Eastern Standard Time
To: Allen, Anita
Subject: RE: NAIS Programmatic DEIS - FR notice 6/30/06, p. 37594 - USCG Docket-2005-22837

Anita - Thanks. I was able to look at the document. It seems pretty conceptual. Is there any way to tell at this point whether (and if so, where) there would be construction in the California coastal zone? - Mark

-----Original Message-----

From: A.Allen@comdt.uscg.mil [<mailto:A.Allen@comdt.uscg.mil>]
Sent: Tuesday, July 11, 2006 5:03 AM
To: Mark Delaplaine
Subject: RE: NAIS Programmatic DEIS - FR notice 6/30/06, p. 37594 - USCG
Docket-2005-22837

RESPONSE

4. Comment noted. Further coordination will be undertaken for construction of each new tower site proposed in California. Thank you.

COMMENT

RESPONSE

4.

Page 2 of 2

<http://www.uscg.mil/hq/g-a/Ais/docs/env%20planning/Env%20Planning.htm>

You should be able to access the Draft EIS at this website.

Anita Allen, Ph.D.
Environmental Program Manager
Nationwide Automatic Identification System Program HQ, USCG
Phone: 202/475-3292
Cell: 202/580-5257
Fax: 202 475-3916
aallen@comdt.uscg.mil

From: mdelaplaine@coastal.ca.gov [mailto:mdelaplaine@coastal.ca.gov]
Sent: Monday, July 10, 2006 6:18 PM
To: Allen, Anita
Subject: NAIS Programmatic DEIS - FR notice 6/30/06, p. 37594 - USCG
Docket-2005-22837

Dr. Allen - I'm not finding the website for this. I'd like to know the scope for activities in California. Can you email me a copy or show me a link?

Thanks,

Mark Delaplaine
Federal Consistency Supervisor
California Coastal Commission
45 Fremont St., Suite 2000
San Francisco, CA 94114

(415) 904-5289 - phone
(415) 904-5400 - fax no.
mdelaplaine@coastal.ca.gov

COMMENT

RESPONSE

5.

5. Thank you, comment noted.

4068229



Maryland Department of Planning

Robert L. Ehrlich, Jr.
Governor
Michael S. Steele
Lt. Governor

Andry E. Vait
Secretary
Florence E. Burian
Deputy Secretary

July 13, 2006

Mr. J.K. Ingalsbe
Commander, Deputy Project Manager, Nationwide AIS Project
U.S. Coast Guard
2100 Second Street, S.W.
Staff Symbol: G-AIS
Washington, DC 20593-0001

USCA - 2006 - 22837 -41

SLATE CLEARINGHOUSE REVIEW PROCESS

State Application Identifier: MD20060712-0771
Reviewer Comments Due By: August 24, 2006
Project Description: Draft Programmatic EIS (PEIS): Proposed Implementation of the Nationwide Automatic Identification System Project; consider four (4) alternatives includes "no build"; public hearing 8/9/06; location of receivers and other equipment on towers along coastline
Project Location: United States of America
Clearinghouse Contact: Bob Rosenbush

Dear Mr. Ingalsbe:

Thank you for submitting your project for intergovernmental review. Participation in the Maryland Intergovernmental Review and Coordination (MIRC) process helps ensure project consistency with plans, programs, and objectives of State agencies and local governments. MIRC enhances opportunities for approval and/or funding and minimizes delays by resolving issues before project implementation.

The following agencies and/or jurisdictions have been forwarded a copy of your project for their review: the Maryland Department(s) of the Environment, Budget & Management, Natural Resources, Transportation, and the Maryland Department of Planning, including the Maryland Historical Trust. They have been requested to contact your agency directly by August 24, 2006 with any comments or concerns and to provide a copy of those comments to the State Clearinghouse for Intergovernmental Assistance. Please be assured that after August 24, 2006 all MIRC requirements will have been met in accordance with Code of Maryland Regulations (COMAR 14.24.04).

NOTE TO THE REVIEW COORDINATORS: The review document can be accessed at

<http://www.uscg.mil/hq/gc-AIS>
Single left click on Environmental Planning; then click on the various chapters of the PEIS. The project has been assigned a unique State Application Identifier that should be used on all documents and correspondence. If you need assistance or have questions, contact the State Clearinghouse staff noted above at 410-767-4490 or through e-mail at brosenbush@mdp.state.md.us. Thank you for your cooperation with the MIRC process.

Sincerely,

Linda C. Janey, J.D., Director
Maryland State Clearinghouse for Intergovernmental Assistance

LCIBR
Enclosure(s)
cc: MDC/NEV/As
Joane Mueller - MDE*
Chad Clapsadelle - DBM*

Ray Dintaman - DNR*
Cindy Johnson - MDOIT*

Beth Cole - MHT*
Joc Tassone - MDPE*

Pat Goucher - MDPI*

301 West Preston Street • Suite 1101 • Baltimore, Maryland 21201-2305

Telephone: 410.767.4500 • Fax: 410.767.4480 • Toll Free: 1.877.767.6272 • TTY: Users: Maryland Relay
Internet: www.MDP.state.md.us

COMMENT

RESPONSE

6.

6. Thank you, comment noted.

Page 1 of 2

408720



Matt Blunt
Governor

Wag 2005 083137

Michael N. Keathley
Commissioner

State of Missouri
OFFICE OF ADMINISTRATOR
Intergovernmental Relations
Post Office Box 809
Jefferson City, 65102
573/751-1851

07/14/06

J.K. Ingalsbe
Commander, U.S. Coast Guard
Room PL-401 / Plaza Level of Nassif Building
400 Seventh Street, S.W.
Washington, DC 20593-001

Dear Ingalsbe:

Subject: 0701039
Assistance

The Missouri Federal Assistance Clearinghouse, in cooperation with state and local agencies interested or possibly affected, has completed the review on the above project application.

None of the agencies involved in the review had comments or recommendations to offer at this time. This concludes the Clearinghouse's review.

A copy of this letter is to be attached to the application as evidence of compliance with the State Clearinghouse requirements.

Please be advised that I am the new contact for the Federal Funding Clearinghouse. You can send future requests to the following address: Sara VanderFelz, Federal Funding Clearinghouse, 201 West Capitol, Room 125, and Jefferson City, Missouri 65101.

Sincerely,

Sara VanderFelz
Administrative Assistant

cc:

6.

Page 2 of 2

0701039



Commandant
United States Coast Guard

JUL 10 2006

2100 Second Street, S.W.
Washington, DC 20370-0001
Star Station, CG AIS
Phone: (202) 475-3329
Fax: (202) 475-3898

16475
June 30, 2006

Dear Interested Party:

The United States Coast Guard (USCG) announces the availability of the Draft Programmatic Environmental Impact Statement (PEIS) addressing the proposed implementation of the Nationwide Automatic Identification System (NAIS) project. A description of the proposed project is provided in the enclosed Draft PEIS Notice of Availability, as published in the *Federal Register*.

The Draft PEIS was prepared in accordance with the provisions of the National Environmental Policy Act (NEPA) of 1969 (Section 102[2][c]), as implemented by the Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations, Parts 1500-1508), U.S. Department of Homeland Security (DHS) Management Directive 5100.1, *Environmental Program Planning* (MD 5100.1); and Commandant Instruction (COMDTINST) M16475.1D, *National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts*, and other appropriate and applicable regulations. Consistent with NEPA, DHS and USCG policy, the Draft PEIS assesses the potential environmental impacts of the various alternatives for implementing the Proposed Action, including the No Action Alternative.

In making the Draft PEIS available, the USCG is now seeking public comments relating to this document. As part of the PEIS process, the USCG will hold a public meeting on Wednesday, August 9, 2006, in room 2415 of the USCG Headquarters building in Washington, DC. The meeting will begin at 9:00 a.m. and is scheduled to end at 11:00 a.m. The public meeting may end earlier or later than the stated time, depending on the number of persons wishing to speak. The meeting is open to the public, and all interested parties are encouraged to attend. Written and oral comments will be accepted at the public meeting. The public notice initiating the comment process was published in the *Federal Register* on June 30, 2006. A notice is also being published in the *San Francisco Chronicle* and the *Washington Post*.

We would like to hear from the public and encourage you to submit comments and related materials. We will consider all comments received by Monday, August 14, 2006. Comments may be submitted to the DOT Docket Management System (DMS). Please refer to the Federal Register Notice, provided as an enclosure to this letter, for instruction on how to submit comments. In choosing from the means listed in the Federal Register Notice, please give due regard to the continuing difficulties and delays associated with the delivery of mail through the U.S. Postal Service to Federal facilities. Comments and material received from the public, as well as the Draft PEIS, will become part of this docket and will be available for inspection or copying at Room PL-401 on the Plaza Level of the Nassif Building, 400 Seventh Street, S.W., Washington, DC between 9 a.m. and 5 p.m. Monday through Friday, except for Federal holidays. You may also view this docket, including this notice and comments, on the DMS web site at

COMMENT

RESPONSE

7.

7. Comment noted. Further coordination will be undertaken for construction of each new tower site proposed in Hawaii. Thank you.

406319



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P O Box 2359, Honolulu, Hawaii 96804

LINDA LINGLE
GOVERNOR
THEODORE E LIU
GOVERNOR
MARK K ANDERSON
DEPUTY DIRECTOR
LAURA H. THIELSEN
DIRECTOR
OFFICE OF PLANNING

Telephone: (808) 587-2646
Fax: (808) 587-2824

Ref. No. P-11434

July 17, 2006

Commander J. K. Ingalsbe
U.S. Coast Guard
Deputy Project Manager, Nationwide AIS Project
Docket Management Facility
U.S. Department of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590-0001

Dear Commander Ingalsbe:

Subject: Coast Guard Docket Number USCG-2005-22837; Draft Programmatic Environmental Impact Statement (PEIS) for the Nationwide Automatic Identification System (NAIS) Project

The Hawaii Coastal Zone Management (CZM) Program is submitting comments in response to your letter dated June 30, 2006 (reference no. 16475), announcing the availability of the Draft PEIS for the proposed implementation of the NAIS project and inviting us to submit comments. NAIS implementation in Hawaii is likely to necessitate a federal consistency review by the Hawaii CZM Program in accordance with the Coastal Zone Management Act, Section 307(c) requirements. Since the Draft PEIS does not identify specific sites where the NAIS will be located in Hawaii, the Hawaii CZM Program should be consulted during the site consideration and selection process to determine federal consistency applicability, requirements, and potential concerns.

If you have any questions or wish to initiate CZM consultation, please contact John Nakagawa of our CZM Program at (808) 587-2878 or jnakagaw@dbedt.hawaii.gov.

Sincerely,

Laura H. Thielson
Director

COMMENT

RESPONSE

8.

Comment noted. Further coordination will be undertaken for construction of each new tower site proposed in the Commonwealth of Virginia. Thank you.

Page 1 of 2



COMMONWEALTH of VIRGINIA

L. Preston Bryant, Jr.
Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P. O. Box 10009, Richmond, Virginia 23240
Fax (804) 698-4500 TDD (804) 698-4021
www.deq.virginia.gov

David K. Poyler
Director
(804) 698-4000
1-800-592-5482

July 20, 2006

Commander J. K. Ingalsbe
Deputy Project Manager, Nationwide AIS Project
U.S. Coast Guard, G-AIS
2100 2nd Street, S.W.
Washington, D.C. 20593

RE: Nationwide Automatic Identification System, Draft Programmatic
Environmental Impact Statement (Federal Register, Volume 71, Number
126, dated June 30, 2006, pages 37594-37596) (letter reference 16475)

Dear Commander Ingalsbe:

Thank you for your June 30, 2006 letter addressed to "Interested Party"
(received July 7) regarding the above Draft Programmatic Environmental Impact
Statement.

