



ENVIRONMENTAL IMPACT ANALYSIS PROCESS (EIAP) WHITE PAPER

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CADD/GIS Technology Center
Army Engineer Research & Development Center
3909 Halls Ferry Road
Vicksburg, Mississippi

Prepared By:



Tetra Tech EM Inc.
101 Marietta Street, STE 2400
Atlanta, Georgia 30303

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1.0 INTRODUCTION

The CADD/GIS Technology Center's mission establishes a multi-agency vehicle to coordinate facilities, infrastructure, and environmental use of Computer-Aided Design and Drafting and Geographic Information Systems (CADD/GIS) activities within the Department of Defense (DoD) and with other participating governmental (federal, state and local) agencies, and the private sector. This includes setting standards, promoting system integration, supporting centralized acquisition, and providing assistance for the installation, training, operation, and maintenance of CADD/GIS and facilities management (FM) systems. This also includes directing specific application developments, promoting communications, developing and promoting standards, furnishing technical advice, interfacing with professional organizations and industry, evaluating technological developments, and recommending necessary CADD/GIS and FM policy to ensure the maximum benefits are received from these technologies.

All federal government agencies and organizations are required to comply with the National Environmental Policy Act (NEPA). The NEPA policies and instructions integrate environmental considerations into planning and decision-making for assessing effects of the agencies or organizations' actions. NEPA requires each federal agency to systematically evaluate the environmental effects of proposals for projects and programs. The statutes implementing NEPA are not detailed or specific; therefore, there are several approaches on creating a guidance to ensure continuity and quality for implementing NEPA. In each case, the level of detailed and specified direction varies widely. The environmental impact analysis process (EIAP) is the method for ensuring compliance with NEPA requirements. EIAP is a web-based decision tree to support the work necessary to enhance and to promote consistent compliance with NEPA. This decision tree can be used by all federal organizations to facilitate NEPA compliance and to ensure consistency in decisions. In addition, the NEPA data collection and legal reporting requirements identified incorporate Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE) and Facility Management Standards for Facilities, Infrastructure, and Environment (FMSFIE) Release 2.0 from the CADD/GIS Technology Center.

1.1 APPROACH OF ENVIRONMENTAL CHECKLIST

A representative Environmental checklist was chosen from the Air Force and Navy to benchmark the best solution for development. Robins Air Force Base (AFB) and Naval Air Station Patuxent River (NAS PAX) Rover Navy facilities were chosen. Both sites were evaluated and data was extrapolated to facilitate deployment of an Environmental checklist that could be utilized by all federal agencies.

The Robins AFB Environmental Checklist contained the following:

- Can be incorporated easily into a website
- Modification to data can be shown instantly (dynamic)
- Modification to questions in database can be done with minimum effort
- Document decisions made
- Created consistency when making decisions

The NAS PAX River Environmental Checklist provides specific questions relating to each Environmental pillar and was not yet web-enabled.

Table 1-1 provided a website design methodology comparison, listing advantages and disadvantages of each checklist. The Macromedia Shockwave (database driven) module was selected. It allows the developer to create a user-friendly environment to navigate and offers ease of question modification with minimal effort. The programming cost will be directly related to the level of desired easily modifiable components.

For the proposed application to function, the web-hosting server settings should be, at the minimum, the following:

- Windows 2000, with IIS 5.
- Up-to-date security patches and service packs
- Script permission, read/write access. (users can write and open data files)
- Establish a site with in a virtual directory. (ASP, IIS 5, and Unix with Sun’s Chilisoft ASP software)

It incorporates many functionality aspects of the Robins AFB checklist and NAS PAX’s Environmental Planning Checklist. For example, web-enabled, decision tree methodology, requires minimal environmental knowledge (such as the proponent for a project); a detailed comparison utilized to determine web design methodology is listed below.