The Department of Environmental Quality is responsible for coordinating
Virginia's review of federal environmental documents prepared pursuant to the
National Environmental Policy Act and responding to appropriate federal officials
on behalf of the Commonwealth. In addition, DEQ's Office of Environmental
Impact Review (this Office) coordinates Virginia's review of federal consistency
determinations prepared pursuant to the Coastal Zone Management Act.

According to the Federal Register notice and the CD version of the Draft
Programmatic Environmental Impact Statement (Draft PEIS) accompanying your
letter, the Coast Guard intends to install "receivers, transmitters, transceivers,
repeaters, and other equipment on towers or other structures" at locations along
the Nation's coastlines and inland waterways -- as many as 450 sites in all, for
short-range radio frequency coverage. For long-range coverage, the Coast
Guard would hire satellites and is considering the use of existing offshore
platforms or buoys (Federal Register, pages 37595-37596; Draft PEIS, page ES-
1). According to the Draft PEIS, the Coast Guard will conduct tiered National
Environmental Policy Act reviews following its determination of coverage
requirements and specific site candidates after the PEIS process (page 1-12,

COMMENT

RESPONSE

8.

Page 2 of 2

Commander J. K. Ingallsbe
Page 2

section 1.4.3). It is understood, however, that the maritime areas of interest include all of the country's coastlines (Draft PEIS, page 1-7, Figure 1-1).

We will be interested in reviewing site- or area-specific environmental impact statements or assessments tiering off the PEIS when they are published, and before final determinations as to project sites are made. We will also be interested in reviewing any federal consistency determinations for projects which can affect Virginia's coastal resources or coastal uses. We ask that you contact us at that time in order to determine the number of copies of the environmental document and/or federal consistency determination that we will need for our coordinated state review. However, we do not think it would be productive or helpful, to the Coast Guard or to ourselves, to review the Draft Programmatic EIS at this time.

If you have questions, please feel free to contact me (telephone (804) 698-4325 or e-mail ellie@dec.virginia.gov) or Charles Ellis (of this Office (telephone (804) 688-4488 or e-mail chellis@dec.virginia.gov).

Sincerely,



Ellie L. Irons
Program Manager
Office of Environmental Impact
and Federal Consistency Review

COMMENT

RESPONSE

9.

Comment noted. Further coordination will be undertaken for construction of each new tower site proposed in Connecticut. Thank you.



Historic Preservation
& Museum Division

59 South Prospect Street
Hartford, Connecticut
06106
(860) 566-3005
(860) 566-5078

Connecticut Commission on Culture & Tourism

407262

RECEIVED

RECEIVED

July 20, 2006

Ms. Andrea M. Jenkins
Docket Management Facility
U.S. Department of Transportation
400 Seventh Street, SW
Washington, DC 20590-0001

Subject: U.S. Coast Guard
Nationwide Automatic Identification System
Docket: USGC-2005-22837-27

Dear Ms. Jenkins:

The State Historic Preservation Office has reviewed the *Draft Programmatic Environmental Impact Statement for Implementation of the U.S. Coast Guard Nationwide Automatic Identification System Project*. This office notes that the State of Connecticut possesses a rich heritage of maritime-related historic, architectural, or archaeological resources that may be impacted, physically or visually, by site-specific actions forthcoming from the proposed undertaking. We look forward to further consultation with the U.S. Coast Guard regarding all specific NAIS-related projects which may be considered within Connecticut.

This office appreciates the opportunity to have reviewed and commented upon the proposed undertaking.

This comment is provided in accordance with the National Historic Preservation Act and the Connecticut Environmental Policy Act.

For further information please contact Dr. David A. Poirier, Staff Archaeologist.

Sincerely,

J. Paul Loether
Division Director and Deputy
State Historic Preservation Officer

COMMENT

RESPONSE

10.

10. Comment noted. Further coordination will be undertaken for construction of each new tower site proposed in Arkansas. Thank you.

408721



The Department of
**Arkansas
Heritage**

Mike Huckabee, Governor
Cathie Matthews, Director

Arkansas Arts Council
Arkansas Natural Heritage
Commission

Delta Cultural Center

Historic Arkansas Museum

Mosaic Templars
Cultural Center

Old State House Museum



Arkansas Historic
Preservation Program

1500 Tower Building
323 Center Street
Little Rock, AR 72201

(501) 324-9880
fax: (501) 324-9184
tdd: (501) 324-9811

e-mail: info@arkansaspreservation.org
website:
www.arkansaspreservation.org

An Equal Opportunity Employer



July 24, 2006

Com. J.K. Ingalsbe
Deputy Project Manager, Nationwide AIS Project
United State Coast Guard
2100 Second Street, S.W.
Washington, D.C. 20593-0001

RE: Multi County - General
Section 106 Review - USCG
Proposed Implementation of the Nationwide Automatic
Identification System Project
AHPP Tracking No: 61024

Dear Com. Ingalsbe:

My staff has reviewed the draft Programmatic Environmental Impact Statement (PEIS) regarding the above-referenced undertaking. Because specific project elements may not have been identified at this point, we recommend that individual undertakings be submitted to this office for review under the terms of Section 106 of the National Historic Preservation Act. Such undertakings need be submitted only if ground disturbing activities are planned or if installation of Coast Guard equipment will modify an existing structure to the extent that an adverse visual effect might occur.

Thank you for the opportunity to comment on this undertaking. If you have any questions, please contact Steve Innhoff of my staff at (501) 324-9880.

Sincerely,

Ken Grunewald
Deputy State Historic Preservation Officer

cc: Dr. Ann M. Early, Arkansas Archeological Survey

2006-2008 38837-38

COMMENT

RESPONSE

11.

11. Thank you, comment noted.



Jon Bush
Governor

**Department of
Environmental Protection**

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

Colleen M. Castille
Secretary

July 26, 2006

Dr. Anita Allen
NAIS Environmental Manager
U.S. Coast Guard, G-AIS
2100 Second Street, SW
Washington, DC 20593-0001

RE: U.S. Coast Guard – Docket No. USCG-2005-22837 – Draft Programmatic
Environmental Impact Statement for Implementation of the U.S. Coast Guard
Nationwide Automatic Identification System Project
SAI # FL200607262638C

Dear Dr. Allen:

Florida State Clearinghouse staff, pursuant to Presidential Executive Order 12372,
Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-
1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335,
4341-4347, as amended, has reviewed the referenced Draft Programmatic Environmental
Impact Statement (DPEIS).

Based on the information contained in the DPEIS, the state has determined that the
proposed federal activities are consistent with the Florida Coastal Management Program.

Thank you for the opportunity to review the proposed project. Should you have any
questions regarding this letter, please contact Ms. Lauren P. Milligan at (850) 245-2170.

Sincerely,

Sally B. Mann, Director
Office of Intergovernmental Programs

SBM/lm

COMMENT

RESPONSE

12.

Comment noted. Further coordination will be undertaken for construction of each new tower site proposed in New Jersey. Thank you.

407999



State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Environmental Regulation
Office of Permit Coordination and Environmental Review
401 East State Street
P.O. Box 423
Trenton, New Jersey 08625-0423
Phone: (609) 292-3600 Fax: (609) 777-1330

JON S. CORZINE
Governor

LISA P. JACKSON
Commissioner

July 27, 2006

DEPT. OF TRANSPORTATION
COCKETS
2006 AUG -7 P 12:58

Docket Management Facility
U.S. Department of Transportation
400 Seventh Street, SW.
Washington, DC 20590-0001

0566-2005-22337-31

RE: U.S. Coast Guard Nationwide Automatic Identification System
Draft Programmatic Environmental Impact Statement

Dear Sir or Madam,

The Office of Program Coordination of the New Jersey Department of Environmental Protection (NJDEP) has completed its review of the Draft Programmatic Environmental Impact Statement (DPEIS) for the United States Coast Guard Nationwide Automatic Identification System (NAIS). We have no comments on the programmatic document.

The Office of Permit Coordination and Environmental Review coordinates Department reviews of environmental documents prepared pursuant to the requirements of the National Environmental Policy Act (NEPA). The purpose of our reviews is to identify the environmental and regulatory issues that may have impacts to the State of New Jersey. Different features of the NAIS may require NJDEP permits and approvals depending on the sites and/or locations selected in New Jersey. Once subsequent NAIS environmental documents outlining New Jersey specific sites are completed, please send six copies of the NEPA documents directly to our Office to insure timely, comprehensive reviews.

Thank you for giving us the opportunity to review the DPEIS.

Sincerely,

Kenneth C. Koschek
Supervising Environmental Specialist
Office of Permit Coordination
and Environmental Review

COMMENT

RESPONSE

13.

13. Thank you, comment noted.

408717

03/06/06 37-25

STATE OF SOUTH CAROLINA
State Budget and Control Board
OFFICE OF STATE BUDGET



MARK SANDFORD, CHAIRMAN
GOVERNOR
GRADY L. PATTERSON, JR.
STAFF TREASURER
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RICHIE LEATHERMAN, SR.
CHAIRMAN, SENATE FINANCE COMMITTEE
DANIEL T. "DAN" COOPER
CHAIRMAN, WAYS AND MEANS COMMITTEE
FRANK W. FUSCO
EXECUTIVE DIRECTOR

1201 Main Street, Suite 870
COLUMBIA, SOUTH CAROLINA 29201
(803) 734-2280

LES HOLES
DIRECTOR

July 31, 2006

J.K. Ingalsbe
US Dept. of Homeland Security
US Coast Guard
Attn: Commander J.K. Ingalsbe
2100 Second Street, S.W.
Washington, DC 20593-0001

Project Name: Nationwide Automatic Identification System (NAIS) Project

State Application Identifier: SC060701-895

Dear Commander Ingalsbe:

The State Clearinghouse, Office of State Budget, has conducted an intergovernmental review of the project referenced above as provided by Presidential Executive Order 12372. All comments received, if any, as a result of the review are enclosed for your information.

The Clearinghouse does not have information on the Federal agency's review status. Please contact your Federal grantor agency with any questions concerning the status of your application.

The State Application Identifier indicated above should be used in any future correspondence with this office.

Sincerely,

Jean Ricard
Fiscal Manager, Grant Services

COMMENT

RESPONSE

14.

Comment noted. Further coordination will be undertaken for construction of each new tower site proposed in the Commonwealth of Virginia. Thank you.



COMMONWEALTH of VIRGINIA

L. Preston Byrnie, Jr.
Secretary of Natural Resources

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

August 2, 2006

Kathleen S. Kilpatrick
Director
Tel: (804) 367-2323
Fax: (804) 367-2391
TDD: (804) 367-2386
www.dhr.virginia.gov

Dr. Anita Allen
NAIS Environmental Manager
US Coast Guard
2100 Second Street, S.W.
Washington, DC 20593-0001

RE: Nationwide Automatic Identification System
DHR file no. 2005-1712

Dear Dr. Allen:

We have received a copy of the notice published in the Federal Register regarding the preparation of Programmatic Environmental Impact Statement for the Nationwide Automatic Identification System. We have no comments on this project at this time since it is not yet clear if the Commonwealth of Virginia will be impacted by this project. However, the project activities involved certainly have the potential to affect cultural resources. Therefore, we look forward to consulting with the Coast Guard pursuant to Section 106 of the National Historic Preservation Act should the decision be made to implement this program in the Commonwealth of Virginia.