**TABLE 1-1
WEBSITE DESIGN METHODOLOGY COMPARISON**

FEATURE AND FUNCTION	ADVANTAGE	DISADVANTAGE
Simple hyper text mark-up language (HTML) module	Simple basic coding Modified by personnel w/ minimal training Easily hosted to any website Cheapest option – initially	Modified by extensive programming Not automatically modifiable Modifications to questions are expensive Internet Explorer versus Netscape
Database driven HTML module	Data modified by anyone Dynamic data – HTML module instantly reflecting changes in database Question modification costs minimal	Underlying code requires Active Server Page (ASP) programmer to modify Requires special web serving applications (ASP and CGI) Not easily hosted to website (unless always served by a hosting provider that supports Server Side scripting) Database must reside on server Internet Explorer versus Netscape

FEATURE AND FUNCTION	ADVANTAGE	DISADVANTAGE
Shockwave (text file based) module	Stand alone and easily hosted to any website Data modifiable by anyone Module reflects changes (simple text (TXT) file generation process and upload) Database does not need to reside on server Question modification minimal Module branching more flexible	Underlying code requires (LINGO) programmer to modify User required to download Shockwave Player
Shockwave (database driven) module	Stand alone and easily hosted to website Data modified by anyone Dynamic data – module instantly reflects changes in database Module branching more flexible	Underlying code requires (LINGO) programmer to modify User is required to download Shockwave Player (free) Database must reside on server

2.0 UTILIZING THE ENVIRONMENTAL PLANNING CHECKLIST (EPC)

The Environmental Planning Checklist (EPC) was established to facilitate the accurate and consistent application of environmental compliance criteria in a user-friendly fashion. This tool will allow the user to properly and accurately apply NEPA regulations to project-specific decisions being made. The EPC will guide the user through the questions to properly address NEPA concerns for various projects. The decision logic included in this version of the Checklist cover many of the issues that proponents must address regarding the protection of environmental resources, and other compliance related issues. Within the EPC application, questions and implicit decision logic are intended to educate proponents about environmental requirements and streamline routine inquiries about potential environmental impacts on proposed projects throughout the year.

Step-by-step instructions are available within the application, under the Instructions tab. Macromedia Shockwave player is necessary for the EPC to function; therefore, must be installed on the desktop or laptop computer. If the user currently does not have installed, within the application the following link [Download Shockwave Player](#) will enable installation of the software.

2.1 STRUCTURE OF THE EPC

The goal of the EPC application was to create a consistent, streamline methodology for reviewing project to identify environmental constraints and to ensure compliance with federal environmental regulations. EPC used to ensure the consistent application of environmental

requirements to planning and implementation of construction, maintenance, renovation, and design projects.

The EPC consists of 100 questions, organized into 27 sections covering a broad spectrum of environmental issues and NEPA requirements. The EPC is designed for users without specialized environmental expertise and enables the user to navigate to the four environmental pillars: Compliance, Conservation, Restoration, Pollution Prevention, and a section labeled “Other.” The application allows the user to move backward or forward; however, it does not allow you to proceed to the next question unless you provide some response to the question being displayed. This is due to the decision tree methodology development. The user completes a section; a check mark is added next to the section title. This enables the user to identify at a glance questions completed. Each section contains a list of questions through which a user can navigate. The EPC presents questions individually on a sequence of screens. Users must respond “Yes” or “No” or “Don’t Know” to each question posed by the application. The user may add comments that are recorded with each appropriate answer. At any time during the session, the user may pause to edit and review answers that are given to previous questions. The logic uses the response to each question to determine the next applicable question. Users are prompted to respond only to those questions that are applicable to their project based upon the answers to environmental concerns. The program requires that users respond to each question that is prompted. Users may temporarily respond “don’t know” to a question and return later. As the user responds, the answer is highlighted. For certain questions, a dialog box containing a message will appear, providing further information. The screen for each question provides information regarding applicable SDSFIE and multiple sources of technical assistance, as well as the name and phone number for the corresponding technical expert on the Environmental Support Team. The EPC application has a link to the Federal Real Property Management (RPM) website.

The outputs provided by this application are as follows:

- Project Profile/Information
- Environmental Checklist Report – consists of questions answered, action items, date questions were answered, and the user’s login
- Outstanding Issue Report – consists of the questions that were answered “Don’t Know”
- Action Item Report- consists of questions, actions items and identifies the user’s login

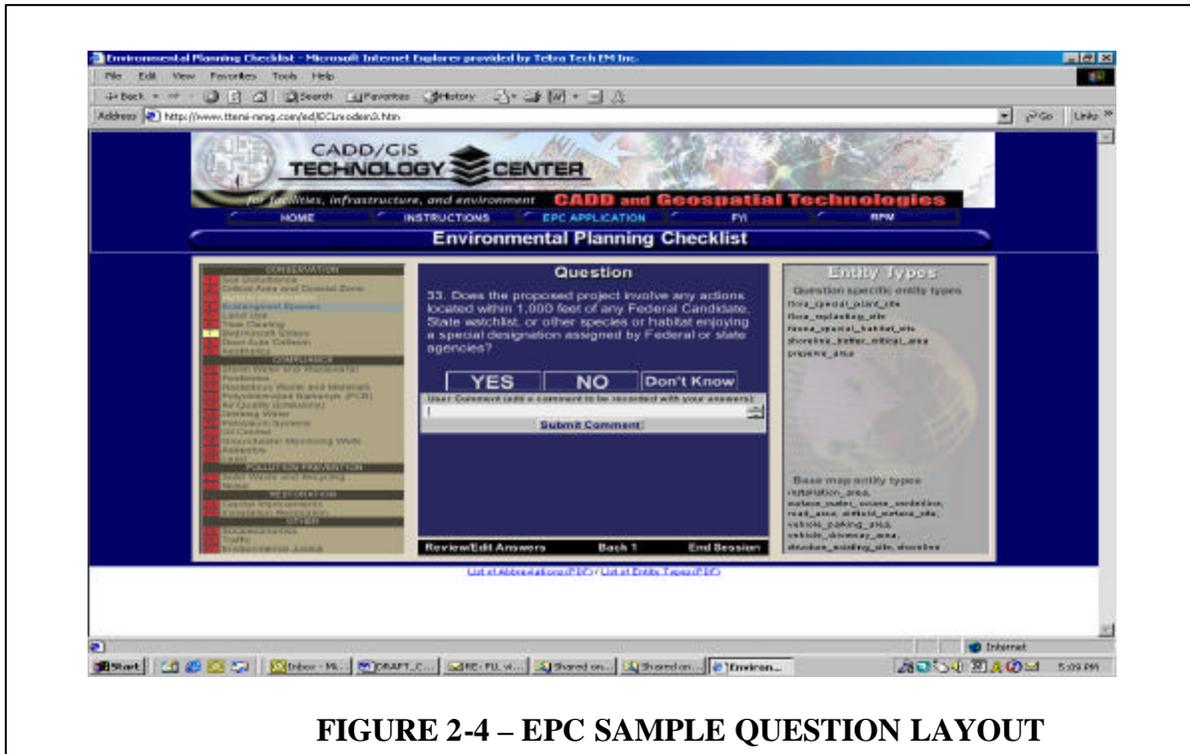


FIGURE 2-4 – EPC SAMPLE QUESTION LAYOUT

2.2 INSTALLATION OF THE EPC APPLICATION ON A WEB SERVER

The files required for the EIAP application should be placed in a subdirectory on the hosting server, using the same subdirectory structure provided on the CD in the Web Application subdirectory. It is suggested to coordinate efforts with webmaster. Based on the selected directory (example: EIAP), the following subdirectory structure should be used:

EIAP/data
 EIAP/images
 EIAP/pdf

The main EIAP directory would contain the HTM, DCR and XML files, and the FileListRoot.asp file provided in the Web application subdirectory of the CD. All other files would be placed in their appropriate subdirectories, listed above.

When utilizing Shockwave and ASP files, this application can only be viewed via a URL. Support files for the project are provided in the “Documents” directory of the EIAP CD-ROM.

The following are the server settings for the EIAP web site:

1. Server: Windows 2000, III 5.0, up-to-date security patches and service packs;
2. Script permission and read/write access;

3. Utilizes active server pages (ASP), and has been confirmed to work with IIS 5.0 and Unix with Sun's Chilisoft ASP software.

3.0 CHECKLIST QUESTIONS COMPARISON

The goal of both applications was to streamline the environmental review process and provide consistency in quality of the review and making environmental decisions as related to NEPA. Each promotes early planning to potentially avoid costly work stoppage situation and delays associated with last-minute attempts at environmental compliance. The guidance manual developed by the Environmental Support Team captures the point as it states that the checklist is not intended to replace real-time interaction among project developers (users) and team members. Instead, it is intended to educate users about environmental requirements and streamline routine or repetitive inquiries for simple projects. This section further discusses the organization and type of questions in each of the applications.