Sincerely,

Kristin Hill, Architectural Historian
Office of Review and Compliance

RECEIVED
AUG 6 - 2006

Administrative Services
10 Courthouse Avenue
Petersburg, VA 23803
Tel: (804) 863-1024
Fax: (804) 862-4196

Capital Region Office
2801 Kensington Ave.
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

Tidewater Region Office
14415 Old Courthouse Way, 2nd Floor
Newport News, VA 23608
Tel: (757) 886-2807
Fax: (757) 886-2808

Roanoke Region Office
1020 Fenmar Ave., SE
Roanoke, VA 24013
Tel: (540) 857-7883
Fax: (540) 857-7588

Winchester Region Office
107 N. Kent Street, Suite 203
Winchester, VA 22601
Tel: (540) 722-3427
Fax: (540) 722-7535

COMMENT

RESPONSE

15.

a. AIS equipment will be co-located on existing towers to the greatest extent possible.

Page 1 of 2

b. Proposed new towers will be built 199 feet AGL or less to the greatest extent possible.

c. Follow-on NEPA documentation for proposed new towers will include analysis of potential cumulative impacts.

d. The USCG would have some flexibility in the exact siting of NAIS towers and equipment and would seek to avoid impacts to the greatest extent possible. Further coordination will be undertaken with USFWS for construction of each new tower site.

P. 2

7855398567

USFWS Manhattan, Kansas

AUG 04 06 01:19P

407811



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Kansas Ecological Services Field Office
2609 Anderson Avenue
Manhattan, Kansas 66502-6172

August 3, 2006

Document Management Facility
US Department of Transportation
400 7th Street SW
Washington, DC 20590-0001

WOLG-2005-22837-30

FWS Tracking # 2006-P-0448

RE: PEIS NAIS Project Comments

Dear Sirs/Madamame:

This is in response to your June 30, 2006 public notice seeking comment on the United States Coast Guard (USCG) Draft Programmatic Environmental Impact Statement (PEIS) addressing the proposed implementation of the Nationwide Automatic Identification System (NAIS) Project.

The proposal would involve installing receivers, transmitters, transceivers, repeaters and other equipment on towers or other structures at up to 450 sites at locations along 95,000 miles of coastline and inland waterways, as well as the use of selected remote platforms. We offer the following for your consideration.

- a. Anyone proposing to construct a new communications tower is strongly encouraged to co-locate the equipment on an existing communications tower or other structure or building mount. Depending on the tower load factors, from six to ten providers may collocate on an existing tower.
- b. If collocation is not feasible and a new tower or towers are to be constructed, communications providers are encouraged to construct towers no more than 199 feet above ground (AGL), using construction techniques that do not require guy wires. Such towers should be unlighted if Federal Aviation Administration (FAA) regulations permit.
- c. If constructing multiple towers, providers should consider the cumulative impacts of all of those towers to migratory birds and threatened and endangered species, as well as impacts of each individual tower.
- d. New towers should be sited within existing antenna farms. Towers should not be sited near wetlands, other known bird concentration areas, in known migratory or daily movement flyways or in habitat of threatened or endangered species. Towers should not be sited in areas with a high incidence of fog, mist and low ceilings as compared to nearby areas.

COMMENT

RESPONSE

15.

e. The USCG will follow FAA tower lighting guidelines.

Page 2 of 2

f. The USCG would have some flexibility in the exact siting of NAIS towers and equipment and would seek to avoid impacts to the greatest extent possible. Further coordination will be undertaken with USACE and USFWS, as necessary, for construction of each new tower site.

e. If taller (>199 feet) towers requiring lights for aviation safety must be constructed, the minimum amount of pilot warning and obstruction avoidance lighting required by the FAA should be used. Only white or red strobe lights should be used at night and these should be the minimum number of flashes per minute allowable by the FAA. The use of solid red or pulsating red warning red lights should be avoided.


f. Construction and operational activities should avoid wetlands, streams, and riparian woodlands to the maximum extent possible. All project sites should be surveyed for the presence of marshes and other wetland habitat types. If impacts to these areas are unavoidable, a permit may be required from the U.S. Army Corps of Engineers. All disturbed riparian areas should be revegetated with native plants as soon as possible after the disturbance occurs. Species composition following revegetation should parallel that which existed prior to the disturbance.

If a permit from the Corps of Engineers is required, the USFWS will be given the opportunity to review the public notice on the proposed action and provide additional comments at that time. Section 404 guidelines require the sequence of avoidance of impacts, minimization of impacts and compensation for unavoidable impacts. When we review the public notice we will request information on alternatives considered, how the project avoided and minimized impacts to aquatic ecosystems, and the compensatory mitigation proposal, if one is required by the Corps.

g. Under the Migratory Bird Treaty Act (MBTA), construction activities in prairies, wetlands, stream and woodland habitats that would otherwise result in the taking of migratory birds, eggs, young, and/or active nests should be avoided. Although the provisions of MBTA are applicable year-round, most migratory bird nesting activity in Kansas occurs during the period of April 1 to July 15, although some migratory birds are known to nest outside this period. If the proposed construction project may result in the take of nesting migratory birds, the USFWS recommends a field survey during the nesting season of the affected habitats and structures to determine the presence of active nests. Our office should be contacted immediately for further guidance if a field survey identifies the existence of one or more active bird nests that cannot be avoided temporarily or spatially by the planned construction activities.

Thank you for this opportunity to comment on the proposal.

Sincerely,


Michael J. LeValley
Field Supervisor

cc: KDWP, Pratt, KS (Environmental Services)
Connie Young-Dubovsky, RG, RO, (ES)

COMMENT

RESPONSE

16.

16. Thank you, comment noted.

4/12/06

DEPT. OF TRANSPORTATION
TODD

7:00 AM '06 22 P 3: 04

August 7, 2006

Docket Management Facility
USDOT
400 Seventh Street SW
Washington, D.C. 20590-0001

Re: AHC 2006-1245; USCG Docket Number USCG-2005-22837; Implementation of
Nationwide Automatic Identification System, Statewide, Alabama

Dear Sir or Madam:

Upon review of the above referenced project, the Alabama Historical Commission has determined that we can concur with the proposed project provided we are consulted on a case-by-case basis for each action in this undertaking. Thank you for the notice.

We appreciate your commitment to helping us preserve Alabama's non-renewable resources. Should you have any questions, please contact Amanda Hill of this office and include the AHC tracking number referenced above.

Very truly yours,



Elizabeth Ann Brown
Deputy State Historic Preservation Officer

EAB/ALM/alm



468 South Perry Street
Montgomery, Alabama
36130-0900

tel 334 242-3184
fax 334 240-3477

preserveALA
ALABAMA HISTORICAL COMMISSION

COMMENT

RESPONSE

17.

17. Comment noted. Further coordination will be undertaken for construction of each new tower site proposed in Florida. Thank you.



FLORIDA DEPARTMENT OF STATE
Sue M. Cobb
Secretary of State
DIVISION OF HISTORICAL RESOURCES

Dr. Anita Allen
United States Coast Guard
2100 Second Street, S.W.
Washington, DC 20593-0001

August 8, 2006

RE: DHR Project File Number: 2006-6191 / Received by DHR: July 10, 2006
United States Coast Guard
Draft Programmatic Impact Statement (PEIS) for the Nationwide Automatic
Identification System (NAIS)
All Florida

Dear Dr. Allen:

Our office received and reviewed additional information for the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended and *36 CFR Part 800: Protection of Historic Properties* and the *National Environmental Policy Act of 1969*, as amended. The State Historic Preservation Officer is to advise Federal agencies as they identify historic properties (listed or eligible for listing in the *National Register of Historic Places*), assess effects upon them, and consider alternatives to avoid or minimize adverse effects.

We appreciate receiving the advance notice of the PEIS for the above-referenced project and look forward to working with you on this project when we receive a hard copy of the document.

If there are any questions, please contact James Tomer, Historic Sites Specialist, by electronic mail at jtomer@doh.state.fl.us, or at 850-245-6333.

Sincerely,

Handwritten signature of Frederick P. Gaska.

Frederick P. Gaska, Director, and
State Historic Preservation Officer

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>
 Director's Office (850) 245-6336 Archaeological Research (850) 245-6444 • FAX: 245-6452 Historic Preservation (850) 245-6333 • FAX: 245-6437 Historical Museums (850) 245-6400 • FAX: 245-6433
 Southeast Regional Office (904) 467-4990 • FAX: 467-4991 Northeast Regional Office (904) 825-5045 • FAX: 825-5044 Central Florida Regional Office (813) 272-3843 • FAX: 272-2340

COMMENT

RESPONSE

18.

18. Thank you, comment noted.



409092
PRINCE WILLIAM SOUND REGIONAL CITIZENS' ADVISORY COUNCIL
1709 Spinnaker Road, Suite 1100 / Anchorage, Alaska 99503 / (907) 277-2222 / FAX 907-477-4323
1500 Ave. 100th / Suite 302 / Valdez, Alaska 99666 / (907) 634-3000 / FAX 907-635-3926

August 8, 2006

Docket Management Facility
U. S. Department of Transportation
400 Seventh Street, S.W.
Washington, DC 20590-0001

RE: Coast Guard Docket Number USCG-2005-22837 - 42
Nationwide Automatic Identification System, Environmental Impact Statement

Dear Sirs:

The Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) is an independent non-profit corporation whose mission is to promote environmentally safe operation of the Valdez Marine Terminal and associated tankers. Our work is guided by the Oil Pollution Act of 1990, and our contract with Alyeska Pipeline Service Company. PWSRCAC's 18 member organizations are communities in the region affected by the 1989 Exxon Valdez oil spill, as well as commercial fishing, aquaculture, Native, recreation, tourism and environmental groups.

PWSRCAC strongly supports the proposed action to establish a nationwide network of receivers and transmitters to capture, display, exchange, and analyze Automatic Identification System (AIS) generated information. We recognize that the implementation of this project would provide the U.S. Coast Guard with enhanced capability to receive and distribute information from ship-borne AIS equipment and to transmit information to AIS equipped vessels to enhance vessel tracking and maritime security. We see this as an improvement that would benefit crude oil transporters in U.S. coast wide trade and improve maritime safety in the areas where we have an active advisory role.

Sincerely,


John S. Devens, Ph. D.
Executive Director

COMMENT

RESPONSE

19.

19. Thank you, comment noted.

Page 1 of 2

08/08/2006 11:03 FAX 504 5841528

CANAL BARBE

001/002

4pg 341



Canal Barge Company, Inc.

835 UNION STREET
NEW ORLEANS, LOUISIANA 70112-1469
TELEPHONE (504) 581-2424
FAX (504) 584-1508

August 9, 2006

VIA TELEFAX (202) 493-2251

Docket Management Facility
U.S. Department of Transportation
400 Seventh St. S.W.
Washington, D.C. 20590-0001

RE: Docket No. USCG-2005-22837 - 92

Dear Sir or Madam:

Thank you for the opportunity to comment on the proposed National Automatic Identification System (NAIS) and the Programmatic Environmental Impact Statement prepared in advance of the nationwide implementation of this valuable program.

Background

Canal Barge Company, Inc. ("CBC") employs over 350 employees ranging from Unlimited Masters and Chief Engineers, to Masters of Towing Vessels, to Tankermen and Deckhands. These mariners operate our fleet of 16 inland towing vessels and over 600 barges (including over 170 inland tank barges) in the inland marine transportation service industry. We also own and operate an asphalt and chemical terminal located at Mile 281.3 of the Illinois Waterway.

CBC is an active member of the American Waterways Operators (AWO) and has actively participated with the AWO and the United States Coast Guard to develop practical security and safety solutions that represent the best available practices of the inland towing industry.