3.1 CHECKLIST QUESTIONS FROM ROBINS AFB

The Robins AFB's checklist is a web-based application that presents modules of questions to the user, who must answer, "Yes" or "No" to each. It consists of 87 questions, organized into 5 sections (environmental pillars and other), as depicted in Table 3-1. The application is based upon previously mentioned tree methodology. The user's response determines the next question. Users are prompted to respond only to applicable questions based upon each answer and associated environmental impact. The number of questions posed by the computer program to a given user depends on the complexity of the project, descriptive data available for the project, and the potential for the project to cause environmental impacts.

The first section directs the user to determine if the action qualifies for a categorical exclusion (CATEX) or whether it is adequately addressed in the existing base-wide Programmatic Environmental Assessment for operations at Robins AFB. Like many Department of Defense (DoD) installations, Robins AFB prepared a programmatic NEPA evaluation addressing the potential for environmental impacts from the totality of its mission. Programmatic NEPA documents may be either EISs or environmental assessments, depending on the potential for the mission to result in significant environmental impacts. Individual projects proposed after completion of a programmatic document must then be reviewed to determine whether they are adequately addressed in the programmatic document or whether additional analysis is necessary. This process of initially referring to the programmatic EA and extrapolating pertinent data is termed "tiering".

**TABLE 3-2
ENVIRONMENTAL PLANNING CHECKLIST SECTIONS**

Section (Pillar)	Title	
CONSERVATION	Soil Disturbance	
	Aesthetics	
	Critical Area and Coastal Zone	
	Historical Preservation	
	Capital Improvements	
	Endangered Species	
	Land Use	
	Tree Clearing	
	Bird/Aircraft Strike	
	Deer Auto Collisions	
	COMPLIANCE	Drinking Water
		Hazardous Materials and Waste
		Polychlorinated Biphenyls (PCBs)
Air Quality and Emissions		
Petroleum Systems		
Oil Control		
Ground Water Monitoring		
Asbestos		
Lead		
Storm Water and Wastewater		
POLLUTION PREVENTION	Pesticides	
	Solid Waste and Recycling	
RESTORATION	Noise	
	Capital Improvements	
OTHER	Installation Restoration	
	Socioeconomics	
	Traffic	
	Environmental Justice	

3.2 CHECKLIST QUESTIONS FROM NAS-PAX RIVER

The NAS-PAX River checklist is a server-based application that presents modules of questions to the user, who must answer, “yes” or “no” to each. It consists of numerous questions relating to federal, state, and local NEPA regulatory compliance. The application of based upon previously mentioned decision tree methodology. The questions were very specific and originated to facilitate coordination with Planners regarding construction, maintenance, renovation, and design projects.

4.0 SUMMARY

Both the Robins AFB and NAS-PAX River EPC applications encourage interaction with appropriate environmental specialists employed on the respective bases. The EPC streamlines the environmental review, promotes consistency in quality, and utilizes the SDSFIE and FMSFIE to maximum effectiveness and efficiency. EPC enables proactive front-end planning to minimize delays, project costs, and loss of project objectives. The EPC application can be used as a federal regulatory guideline and a decision-making tool for NEPA compliance. Other capabilities include the following:

- Determine the required level of NEPA documentation
- Plan public involvement activities
- Determine resources affected by a proposed action
- Identify mitigation measures
- Write NEPA documents
- Review NEPA documents
- Serve as the NEPA documents

The proposed EPC provides an application for utilization for federal government entities. This application is hosted at the CADD/GIS Technology Center website. This site includes a user manual, administration tools, and access to download the EPC. This application was developed to enhance the effectiveness and efficiency of the NEPA process at the federal level. Enhancements are scheduled to occur within the next fiscal year. The application also provides a direct linkage to the Federal Real Property Management (RPM) website

Appendix A

Checklist Questions and Associated Entity Types.

Section: 0 BASEMAP

Question No. 105 BASEMAP

ENTITY TYPE NAME	DEFINITION
airfield_surface_site	The surface areas that utilize aircraft. These include runways, taxiways, parking ramps, landing strips, helipads which may be components of airport and heliport facilities.
installation_area	Land and water currently owned or used by the military installation or facility.
road_area	A portion of a road with similar characteristics such as the number of lanes or surface type.
shoreline	The boundary where land meets the edge of a large body of fresh or salt water. The shoreline is the mean high water line between high and low tide.
structure_existing_site	An existing structure that was created, by man, for occupation, storage, or to facilitate and activity.
surface_water_course_centerline	The center of a flowing course of water, normally measured at a location equidistant opposite shorelines or waterlines.
vehicle_driveway_area	An access to a residence or other vehicle parking lot or storage area.
vehicle_parking_area	An area used for parking vehicles not including residential streets and driveways.

Section: 1 Soil Disturbance

This section addresses issues such as soil disturbance, wetlands impact, Nationwide Permits, Water Quality Certifications, archaeological surveys, National Register eligibility, agricultural land leases and prime/unique farmland soils.

Question No. 3 Is the proposed project located within 100 feet of any potential wetlands, streams (perennial or intermittent), or other surface waters?

Entity Type Name	Definition
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shoreline	The boundary where land meets the edge of a large body of fresh or salt water. The shoreline is the mean high water line between high and low tide.
land_reclamation_project_site	Sites where an ecosystem has been reclaimed or enhanced by man's efforts. This includes the restoration or creation of wetlands, dunes, stable shorelines, etc.
shoreline_buffer_critical_area	An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.
wetland_area	Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.
wetland_buffer_area	Areas surrounding certain types of wetlands where any development is restricted. The buffer distance can differ based upon state regulations and the type of wetland.
wetland_centerline	A singularly defined length of linear wetland, where the water table is usually at or near the surface of the land or the land is covered by shallow water.
surface_water_course_area	A flowing course of water including rivers, streams, canals, etc.
surface_water_course_centerline	The center of a flowing course of water, normally measured at a location equidistant opposite shorelines or waterlines.
surface_water_body_area	A standing body of water that can be natural or man-made including lakes, ponds, pools, etc.
construction_storm_water_site	An area where surface runoff from past or present land clearing and/or construction activities have the potential to contribute sediment or other pollutants to the environment.

Question No. 4 Has a delineation of wetlands and other surface water features, regulated by the Clean Water Act or applicable state or local regulations been performed? If so, has a jurisdictional determination been issued?

Entity Type Name	Definition
shoreline_buffer_critical_area	An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.
land_reclamation_project_site	Sites where an ecosystem has been reclaimed or enhanced by man's efforts. This includes the restoration or creation of wetlands, dunes, stable shorelines, etc.
wetland_area	Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.
wetland_centerline	A singularly defined length of linear wetland, where the water table

is usually at or near the surface of the land or the land is covered by shallow water.

wetland_buffer_area

Areas surrounding certain types of wetlands where any development is restricted. The buffer distance can differ based upon state regulations and the type of wetland.

Question No. 5 Will streams or wetlands actually be impacted (drained, filled, cleared, or otherwise altered)? Will stream or wetland buffers designated by your state or local government(s) be impacted?

Entity Type Name

Definition

land_reclamation_project_site

Sites where an ecosystem has been reclaimed or enhanced by man's efforts. This includes the restoration or creation of wetlands, dunes, stable shorelines, etc.

shoreline_buffer_critical_area

An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.

surface_water_course_centerli

The center of a flowing course of water, normally measured at a location equidistant opposite shorelines or waterlines.

surface_water_course_area

A flowing course of water including rivers, streams, canals, etc.

wetland_centerline

A singularly defined length of linear wetland, where the water table is usually at or near the surface of the land or the land is covered by shallow water.

wetland_buffer_area

Areas surrounding certain types of wetlands where any development is restricted. The buffer distance can differ based upon state regulations and the type of wetland.

wetland_area

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Question No. 6 Is the proposed project type covered by nationwide or applicable state-wide or regional General Permit ?