NAIS

As an operator of towboats on the Upper and Lower Mississippi, Illinois, and Tennessee Rivers, the Ohio Valley, the Intraoastal Waterways, and the Gulf Coast, CBC has already placed AIS systems on board all 16 of its towboats, including those vessels that operate outside of VTS zones and are not required to carry AIS. In our experience, AIS can be and has been an extremely valuable tool that aids both vessel safety and security.

19.

Page 2 of 2

08/09/2006 11:00 FAX 504 5041529

CANAL BARBE

002/002

Docket Management Facility
Page 2
August 9, 2006

Our wheelhouse personnel, who act as our "eyes and ears" on the river, have been overwhelmingly positive in their assessment of the AIS system and its impact on safe navigation. The inland waterways can be treacherous even to the most seasoned mariner; the AIS system allows real-time visualization of vessel traffic and facilitates communication of accurate information among vessels. CBC has seen the value of AIS in the real world, and strongly supports implementation of the system along the entire inland waterway system as quickly as possible. This implementation should be done in a consistent way across this entire system so that all vessels interact without any gaps in the system. The AIS system can be an excellent tool, but it will only be effective if all users are operating the same system on a continuous basis.

Environmental Impact

CBC has reviewed the Programmatic Environmental Impact Statement, along with the comments to the docket submitted by other governmental agencies centered on environmental protection. We note that the USCG has proposed installing AIS on existing antennae farms and other structures where possible, which reduces to the greatest extent possible any environmental impact, and that any short-term minor impacts would be offset by long-term gains in human health and safety on the waterways. We also note that among the state and federal agencies that have submitted comments to the docket, there have been no objections to the implementation of the system as a whole. CBC supports those comments that call for careful review of individual installations to ensure that any environmental impacts are minimized. However, as a whole we believe this program will provide great benefits to safety and security without any meaningful negative environmental impacts. We respectfully submit and recommend that implementation of AIS should proceed without delay.

We appreciate the chance to provide comments on this important program. If you have any questions or problems, please contact the undersigned at (504) 581-2424.

Best regards



William T. Smith
VP - Human Resources & CSO

COMMENT

RESPONSE

20.

20. Text clarified per comment.

a. Page 3-20, lines 10-35 were added to clarify Section 110 applicability.

b. and c. Page 3-22, lines 21-35 were added to address NAGPRA, unmarked burials, and prior archeological research.

Further coordination will be undertaken for construction of each new tower site proposed in Massachusetts. Thank you.

408085



DEPT. OF TRANSPORTATION
LOGISTICS

With the A 10-08

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth

Massachusetts Historical Commission

Captain K.J. Guith

Project Manager, Nationwide AIS Project

Deckle Management Facility

U.S. Department of Transportation

400 Seventh Street, SW

Washington, D.C. 20590-0001

SA

RE: USCG's Nationwide Automatic Identification System (NAIS), USCG #2005-22837, MHC #RC-38345.

Dear Captain Guith:

Staff at the Massachusetts Historical Commission (MHC) has received the copy of the Programmatic Environmental Impact Statement by the United States Coast Guard concerning the project referenced above. The proposed project involves the installation of a system of radio frequency antennas, receivers, transmitters, repeaters and other related equipment located on shore-based installations and remote platforms throughout the continental U.S. and U.S. Territories. MHC understands that once specific RF site locations have been selected, the USCG will consult with the MHC.

- a. On page 3-20, please note that Section 110 of the National Historic Preservation Act also applies to federal land.
- b. On page 3-21, please note that NAGPRA discovery does not apply to non-federal land; marked and unmarked burials are protected under several statutes in Massachusetts under the Massachusetts Unmarked Burial Law (M.G.L., Chapter 38, Section 6; Chapter 9, Section 26A and 27C; and Chapter 7, Section 38A).
- c. On page 3-22, lines 19-27, please note that the results of relevant, previous archaeological research should also be taken into account by qualified archaeologists (see 950 CMR 70.10) to develop predictive models and undertake archaeological sensitivity assessments. In Massachusetts, a State Archaeologist's Permit (950 CMR 70) is required for archaeological investigations.

These comments are offered to assist in compliance with Sections 106 and 110 of the National Historic Preservation Act of 1966 (36 CFR 800) and Massachusetts General Laws, Chapter 9, Sections 26-27C (950 CMR 70). Please feel free to contact either Gregory R. Dubell at this office if you have any questions or need additional information.

Sincerely,

Brona Simon

Brona Simon
State Archaeologist
Deputy Historic Preservation Officer
Acting Executive Director
Massachusetts Historical Commission

cc: Iana Helle, Historic Preservation Officer, Department of Homeland Security
Advisory Council on Historic Preservation
Victor Mastroma, Massachusetts Board of Underwater Archaeological Resources
Massachusetts Coastal Zone Management

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128

www.scc.state.ma.us/mhc

NO 0434 P. 2

MASS HISTORICAL COMM.

AUG 11 2006 9:05AM

COMMENT

RESPONSE

21.

Comment noted. Further coordination will be undertaken for construction of each new tower site proposed in Washington State. Thank you.

Aug. 14, 2006 1:47PM

No. 2791 P. 2

Page 1 of 2



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
4601 N. Monroe Street • Spokane, Washington 99205-1295 • (509) 329-3400

August 11, 2006

Captain Kurtis J. Guth
U.S. Coast Guard
2100 Second Street, SW
Washington, DC 20593

DOT No. USCG-2005-22837 - 39

Dear Captain Guth:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement regarding the Implementation of the U.S. Coast Guard Nationwide Automatic Identification System Project (Proponent – Dept. of Homeland Security). The Department of Ecology has reviewed the documents and has the following comments:

Water Quality Program

Any discharge of sediment-laden runoff or other pollutants to waters of the state is in violation of Chapter 90.48, Water Pollution Control, and WAC 173-201A, Water Quality Standards for Surface Waters of the State of Washington, and is subject to enforcement action.

Proper disposal of construction debris must be on land in such a manner that debris cannot enter the natural stormwater drainage system or cause water quality degradation of state waters.

Proper erosion and sediment control practices must be used on the construction site and adjacent areas to prevent upland sediments from entering the natural stormwater drainage system. All areas disturbed or newly created by construction activities must be stabilized and revegetated using the best available techniques to protect against erosion.

All dry wells and other injection wells must be registered with the Underground Injection Control Program (UIC) at Department of Ecology. Contact the UIC staff at UIC Program, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600 or (360) 407-6616 for registration forms and further information.

Dry wells can not be used for disposal of stormwater unless a treatment device or all known available and reasonable methods of prevention, control and treatment (AKART) is provided prior to injection and the discharge can meet the Ground Water Standards, Chapter 173-200 WAC. Examples of AKART are grassy swales, sand filters, catch



COMMENT

RESPONSE

21.

Page 2 of 2

Aug. 14. 2006 1:47PM

No. 2791 P. 3

basins, and wet and dry ponds. A coalescing plate oil/water separator or equivalent treatment must be used in high traffic areas where gasoline or oil contamination or storm water is likely to be present. Disposal of antifreeze, oil and other pollutants into drywells is not allowed.

Routine inspection and maintenance of all sediment and erosion control devices is recommended both during and after development of the site.

During construction, all release of oils, hydraulic fluids, fuels, other petroleum products, paints, solvents, and other deleterious materials must be contained and removed in a manner that will prevent their discharge to waters and soils of the state. The cleanup of spills should take precedence over other work on the site.

Dumpsters and refuse collection containers must be leak free with close fitting covers. The drainage for refuse containers and dumpster areas adjacent to or over the water must be designed to prevent leachate from being discharged to surface waters.

On-site septic tank and drainfield systems are designed to treat and dispose of domestic wastewater or its equivalent only. Commercial and industrial operations discharging wastes other than domestic wastewater to on-site systems may result in ground water contamination and could cause the facility owner or operator to incur severe liabilities.

Sincerely,



Terri Miller
SEPA Coordinator
Department of Ecology
Eastern Regional Office
4601 N. Monroe Street
Spokane, WA 99205-1295
Phone: (509)329-3550
Email: teri461@ecy.wa.gov 2006-5789

COMMENT

RESPONSE

22.

22. Thank you, comment noted.

Page 1 of 2



Arnold Schwarzenegger
Governor



Sean Walsh
Director

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

August 15, 2006

Anita Allen
U.S. Coast Guard
2100 Second Street, SW (code G-AIS)
Washington, DC 20393

Subject: Programmatic EIS for Implementation of the Nationwide Automatic Identification System Project
SCH#: 2006074001

Dear Anita Allen:

The State Clearinghouse submitted the above named Draft EIS to selected state agencies for review. The review period closed on August 14, 2006, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts
Director, State Clearinghouse

Document Details Report
State Clearinghouse Data Base

SCH#	2006074001
Project Title	Programmatic EIS for Implementation of the Nationwide Automatic Identification System Project
Lead Agency	U.S. Coast Guard
Type	EIS Draft EIS
Description	The action assessed in the draft PEIS is the proposed implementation of the Nationwide Automatic Identification System (NAIS) project. The proposed implementation of the NAIS project would involve installing receivers, transmitters, and related equipment on towers or other structures at up to 450 sites at locations along 95,000 miles of coastline and inland waterways, as well as the use of selected remote platforms such as satellites, oil and gas platforms, and data buoys. The NAIS project is a U. S. Department of Homeland Security Level 1 investment and USCG major systems acquisition.
Lead Agency Contact	
Name	Anita Allen
Agency	U.S. Coast Guard
Phone	(202) 474-3282
email	
Address	2100 Second Street, SW (code G-AIS)
City	Washington
State	DC
Zip	20593
Project Location	
County	
City	
Region	
Cross Streets	
Parcel No.	
Township	
Range	
Section	
Base	
Proximity to:	
Highways	
Airports	
Railways	
Waterways	U.S. Coastline and certain inland waterways
Schools	
Land Use	
Project Issues	Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Cumulative Effects; Economics/Jobs; Flood Plain/Flooding; Geologic/Seismic; Landuse; Noise; Recreation/Parks; Soil Erosion/Compaction/Grading; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife
Reviewing Agencies	Resources Agency; Office of Emergency Services; Department of Fish and Game, Headquarters; Department of Water Resources; California Coastal Commission; California Highway Patrol; Department of Boating and Waterways; Calltrans, Division of Transportation Planning; State Water Resources Control Board, Division of Water Quality; State Lands Commission; San Francisco Bay Conservation and Development Commission; Department of Parks and Recreation; Native American Heritage Commission
Date Received	07/06/2006
Start of Review	07/07/2006
End of Review	08/14/2006

Note: Blanks in data fields result from insufficient information provided by lead agency.

COMMENT

RESPONSE

23.

23. Thank you, comment noted.



MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard • Baltimore Maryland 21230-1718
(410) 537-4120

Robert L. Ehrlich, Jr.
Governor
Michael S. Steele
Lt. Governor

Kendall P. Phillips
Secretary
Jonas A. Jacobson
Deputy Secretary

August 18, 2006

Mr. J. K. Ingalsbe
U.S. Coast Guard
2100 Second Street, SW
Staff Symbol: G-AIS
Washington DC 20593-0001

RE: State Application Identifier: MD20060712-0771
Project: Draft Programmatic EIS (PEIS)

Dear Mr. Ingalsbe:

Thank you for providing the Maryland Department of the Environment (MDE) with the opportunity to comment on the above-referenced project. Copies of the documents were circulated throughout MDE for review, and it has been determined that this project is consistent with MDE's plans, programs and objectives.

Again, thank you for giving MDE the opportunity to review this project. If you have any questions or need additional information, please feel free to call me at (410) 537-4120.

Sincerely,

Joane D. Mueller
MDE Clearinghouse Coordinator
Technical and Regulatory Services Administration

cc: Bob Rosenbush, State Clearinghouse

COMMENT

24.

Catawba Indian Nation
Tribal Historic Preservation Office
P. O. Box 750
Rock Hill, South Carolina 29731
803-328-2427 Fax 803-328-5791

*System - Pl. coordination
of Catawba
line and...*



18 August 2006
US Department of Homeland Security
Commandant US Coast Guard
2100 Second Street, SW
Washington, DC 20503-0001

Re: THPO # Project
2006-00-1 16475
Project description
Letter re Draft PEIS / proposed implementation of the NAMS

Dear Sir or Madam:

We have received your notice concerning the availability of the Draft Programmatic Environmental Impact Statement (PEIS), which addresses the proposed implementation of the Nationwide Automatic Identification System (NAMS) project.

The Catawba Indian Nation is a primary consulting party, not "the public." We should have been involved from the beginning. You will need to send us a complete copy, before we comment on it. Please check to see that you have the correct mailing address for us. Regular mail should be sent to:

Dr. Wenonah G. Haire, Director
Catawba Indian Nation
Tribal Historic Preservation Office
PO Box 750
Rock Hill, SC 29731

Federal Express and UPS packages may be sent to our location:
Dr. Wenonah G. Haire
CIN THPO
1536 Tom Steven Road
Rock Hill, SC 29730

If you have questions, please contact Sandra Reinhardt at 803-328-2427, ext. 233 or e-mail sandrar@copprechts.com.

Sincerely,

Sandra Reinhardt
Wenonah G. Haire
Tribal Historic Preservation Officer

WGH/ssr

RESPONSE

24. The Catawba Tribal Historic Preservation Officer was sent a Notice of Intent to prepare an EIS on 23 November 2005. This letter was sent to all potentially affected Tribal, Federal, State, and local agencies and representatives as a way to solicit information and concerns before preparation of the Programmatic EIS began. This letter also served as an invitation to consult throughout the preparation of the Programmatic EIS. No response to that letter from the Catawba Indian Nation was received by the U.S. Coast Guard. Because the Programmatic EIS is general in nature, evaluating the potential effects of implementing a program on a national scale without knowing the actual locations of the sites, no formal consultation regarding specific impacts at specific locations has been initiated for any implementation sites with any Tribal, Federal, State, or local representative or agency to date because none of the sites are known at this time. That level of consultation and coordination will be undertaken once implementation sites have been identified and as part of the preparation of the tiered NEPA documentation that will be required. At that time all Tribal, Federal, State, and local agencies having jurisdiction over potentially affected resources will be notified of the scope of the project proposed in their areas of jurisdiction and the appropriate coordination will be completed.

COMMENT

25.

Page 1 of 2

25. Thank you, comment and rating of Lack of Objections noted. Text on Page 4-1, line 36 was revised to remove reference to specific categorical exclusion numbers.

RESPONSE

41004-1



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460-0101 OFFICE OF TRANSPORTATION
DOCKETS

2005 AUG 21 P 2:10

AUG 14 2006

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Docket Management Facility
(USCG-2005-22837) -43
U.S. Department of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590-0001

Dear Sir/Madam:

In accordance with our responsibilities under Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the Environmental Protection Agency (EPA) has reviewed U. S. Coast Guard's (USCG) draft programmatic Environmental Impact Statement (EIS) for Implementation of the U.S. Coast Guard Nationwide Automatic Identification System (NAIS) Project. (CEQ # 20060271).

The purpose of this project is to establish a nationwide network of receivers and transmitters to capture, display, exchange, and analyze automatic identification system (AIS) generated information. This would satisfy the USCG's need to enhance homeland security while carrying out its mission to ensure marine safety and security, preserve maritime mobility, protect the marine environment, enforce U.S. laws and international treaties, and perform search and rescue operations. The proposed action involves installing receivers, transmitters, transceivers, repeaters, and other equipment on towers or other structures at up to 450 sites along 95,000 miles of coastline, other inland waterways, and remote platforms such as satellites, offshore oil and gas platforms and data buoys. The proposed project would provide detection and identification of vessels carrying AIS equipment approaching or operating in the maritime domain where little or no vessel tracking currently exists.

The technical and operational requirements for NAIS require the system to be operational in both inland navigable waters and the open ocean out to 2,000 nautical miles offshore. For this reason, in order to meet the proposed action, USCG has determined that a combination of implementation alternatives would be necessary to meet these requirements. They include:

- (1) establishing a combination of co-located and newly built shore-based radio frequency sites for short-range AIS coverage;

COMMENT

RESPONSE

25.

Page 2 of 2


- (2) leasing commercial satellite services for long-range AIS coverage; and
- (3) installing AIS equipment on existing offshore oil and gas platforms and data buoys for supplemental coverage.

The document states that the actions to lease commercial satellite services for long-range AIS coverage and installing AIS equipment on existing offshore oil and gas platforms and data buoys for supplemental long-range coverage would likely be categorically excluded from detailed NEPA analysis by using an established categorical exclusion (CATEX). While EPA does not object to this approach, it does not appear that the stated CATEX applies to these actions. During further communications with the USCG, staff indicated that they recognized this was incorrect. This will be corrected in the final EIS.

Based on the review of the document and the clarification provided above, we have rated the document as Lack of Objectives (LO).

We appreciate the opportunity to review and comment on this draft programmatic EIS. We also look forward to reviewing the final programmatic EIS related to this project. The staff contact for the review is Marthea Rountree and she can be reached at 202-564-7141.

Sincerely,



Anne Norton Miller
Director
Office of Federal Activities

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APPENDIX C

APPLICABLE LAWS AND EXECUTIVE ORDERS

Appendix C

Applicable Laws and Executive Orders¹

Title, Citation	Summary
Archaeological and Historical Preservation Act, 16 United States Code (U.S.C.) 469	Protects and preserves historical and archaeological data. Requires Federal agencies to identify and recover data from archaeological sites threatened by a proposed action(s).
Clean Air Act, 42 U.S.C. 7401–7671q, as amended	Establishes Federal standards for air pollutants. Prevents significant deterioration in areas of the country where air quality fails to meet Federal standards.
Clean Water Act, 33 U.S.C. 1251–1387 (also known as the Federal Water Pollution Control Act)	Comprehensively restores and maintains the chemical, physical, and biological integrity of the nation’s waters. Implemented and enforced by the U.S. Environmental Protection Agency (USEPA).
Coastal Barrier Resources Act, 16 U.S.C. 3501–3510	Discourages coastal barrier island degradation by prohibiting direct or indirect Federal financial funds (including flood insurance) for development, except for emergency life-saving activities.
Coastal Zone Management Act of 1972, 16 U.S.C. 1451–1464	Establishes a policy to preserve, protect, develop, and, where possible, restore and enhance the resources of the nation’s coastal zone. Encourages and assists states in developing and implementing coastal zone management programs.
Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9601–9675 (also known as “Superfund”)	Provides for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and cleanup of inactive hazardous substances disposal sites. Establishes a fund financed by hazardous waste generators to support cleanup and response actions.
Endangered Species Act of 1973, 16 U.S.C. 1531–1543, as amended	Protects threatened, endangered, and candidate species of fish, wildlife, and plants and their designated critical habitats. Prohibits Federal action that jeopardizes the continued existence of endangered or threatened species. Requires consultation with U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries and a biological assessment when such species are present in an area affected by government activities.
Farmlands Protection Policy Act, P.L. 97-98, 7 U.S.C. 4201, et seq.	Minimizes the extent to which Federal programs contribute to the unnecessary or irreversible conversion of farmland to nonagricultural uses. The act also ensures that Federal programs are administered in a manner that, to the extent practicable, will be compatible with private, state, and local government programs and policies to protect farmland.

Table of Applicable Laws and Executive Orders (continued)

Title, Citation	Summary
Fish and Wildlife Coordination Act, 16 U.S.C. 661–667e, as amended	Authorizes the Secretaries of the Interior and Commerce to provide assistance to and cooperate with Federal and state agencies to protect, rear, stock, and increase the supply of game and fur-bearing animals, as well as to study the effects of domestic sewage, trade wastes, and other polluting substances on wildlife. The 1946 amendments require consultation with the USFWS and the state fish and wildlife agencies involving any waterbodies that are proposed or authorized, permitted, or licensed to be impounded, diverted, or otherwise controlled or modified by any agency under a Federal permit or license.
Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801–1883, as amended	Establishes regional fisheries councils that set fishing quotas and restrictions in U.S. waters. Requires Federal agencies to consult with NOAA Fisheries on all actions (authorized, funded, or undertaken) that might adversely affect essential fish habitat.
Marine Mammal Protection Act of 1972, 16 U.S.C. 1361–1389, 1401–1407, 1538, 4107	Establishes a moratorium on the taking and importation of marine mammals. Prohibits harassing, hunting, capturing, collecting, or killing of marine mammals or attempting such actions. Requires permits for taking marine mammals. Requires consultations with USFWS and NOAA Fisheries if impacts on marine mammals are possible.
Maritime Transportation Security Act of 2002, Public Law (P. L.) 107-295	Designed to protect the nation’s ports and waterways from a terrorist attack. Requires vessels and port facilities to conduct vulnerability assessments and develop security plans that could include passenger, vehicle, and baggage screening procedures; security patrols; establishing restricted areas; personnel identification procedures; access control measures; and installation of surveillance equipment. Mandates regulations for AIS carriage requirements for certain vessels.
Migratory Bird Treaty Act, 16 U.S.C. 703–712	Implements treaties and conventions between the United States, Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Unless otherwise permitted by regulations, the Act makes it unlawful to pursue, hunt, take, capture, or kill; attempt to take, capture, or kill; possess, offer to sell, barter, purchase, or deliver; or cause to be shipped, exported, imported, transported, carried, or received any migratory bird, part, nest, egg, or product, manufactured or not. The Act also makes it unlawful to ship, transport or carry from one state, territory, or district to another, or through a foreign country, any bird, part, nest, or egg that was captured, killed, taken, shipped, transported, or carried contrary to the laws from where it was obtained; and import from Canada any bird, part, nest, or egg obtained contrary to the laws of the province from which it was obtained. The U.S. Department of the Interior has authority to arrest, with or without a warrant, a person violating the Act.

Table of Applicable Laws and Executive Orders (continued)

Title, Citation	Summary
National Environmental Policy Act of 1969, 42 U.S.C. 4321–4370e, as amended	Requires Federal agencies to use a systematic approach when assessing environmental impacts of government activities. Proposes an interdisciplinary approach in a decisionmaking process designed to identify unacceptable or unnecessary impacts to the environment.
National Historic Preservation Act, 16 U.S.C. 470–470x-6	Requires Federal agencies to consider the effect of any federally assisted undertaking or licensing on any district, site, building, structure, or object eligible for inclusion, or listed in the National Register of Historic Places (NRHP). Provides for the nomination, identification (through NRHP listing), and protection of significant historical and cultural properties.
National Marine Sanctuaries Act, 16 U.S.C. 1431 et seq.	Authorizes the Secretary of Commerce to designate national marine sanctuaries based on statutory criteria and stipulated factors to be considered by the Secretary as a basis for designation. Stipulates consultation requirements with various Federal agencies, Congressional committees, state agencies, and regional fishery councils.
Noise Control Act of 1972, 42 U.S.C. 4901–4918	Establishes a national policy to promote an environment free from noise that jeopardizes health and welfare. Authorizes the establishment of Federal noise emissions standards and provides relevant information to the public.
Nonindigenous Aquatic Nuisance Prevention Control Act of 1990, 16 U.S.C. 4701–4751	Establishes aquatic nuisance species.
Occupational Safety and Health Act of 1970, 29 U.S.C. 651–678	Establishes standards to protect workers, including standards on industrial safety, noise, and health standards.
Port and Waterways Safety Act, 33 U.S.C. 1221–1232	Sets boat operating and towing safety requirements and establishes enforcement provisions. Authorizes the U.S. Coast Guard (USCG) to establish vessel traffic service/separation schemes for ports, harbors, and other waters subject to congested vessel traffic.
Wild and Scenic Rivers Act, P.L. 90-542, 16 U.S.C. 1271, et seq.	Establishes a National Wild and Scenic Rivers System and prescribes the methods and standards through which additional rivers may be identified and added to the system.
Resource Conservation and Recovery Act, 42 U.S.C. 6901–6992k	Establishes requirements for safely managing and disposing of solid and hazardous waste and underground storage tanks.