Entity Type Name

Definition

wetland_buffer_area

Areas surrounding certain types of wetlands where any development is restricted. The buffer distance can differ based upon state regulations and the type of wetland.

shoreline_buffer_critical_area

An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.

wetland_area

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

wetland_centerline	A singularly defined length of linear wetland, where the water table is usually at or near the surface of the land or the land is covered by shallow water.
borrow_area	An area designated a being the source of soils or other material which can be used for levee construction projects.
constr_dredging_project_refere	The area representing the extents of a construction dredging project used primarily to reference another design file containing the individual elements of the project including current and future constructions.
surface_water_quality_monitori	Equipment installed at a predetermined location for the automatic or manual periodic collection of samples for monitoring the environmental quality of surface water.
land_reclamation_project_site	Sites where an ecosystem has been reclaimed or enhanced by man's efforts. This includes the restoration or creation of wetlands, dunes, stable shorelines, etc.

Question No. 7 Can the project be accomplished within the limitations, conditions, and management practices prescribed by the applicable General Permit?

Entity Type Name	Definition
surface_water_quality_monitori	Equipment installed at a predetermined location for the automatic or manual periodic collection of samples for monitoring the environmental quality of surface water.
constr_dredging_project_refere	The area representing the extents of a construction dredging project used primarily to reference another design file containing the individual elements of the project including current and future constructions.
borrow_area	An area designated a being the source of soils or other material which can be used for levee construction projects.
wetland_centerline	A singularly defined length of linear wetland, where the water table is usually at or near the surface of the land or the land is covered by shallow water.
wetland_buffer_area	Areas surrounding certain types of wetlands where any development is restricted. The buffer distance can differ based upon state regulations and the type of wetland.
wetland_area	Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.
land_reclamation_project_site	Sites where an ecosystem has been reclaimed or enhanced by man's efforts. This includes the restoration or creation of wetlands, dunes, stable shorelines, etc.
shoreline_buffer_critical_area	An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.

Question No. 8

Does the applicable Nationwide Permit have a requirement to notify the USACE District Engineer or a state or local regulatory agency?

Entity Type Name

Definition

wetland_area

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

constr_dredging_project_refere

The area representing the extents of a construction dredging project used primarily to reference another design file containing the individual elements of the project including current and future constructions.

shoreline_buffer_critical_area

An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.

borrow_area

An area designated a being the source of soils or other material which can be used for levee construction projects.

wetland_buffer_area

Areas surrounding certain types of wetlands where any development is restricted. The buffer distance can differ based upon state regulations and the type of wetland.

surface_water_quality_monitori

Equipment installed at a predetermined location for the automatic or manual periodic collection of samples for monitoring the environmental quality of surface water.

land_reclamation_project_site

Sites where an ecosystem has been reclaimed or enhanced by man's efforts. This includes the restoration or creation of wetlands, dunes, stable shorelines, etc.

wetland_centerline

A singularly defined length of linear wetland, where the water table is usually at or near the surface of the land or the land is covered by shallow water.

Question No. 9

Does the applicable Nationwide Permit have a requirement for a Section 401 Water Quality Certification?

Entity Type Name

Definition

wetland_centerline

A singularly defined length of linear wetland, where the water table is usually at or near the surface of the land or the land is covered by shallow water.

surface_water_discharge_point

The location of a surface water discharge.

shoreline_buffer_critical_area

An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.

surface_water_quality_monitori

Equipment installed at a predetermined location for the automatic or manual periodic collection of samples for monitoring the environmental quality of surface water.

wastewater_discharge_point	Any location where wastewater pipes directly discharge effluent.
wetland_buffer_area	Areas surrounding certain types of wetlands where any development is restricted. The buffer distance can differ based upon state regulations and the type of wetland.
wetland_area	Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.
land_reclamation_project_site	Sites where an ecosystem has been reclaimed or enhanced by man's efforts. This includes the restoration or creation of wetlands, dunes, stable shorelines, etc.

Question No. 10 Does the applicable Nationwide Permit have a requirement for a public discharge notification?

Entity Type Name	Definition
surface_water_discharge_point	The location of a surface water discharge.
wastewater_discharge_point	Any location where wastewater pipes directly discharge effluent.
wetland_centerline	A singularly defined length of linear wetland, where the water table is usually at or near the surface of the land or the land is covered by shallow water.
wetland_buffer_area	Areas surrounding certain types of wetlands where any development is restricted. The buffer distance can differ based upon state regulations and the type of wetland.
wetland_area	Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.
surface_water_quality_monitori	Equipment installed at a predetermined location for the automatic or manual periodic collection of samples for monitoring the environmental quality of surface water.
land_reclamation_project_site	Sites where an ecosystem has been reclaimed or enhanced by man's efforts. This includes the restoration or creation of wetlands, dunes, stable shorelines, etc.
industrial_waste_discharge_poi	Any location where industrial waste water pipes directly discharge effluent.
shoreline_buffer_critical_area	An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.