Table of Applicable Laws and Executive Orders (continued)

Title, Citation	Summary
Executive Order (EO) 11988, <i>Floodplain Management</i> , May 24, 1977	Directs agencies to consider alternatives to avoid adverse effects and incompatible development in floodplains. An agency may locate a facility in a floodplain if the head of the agency finds there is no practicable alternative. If it is found there is no practicable alternative, the agency must minimize potential harm to the floodplain, and circulate a notice explaining why the action is to be located in the floodplain prior to taking action. Finally, new construction in a floodplain must apply accepted floodproofing and flood protection to include elevating structures above the base flood level rather than filling in land.
EO 11990, <i>Protection of Wetlands</i> , May 24, 1977	Directs agencies to consider alternatives to avoid adverse effects and incompatible development in wetlands. Federal agencies are to avoid new construction in wetlands, unless the agency finds there is no practicable alternative to construction in the wetland and the proposed construction incorporates all possible measures to limit harm to the wetland. Agencies should use economic and environmental data, agency mission statements, and any other pertinent information when deciding whether or not to build in wetlands. EO 11990 directs each agency to provide for early public review of plans for construction in wetlands.
EO 12372, <i>Intergovernmental Review of Federal Programs</i> , July 14, 1982, 47 Federal Register (FR) 30959 (6/16/82), as supplemented	Requires Federal agencies to consult with state and local governments when proposed Federal financial assistance or direct Federal development impacts interstate metropolitan urban centers or other interstate areas.
EO 12898, <i>Environmental Justice</i> , February 11, 1994, 59 FR 7629 (2/16/94), as amended	Requires certain Federal agencies, to the greatest extent practicable permitted by law, to make environmental justice part of their missions by identifying and addressing disproportionately high and adverse health or environmental effects on minority and low-income populations.
EO 13148, <i>Greening the Government Through Leadership in Environmental Management</i> , April 21, 2000, 65 FR 24595 (4/26/00)	Designates the head of each Federal agency to ensure that all necessary actions are taken to integrate environmental accountability into agency day-to-day decisionmaking and long-term planning processes, across all agency missions, activities, and functions. Establishes goals for environmental management, environmental compliance, right-to-know (informing the public and their workers of possible sources of pollution resulting from facility operations) and pollution prevention, and similar matters.
EO 13175, <i>Consultation and Coordination with Indian Tribal Governments</i> , November 6, 2000, 65 FR 67249 (11/09/00)	Requires Federal agencies to establish an accountable process that ensures meaningful and timely input from tribal officials in developing policies that have tribal implications.

Table of Applicable Laws and Executive Orders (continued)

Title, Citation	Summary
EO 13186, <i>Responsibilities of Federal Agencies to Protect Migratory Birds</i> , January 10, 2001, 66 FR 3853 (1/17/01)	Requires each agency to ensure that environmental analyses of Federal actions (required by the National Environmental Policy Act or other established environmental review processes) evaluate the effects of actions and agency plans on migratory birds, emphasizing species of concern. Agencies must support the conservation intent of migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities, and by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions. The EO provides broad guidelines on conservation responsibilities and requires the development of more detailed guidance in a Memorandum of Understanding (MOU). The EO is coordinated and implemented by the USFWS. The MOU will outline how Federal agencies will promote conservation of migratory birds. The EO requires the support of various conservation planning efforts already in progress; incorporation of bird conservation considerations into agency planning, including NEPA analyses; and reporting annually on the level of take of migratory birds.
EO 11593, <i>Protection and Enhancement of the Cultural Environment</i> , May 13, 1971, 36 FR 8921 (5/15/71)	Requires all Federal agencies to locate, identify, and record all cultural resources, including significant archaeological, historical, or architectural sites.

¹ This table only reflects those laws and EOs that might reasonably be expected to apply to the Proposed Action and alternatives.

Other laws and EOs that are relevant include, but are not limited to:

- Abandoned Shipwreck Act, 43 U.S.C. 2102, et seq.
- American Indian Religious Freedom Act, 42 U.S.C. 1996, et seq.
- Antiquities Act, 16 U.S.C. 433, et seq.; Archaeological Resources Protection Act, 16 U.S.C. 470 aa-ll, et seq.
- Architectural Barriers Act, 42 U.S.C. 4151, et seq.
- Community Environmental Response Facilitation Act, 42 U.S.C. 9620, et seq.
- Department of Transportation Act, P.L. 89-670, 49 U.S.C. 303, Section 4(f), et seq.
- Emergency Planning and Community Right-to-Know Act, 42 U.S.C. 11001–11050, et seq.
- Environmental Quality Improvement Act, P.L. 98-581, 42 U.S.C. 4371, et seq.
- Federal Insecticide, Fungicide, and Rodenticide Act, P.L. 86-139, 7 U.S.C. 135, et seq.
- Federal Records Act, 44 U.S.C. 2101–3324, et seq.
- Fish and Wildlife Act of 1956, P.L. 85-888, 16 U.S.C. 742, et seq.
- Flood Disaster Protection Act, 42 U.S.C. 4001, et seq.
- Marine Protection, Research, and Sanctuaries Act of 1972, 33 U.S.C. 1401–1445

- Native American Graves Protection and Repatriation Act, 25 U.S.C. 3001, et seq.
- Northwest Atlantic Fisheries Convention Act of 1995, 16 U.S.C. 5601–5610
- Outer Continental Shelf Lands Act of 1953, 43 U.S.C. 1331–1356, as amended
- Pollution Prevention Act of 1990, 42 U.S.C. 13101-13109, et seq.
- Safe Drinking Water Act, P.L. 93-523, 42, U.S.C. 201, et seq.
- Toxic Substances Control Act, 7 U.S.C. 136, et seq.
- EO 11514, *Protection and Enhancement of Environmental Quality*, March 5, 1970, 35 FR 4247, as amended by EO 11541, July 1, 1970, 35 FR 10737 and EO 11991, May 24, 1977, 42 FR 26967
- EO 12088, *Federal Compliance with Pollution Control Standards*, 43 FR 47707, October 13, 1978, as amended by EO 12580, January 23, 1987, and revoked (in part) by EO 13148, April 21, 2000
- EO 12114, *Environmental Effects Abroad of Major Federal Actions*, January 9, 1979, 44 FR 1957
- EO 12902, *Energy Efficiency and Water Conservation at Federal Facilities*, March 8, 1994, 59 FR 11463
- EO 12962, *Recreational Fisheries*, June 7, 1995, 60 FR 307695
- EO 13007, *Historic Sites Act*, May 24, 1996, 16 U.S.C. 46, et seq.; Indian Sacred Sites, 61 FR 26771
- EO 13045, *Protection of Children from Environmental Health and Safety Risks*, 62 FR 19885, April 21, 1997, as amended by EO 13229, October 9, 2001, 66 FR 52013 and EO 13296, April 18, 2003, 68 FR 19931
- EO 13089, *Coral Reef Protection*, June 11 1998, 64 FR 232, December 3, 1999
- EO 13112, *Invasive Species*, February 3, 1999, 64 FR 6183, as amended by EO 13286, February 28, 2003, 68 FR 10619
- EO 13123, *Greening the Government Through Efficient Energy Management*, June 3, 1999, 64 FR 30851
- EO 13132, *Federalism*, August 4, 1999, 64 FR 43255
- EO 13158, *Marine Protected Areas*, May 26, 2000, 65 FR 2490

APPENDIX D

GLOSSARY

Appendix D

Glossary

Aid to Navigation (AtoN)	Any device external to a vessel or aircraft specifically intended to assist navigators in determining their position or safe course, or to warn them of dangers or obstructions to navigation.
Antenna	Any structure or device used to collect or radiate electromagnetic waves; specifically, that part of a transmitter or receiver that contains, or itself consists of, the apparatus that radiates or receives electromagnetic waves.
Automatic Identification System (AIS)	AIS is an international standard (International Telecommunications Union Recommendation [ITU-R] M.1371-1, <i>Technical Characteristics for a Universal Shipborne Automatic Identification System Using Time Division Multiple Access in the Maritime Mobile Band</i>), adopted by the International Maritime Organization (IMO), for ship-to-ship, ship-to-shore, and shore-to-ship communication of information, including vessel identity, position, speed, course, destination, other data of critical interest for maritime safety and security.
Command and Control	The exercise of authority and direction by a properly designated commander over assigned forces in the accomplishment of the port security mission. Command and control functions are performed through an arrangement of personnel, equipment, communication, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the port security mission.
Common Operational Picture (COP)	The (maritime) COP is a display of relevant maritime information shared by more than one command or organization. The COP provides a shared display of friendly, enemy/suspect, and neutral vessel tracks on a chart, with applicable geographically referenced overlays and data enhancements to facilitate collaborative planning and strategic decisionmaking.
Department of Homeland Security (DHS)	The Homeland Security Act of 2002 established the DHS whose primary mission is to prevent, protect against, and respond to acts of port security terrorism on our soil.
Global Maritime Distress and Safety System (GMDSS)	GMDSS is an internationally-agreed set of safety procedures, types of equipment, and global communication system (provided through a system of inter-linked satellites) enabling vessels in distress to transmit distress signals to nearby coast stations and vessels. GMDSS provides a positioning system combined with emergency communications.
Global Positioning System (GPS)	GPS is a spaced-based positioning, velocity and time system that uses satellites for world-wide coverage.
International Maritime Organization (IMO)	The IMO is a specialized agency of the United Nations which is responsible for measures to improve the safety and security of international shipping and to prevent marine pollution from ships.

Line of Sight	When viewing a scene the line of sight is the straight line between the observer and the target. Line of sight is commonly used to refer to telecommunication links that rely on a line of sight between the transmitting antenna and the receiving antenna. Such capability is necessary for high frequency microwave links that offer relatively high bandwidth communication circuits. Typical operating frequencies are in the gigahertz frequency range where the radio path is not reflected or refracted to any great extent.
Local Notice to Mariners	A written document issued by each USCG District to disseminate important information affecting aids to navigation, dredging, marine construction, special marine activities, and bridge construction on the waterways within that district.
Maritime Domain Awareness (MDA)	MDA is the effective understanding of anything associated with the global marine environment that could impact the security, safety, economy, or environment of the United States. The goal of MDA is to provide situational awareness for decision makers at all levels using a host of systems, sensors, and processes.
Maritime Transportation Security Act of 2002 (MTSA)	<p>The MTSA contains several provisions intended to protect America’s maritime community against the threat of terrorism without adversely affecting the flow of U.S. commerce through our ports. Section 102 of the MTSA creates a new subtitle VI of 46 U.S.C., to establish a comprehensive national system of transportation security enhancements. Chapter 701 of this subtitle contains provisions related to port security.</p> <p>The Act creates a national maritime security system and requires Federal agencies, ports, and vessel owners to take numerous steps to upgrade security. The Act requires USCG to conduct vulnerability assessments of U.S. ports. It also requires USCG to develop national and regional area maritime transportation security plans and requires that seaports, waterfront terminals, and certain types of vessels develop and submit security and incident response plans to the USCG for approval. The MTSA also requires the USCG to conduct antiterrorism assessments of certain foreign ports. Under this law, certain vessels operating in U.S. navigable waters are required to be equipped with and operate an Automatic Identification System (AIS). Finally, the Act authorizes a Federal grant program to help defray the cost of security upgrades at U.S. seaports.</p>
National Strategy for Maritime Security	In December 2004, the President directed the Secretaries of the Department of Defense and DHS to lead the Federal effort to develop a comprehensive National Strategy for Maritime Security, to better integrate and synchronize the existing Department-level strategies and ensure their effective and efficient implementation (National Security Presidential Directive NSPD-14/Homeland Security Presidential Directive HSPD-13, Subject: Maritime Security Policy, December 21, 2004). The National Strategy for Maritime Security aligns all Federal government maritime security programs and initiatives into a comprehensive and cohesive national effort involving appropriate Federal, state, local, and private sector entities.

Nationwide Differential Global Positioning System (NDGPS)	<p>NDGPS provides accurate dynamic navigation information for land and marine travelers with 1- to 2- meter accuracy (and possibly better in the future). This will enable improved collision notification systems, collision avoidance systems, and more accurate route guidance systems.</p> <p>The NDGPS involves the expansion of an existing network of USCG local area Differential Global Positioning System (DGPS) reference stations currently covering United States coastal areas and major inland waterways.</p>
Nautical Mile (NM)	<p>A unit of distance used principally in navigation. The international nautical mile is 1,852 meters long.</p>
Ports and Waterways Safety System (PAWSS)	<p>PAWSS is a USCG project to provide an integrated system of vessel traffic centers, communications, information management capabilities, remote sensors, and associated facilities for vessel traffic management in selected U.S. ports and waterways to provide safe operations and protect the environmental. PAWSS capabilities can directly support USCG maritime security operations for tasking such as surveillance, detection, and command and control.</p>
National Distress and Response System Modernization Project (“Rescue 21”)	<p>The National Distress and Response System (NDRS), the USCG’s short range VHF-FM radio system, consists of approximately 300 remotely controlled VHF radios and antenna high-level sites (HLS) located throughout the terrestrial regions of the continental United States (including the Great Lakes and all major inland bays and waterways), Alaska, Hawaii, the Caribbean, and Guam. The NDRS uses VHF-FM radios to provide two-way voice communications coverage in coastal areas and navigable inland waterways where commercial or recreational traffic exists. The NDRS’s primary mission is to provide the USCG with a means to monitor the international VHF-FM distress frequency and to coordinate search and rescue response operations. Its secondary mission is to provide command and control communications for virtually all USCG missions. Currently the NDRS consists of approximately 300 remotely controlled VHF radios and antenna HLS, and the USCG estimates that a total of 377 sites are needed to provide full coverage of the coastal zone and inland waterways. Modernization of the NDRS was Congressionally mandated by the Department of Transportation and Related Agencies Appropriations Bill, 2002.</p>

Safety of Life at Sea (SOLAS) Convention	<p>The International Convention for the Safety of Life at Sea (SOLAS) is the most important treaty protecting the safety of merchant ships. The first version of the treaty was passed in 1914 in response to the sinking of the RMS Titanic. It prescribed numbers of lifeboats and other emergency equipment along with safety procedures, including continuous radio watches. Newer versions were adopted in 1929, 1948, 1960 and 1974. The 1960 Convention—which was activated in 1965—was the first major achievement for International Maritime Organization (IMO) after its creation and represented a massive advance in updating commercial shipping regulations and in staying up-to-date with new technology and procedures in the industry. The 1974 version simplified the process for amending the treaty. A number of amendments have been adopted since. In particular, amendments in 1992 replaced Morse code with the Global Maritime Distress and Safety System (GMDSS), beginning in 1999.</p> <p>In December 2000, Chapter V was amended to require AIS, capable of providing information about the ship to other ships and to coastal authorities automatically, to be fitted aboard all ships of 300 gross tonnage and upwards engaged on international voyages, cargo ships of 500 gross tonnage and upwards not engaged on international voyages and passenger ships irrespective of size built on or after 1 July 2002.</p>
SOLAS class	Generally, ships more than 300 gross tons on an international voyage and cargo ships more than 500 gross tons and passenger ships carrying more than 12 passengers.
U.S. Maritime Domain	The U.S. Maritime Domain encompasses all U.S. ports and port security, inland waterways, harbors, navigable waters, Great Lakes, territorial seas, contiguous waters, customs waters, coastal seas, littoral areas, the U.S. Exclusive Economic Zone, and oceanic regions of U.S. national interest, as well as the sea lanes to the United States, and U.S. maritime approaches.
Very High Frequency (VHF)	Radio frequency of 30 MHz to 300 MHz. The VHF system is essentially a line-of-sight system limited in range to only a little beyond the horizon.
Vessel Monitoring System (VMS)	VMS is a system employed by the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) to monitor and enforce compliance with NMFS requirements. VMS relies upon satellite communications to monitor the movements of and collect data from fishing vessels meeting specific criteria, such as vessels participating in a specific fishery.
Vessel Traffic Service (VTS)	<p>The purpose of a Vessel Traffic Service (VTS) is to provide active monitoring and navigational advice for vessels in particularly confined and busy waterways. There are two main types of VTS, surveilled and non-surveilled. Surveilled systems consist of one or more land-based sensors (i.e. radar, AIS and closed circuit television sites), which output their signals to a central location where operators monitor and manage vessel traffic movement. Non-surveilled systems consist of one or more reporting points at which ships are required to report their identity, course, speed, and other data to the monitoring authority. They encompass a wide range of techniques and capabilities aimed at preventing vessel collisions, rammings, and groundings in the harbor, harbor approach and inland waterway phase of navigation. They are also designed to expedite ship movements, increase transportation system efficiency, and improve all-weather operating capability.</p>

APPENDIX E

AIR QUALITY EMISSIONS CALCULATIONS

- Summary** Summarizes total emissions by calendar year.
Page E-1
- Combustion** Estimates emissions from non-road equipment exhaust as well as painting.
Pages E-2, E-3, E-4, and E-5 for 2007
- Fugitive** Estimates fine particulate emissions from earthmoving, vehicle traffic, and windblown dust
Pages E-6, E-7, and E-8 for 2007
- Grading** Estimates the number of days of site preparation, to be used for estimating heavy equipment exhaust and earthmoving dust emissions
Page E-9 for 2007
- Emergency Generator** Estimates the total emissions from operation of the stand-by generator 12 hours per year.
Page E-10 for 2007

CY2007

	NO_x (ton)	VOC (ton)	CO (ton)	SO₂ (ton)	PM₁₀ (ton)
Construction Combustion	0.046	0.023	0.054	0.001	0.002
Construction Fugitive Dust					6.120
Emergency Generator	0.035	0.003	0.008	0.002	0.002
TOTAL CY2007	0.081	0.026	0.062	0.003	6.124

Construction Combustion Emissions for CY 2007

Combustion Emissions of VOC, NO_x, SO₂, CO and PM₁₀ Due to Construction

Includes:

1 Construct Prefabricated Building	96 ft ²	0.002	acres	(assumed 8 ft x 12 ft)
2 Construct NAIS Tower Footings	300 ft ²	0.007	acres	(assumed three 10 ft x 10 ft concrete footings for NAIS Tower)
3 Grade Access Road and Project Site	196,480 ft ²	4.511	acres	(assumed gravel road is 18 ft x 2 miles and project site is 80 ft x 8
4 Trench Electric/Communication Line	21,120 ft ²	0.485	acres	(assumed 2 ft x 2 miles)
Total Building Construction Area:	396 ft ²	(1 and 2)		
Total Demolished Area:	0 ft ²	(None)		
Total Paved Area:	0 ft ²	(None)		
Total Disturbed Area:	217,600 ft ²	(3 and 4)		
Construction Duration:	0.1 year(s)			
Annual Construction Activity:	30 days/yr			(Each project will last for 6 weeks (30 working days))

Emission Factors Used for Construction Equipment

Reference: Guide to Air Quality Assessment, SMAQMD, 2004

Emission factors are taken from Table 3-2. Assumptions regarding the type and number of equipment are from Table 3-1 unless otherwise noted.

Equipment	No. Req ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c	PM ₁₀ (lb/day)
Bulldozer	1	29.40	3.66	25.09	0.59	1.17
Motor Grader	1	10.22	1.76	14.98	0.20	0.28
Water Truck	1	20.89	3.60	30.62	0.42	0.58
Total per 10 acres of activity	3	60.51	9.02	70.69	1.21	2.03

Equipment	No. Req ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c	PM ₁₀ (lb/day)
Paver	1	7.93	1.37	11.62	0.16	0.22
Roller	1	5.01	0.86	7.34	0.10	0.14
Total per 10 acres of activity	2	12.94	2.23	18.96	0.26	0.36

Equipment	No. Req ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c	PM ₁₀ (lb/day)
Loader	1	7.86	1.35	11.52	0.16	0.22
Haul Truck	1	20.89	3.60	30.62	0.42	0.58
Total per 10 acres of activity	2	28.75	4.95	42.14	0.58	0.80

Equipment ^d	No. Req ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c	PM ₁₀ (lb/day)
Stationary						
Generator Set	1	11.83	1.47	10.09	0.24	0.47
Industrial Saw	1	17.02	2.12	14.52	0.34	0.68
Welder	1	4.48	0.56	3.83	0.09	0.18
Mobile (non-road)						
Truck	1	20.89	3.60	30.62	0.84	0.58
Forklift	1	4.57	0.79	6.70	0.18	0.13
Crane	1	8.37	1.44	12.27	0.33	0.23
Total per 10 acres of activity	6	67.16	9.98	78.03	2.02	2.27

Note: Footnotes for tables are on following page

Architectural Coatings

Equipment	No. Req. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c	PM ₁₀ (lb/day)
Air Compressor	1	6.83	0.85	5.82	0.14	0.27
Total per 10 acres of activity	1	6.83	0.85	5.82	0.14	0.27

- a) The SMAQMD 2004 guidance suggests a default equipment fleet for each activity, assuming 10 acres of that activity, (e.g., 10 acres of grading, 10 acres of paving, etc.). The default equipment fleet is increased for each 10 acre increment in the size of the construction project. That is, a 26 acre project would round to 30 acres and the fleet size would be three times the default fleet for a 10 acre project.
- b) The SMAQMD 2004 reference lists emission factors for reactive organic gas (ROG). For the purposes of this worksheet ROG = VOC.
- c) The SMAQMD 2004 reference does not provide SO₂ emission factors. For this worksheet, SO₂ emissions have been estimated based on approximate fuel use rate for diesel equipment and the assumption of 500 ppm sulfur diesel fuel. For the average of the equipment fleet, the resulting SO₂ factor was found to be approximately 0.04 times the NOx emission factor for the mobile equipment (based upon 2002 USAF IERA "Air Emissions Inventory Guidance") and 0.02 times the NOx emission factor for all other equipment (based on AP-42, Table 3.4-1)
- d) Typical equipment fleet for building construction was not itemized in SMAQMD 2004 guidance. The equipment list above was assumed based on SMAQMD 1994 guidance.

PROJECT-SPECIFIC EMISSION FACTOR SUMMARY

Source	Equipment Multiplier*	SMAQMD Emission Factors (lb/day)				
		NO _x	VOC	CO	SO ₂ **	PM ₁₀
Grading Equipment	1	30.2272	4.5059	35.3125	0.6045	1.0141
Paving Equipment	1	0.0000	0.0000	0.0000	0.0000	0.0000
Demolition Equipment	1	0.0000	0.0000	0.0000	0.0000	0.0000
Building Construction	1	0.0611	0.0091	0.0709	0.0018	0.0021
Air Compressor for Architectural Coating	1	0.0062	0.0008	0.0053	0.0001	0.0002
Architectural Coating**			1.6218			

*The equipment multiplier is an integer that represents units of 10 acres for purposes of estimating the number of equipment required for the project

**Emission factor is from the evaporation of solvents during painting, per "Air Quality Thresholds of Significance", SMAQMD, 1994

Example: SMAQMD Emission Factor for Grading Equipment NOx = (Total Grading NOx per 10 ac*((total disturbed area/43560)/10))*(Equipment Multiplier)

Summary of Input Parameters

	Total Area (ft ²)	Total Area (acres)	Total Days
Grading:	217,600	5.00	3
Paving:	0	0.00	0
Demolition:	0	0.00	0
Building Construction:	396	0.01	30
Architectural Coating	396	0.01	20

(from "CY2007 Grading" worksheet)

(per the SMAQMD "Air Quality of Thresholds of Significance", 1994 version)

NOTE: The 'Total Days' estimate for paving is calculated by dividing the total number of acres by 0.21 acres/day, which is a factor derived from the 2005 MEANS Heavy Construction Cost Data, 19th Edition, for 'Asphaltic Concrete Pavement, Lots and Driveways - 6" stone base', which provides an estimate of square feet paved per day. There is also an estimate for 'Plain Cement Concrete Pavement', however the estimate for asphalt is used because it is more conservative. The 'Total Days' estimate for demolition is calculated by dividing the total number of acres by 0.02 acres/day, which is a factor also derived from the 2005 MEANS reference. This is calculated by averaging the demolition estimates from 'Building Demolition - Small Buildings, Concrete', assuming a height of 30 feet for a two-story building; from 'Building Footings and Foundations Demolition - 6" Thick, Plain Concrete'; and from 'Demolish, Remove Pavement and Curb - Concrete to 6" thick, rod reinforced'. Paving is double-weighted since projects typically involve more paving demolition. The 'Total Days' estimate for building construction is assumed to be 230 days, unless project-specific data is known.

Total Project Emissions by Activity (lbs)

	NO _x	VOC	CO	SO ₂	PM ₁₀
Grading Equipment	90.6817	13.5176	105.9376	1.8136	3.0422
Paving	-	-	-	-	-
Demolition	-	-	-	-	-
Building Construction	1.8316	0.2722	2.1281	0.0551	0.0619
Architectural Coatings	0.1242	32.4520	0.1058	0.0025	0.0049
Total Emissions (lbs):	92.6375	46.2418	108.1715	1.8712	3.1090

Results: Total Project Annual Emission Rates

	NO _x	VOC	CO	SO ₂	PM ₁₀
Total Project Emissions (lbs)	92.6375	46.2418	108.1715	1.8712	3.1090
Total Project Emissions (tons)	0.0463	0.0231	0.0541	0.0009	0.0016

Construction Fugitive Dust Emissions for CY 2007

Calculation of PM10 Emissions Due to Site Preparation (Uncontrolled).

User Input Parameters / Assumptions

Acres graded per year:	5.00 acres/yr	(From "CY2007 Combustion" worksheet)
Grading days/yr:	2.79 days/yr	(From "CY2007 Grading" worksheet)
Exposed days/yr:	90 assumed days/yr	graded area is exposed
Grading Hours/day:	8 hr/day	
Soil piles area fraction:	0.10	(assumed fraction of site area covered by soil piles)
Soil percent silt, s:	8.5 %	(mean silt content; expected range: 0.56 to 23, AP-42 Table 13.2.2-1)
Soil percent moisture, M:	50 %	(http://www.cpc.noaa.gov/products/soilmst/w.shtml)
Annual rainfall days, p:	140 days/yr	rainfall exceeds 0.01 inch/day (AP-42 Fig 13.2.2-1, Ave. range from 40-240 days/yr on U.S. coastline)
Wind speed > 12 mph %, l:	20 %	Average national windspeed
Fraction of TSP, J:	0.5	per California Environmental Quality Act (CEQA) Air Quality Handbook, SCAQMD, 1993, p. A9-99
Mean vehicle speed, S:	5 mi/hr	(On-site)
Dozer path width:	8 ft	
Qty construction vehicles:	3.00 vehicles	(From "CY2007 Grading" worksheet)
On-site VMT/vehicle/day:	5 mi/veh/day	(Excluding bulldozer VMT during grading)
PM10 Adjustment Factor k	1.5 lb/VMT	(AP-42 Table 13.2.2-2 12/03 for PM ₁₀ for unpaved roads)
PM10 Adjustment Factor a	0.9 (dimensionless)	(AP-42 Table 13.2.2-2 12/03 for PM ₁₀ for unpaved roads)
PM10 Adjustment Factor b	0.45 (dimensionless)	(AP-42 Table 13.2.2-2 12/03 for PM ₁₀ for unpaved roads)
Mean Vehicle Weight W	40 tons	assumed for aggregate trucks

TSP - Total Suspended Particulate
VMT - Vehicle Miles Traveled

Emissions Due to Soil Disturbance Activities

Operation Parameters (Calculated from User Inputs)	
Grading duration per acre	4.5 hr/acre
Bulldozer mileage per acre	1 VMT/acre
Construction VMT per day	15 VMT/day
Construction VMT per acre	8.4 VMT/acre

(Miles traveled by bulldozer during grading)

(Travel on unpaved surfaces within site)

Equations Used (Corrected for PM10)

Operation	Empirical Equation	Units	AP-42 Section (5th Edition)
Bulldozing	$0.75(s^{1.5})/(M^{1.4})$	lbs/hr	Table 11.9-1, Overburden
Grading	$(0.60)(0.051)s^{2.0}$	lbs/VMT	Table 11.9-1,
Vehicle Traffic (unpaved roads)	$[(k/s/12)^a (W/3)^b] [(365-P)/365]$	lbs/VMT	Section 13.2.2

Source: Compilation of Air Pollutant Emission Factors, Vol. I, USEPA AP-42, Section 11.9 dated 10/98 and Section 13.2 dated 12/03

Calculation of PM10 Emission Factors for Each Operation

Operation	Emission Factor (mass/ unit)	Operation Parameter	Emission Factor (lbs/ acre)
Bulldozing	0.08 lbs/hr	4.5 hr/acre	0.40 lbs/acre
Grading	0.77 lbs/VMT	1 VMT/acre	0.80 lbs/acre
Vehicle Traffic (unpaved roads)	2.17 lbs/VMT	8.4 VMT/acre	18.30 lbs/acre

Emissions Due to Wind Erosion of Soil Piles and Exposed Graded Surface

Reference: California Environmental Quality Act (CEQA) Air Quality Handbook, SCAQMD, 1993.

Soil Piles EF = $1.7(s/1.5)[(365 - p)/235][(1/15)(J) = (s)(365 - p)(I)(J)/(3110.2941)$, p. A9-99.

Soil Piles EF = 6.1 lbs/day/acre covered by soil piles

Consider soil piles area fraction so that EF applies to graded area

Soil piles area fraction: 0.10 (Fraction of site area covered by soil piles)
 Soil Piles EF = 0.61 lbs/day/acres graded

Graded Surface EF = 26.4 lbs/day/acre (recommended in CEQA Manual, p. A9-93).

Calculation of Annual PM₁₀ Emissions

Source	Emission Factor	Graded Acres/yr	Exposed days/yr	Emissions lbs/yr	Emissions tons/yr
Bulldozing	0.40 lbs/acre	5.00	NA	2	0.001
Grading	0.80 lbs/acre	5.00	NA	4	0.002
Vehicle Traffic	18.30 lbs/acre	5.00	NA	91	0.046
Erosion of Soil Piles	0.61 lbs/acre/day	5.00	90	274	0.137
Erosion of Graded Surface	26.40 lbs/acre/day	5.00	90	11,869	5.935
TOTAL				12,241	6.12

Soil Disturbance EF: 19.50 lbs/acre
 Wind Erosion EF: 27.01 lbs/acre/day

Back calculate to get EF: 878.24 lbs/acre/grading day

Construction (Grading) Schedule for CY 2007

Estimate of time required to grade a specified area.

Input Parameters
 Construction area: 5.00 acres/yr (from "CY2007 Combustion" Worksheet)
 Qty Equipment: 3.00 (calculated based on 3 pieces of equipment for every 10 acres)

Assumptions.
 Terrain is mostly flat.
 An average of 6" soil is excavated from one half of the site and backfilled to the other half of the site; no soil is hauled off-site or borrowed.
 200 hp bulldozers are used for site clearing.
 300 hp bulldozers are used for stripping, excavation, and backfill.
 Vibratory drum rollers are used for compacting.
 Stripping, Excavation, Backfill and Compaction require an average of two passes each.
 Excavation and Backfill are assumed to involve only half of the site.

Calculation of days required for one piece of equipment to grade the specified area.

Reference: Means Heavy Construction Cost Data, 19th Ed., R. S. Means, 2005.

Means Line No.	Operation	Description	Output	Units	Acres per equip-day)	equip-days per acre	Acres/yr (project-specific)	Equip-days per year
2230 200 0550	Site Clearing	Dozer & rake, medium brush	8	acre/day	8	0.13	5.00	0.62
2230 500 0300	Stripping	Topsoil & stockpiling, adverse soil	1,650	cu. yd/day	2.05	0.49	5.00	2.44
2315 432 5220	Excavation	Bulk, open site, common earth, 150' haul	800	cu. yd/day	0.99	1.01	2.50	2.52
2315 120 5220	Backfill	Structural, common earth, 150' haul	1,950	cu. yd/day	2.42	0.41	2.50	1.03
2315 310 5020	Compaction	Vibrating roller, 6" lifts, 3 passes	2,300	cu. yd/day	2.85	0.35	5.00	1.75
TOTAL								8.37

Calculation of days required for the indicated pieces of equipment to grade the designated acreage.

(Equip)(day)/yr: 8.37
 Qty Equipment: 3.00
 Grading days/yr: 2.79

Emissions from Each Emergency Generator

Constants
 HV of Diesel 137,000 BTU/gal
 hp of BTU/hr 7,000 BTU/hp-hr
 Generator Efficiency 0.36

Max. Hours 12 hrs/yr

Total Capacity 68 hp
 Hourly Rate 1.32 MMBtu/hr
 Annual Use 15.87 MMBtu/yr

Generator Emission Factors (Diesel)

NO_x 4.41 lb/MMBtu
 VOC 0.36 lb/MMBtu
 CO 0.95 lb/MMBtu
 SO_x 0.29 lb/MMBtu
 PM₁₀ 0.31 lb/MMBtu

Emissions (Diesel)

NO_x 0.035 tpy
 VOC 0.003 tpy
 CO 0.008 tpy
 SO_x 0.002 tpy
 PM₁₀ 0.002 tpy

Source: USEPA AP-42 Volume 1, *Stationary Internal Combustion Sources*, Table 3.3-1 (<http://www.epa.gov/ttn/chieffap42/ch03/final/c03s03.pdf>)