Question No. 11 Is the proposed project located entirely within an area that has documented subsurface disturbance such as extensive grading or cutting?

Entity Type Name	Definition
archeological_artifact_point	Objects of archeological significance which, due to their size or nature, have not been removed from the site.

cultural_probable_sensitive_site	A site suspected to contain archeological or historic resources that has not been verified by a detailed archeological study.
cultural_restricted_area	An area that needs to be preserved due to the sensitive nature of the archeological or historic site. The area designated as restricted is intended to prevent access or development that will disturb the site.
cultural_study_site	A site under study for archeological or historic resources.
flora_fire_area	An area where a historically recorded fire has occurred. The fires may be wild or man-made prescribed burns.
historic_district_area	A group of related buildings or streetscapes that demonstrate the historical development of an area.
historic_feature_site	Historically or culturally significant points of interest. These include monuments, memorials, landmarks, museums, historic markers, interpretive sites, etc.
historic_structure_site	A structure that has cultural significance due to its historic background, association with a famous person, or its architectural features.
cultural_survey_site	A site where detailed investigation has been conducted for cultural resources. This investigation could involve test pits, excavation areas, surface surveys, etc.
historic_river_alignment_line	Lines marking the historic river alignments of locations in the recent epoch.
historic_bald_eagle_nesting_site	Areas or points which have historic record of being locations for bald eagle nesting.

Question No. 12 Is the proposed project located within an area that has already been archaeologically investigated?

Entity Type Name	Definition
cultural_study_site	A site under study for archeological or historic resources.
cultural_restricted_area	An area that needs to be preserved due to the sensitive nature of the archeological or historic site. The area designated as restricted is intended to prevent access or development that will disturb the site.
archeological_artifact_point	Objects of archeological significance which, due to their size or nature, have not been removed from the site.
cultural_survey_site	A site where detailed investigation has been conducted for cultural resources. This investigation could involve test pits, excavation areas, surface surveys, etc.
flora_fire_area	An area where a historically recorded fire has occurred. The fires may be wild or man-made prescribed burns.
historic_bald_eagle_nesting_site	Areas or points which have historic record of being locations for bald eagle nesting.
historic_district_area	A group of related buildings or streetscapes that demonstrate the historical development of an area.
historic_feature_site	Historically or culturally significant points of interest. These include monuments, memorials, landmarks, museums, historic markers,

	interpretive sites, etc.
historic_river_alignment_line	Lines marking the historic river alignments of locations in the recent epoch.
historic_structure_site	A structure that has cultural significance due to its historic background, association with a famous person, or its architectural features.
cultural_probable_sensitive_site	A site suspected to contain archeological or historic resources that has not been verified by a detailed archeological study.

Question No. 13 Is the proposed project located within 1,000 feet of a known archaeological site or cemetery?

Entity Type Name	Definition
archeological_artifact_point	Objects of archeological significance which, due to their size or nature, have not been removed from the site.
cultural_study_site	A site under study for archeological or historic resources.
cultural_survey_site	A site where detailed investigation has been conducted for cultural resources. This investigation could involve test pits, excavation areas, surface surveys, etc.
flora_fire_area	An area where a historically recorded fire has occurred. The fires may be wild or man-made prescribed burns.
historic_bald_eagle_nesting_site	Areas or points which have historic record of being locations for bald eagle nesting.
historic_district_area	A group of related buildings or streetscapes that demonstrate the historical development of an area.
historic_feature_site	Historically or culturally significant points of interest. These include monuments, memorials, landmarks, museums, historic markers, interpretive sites, etc.
cultural_probable_sensitive_site	A site suspected to contain archeological or historic resources that has not been verified by a detailed archeological study.
surface_water_body_area	A standing body of water that can be natural or man-made including lakes, ponds, pools, etc.
historic_structure_site	A structure that has cultural significance due to its historic background, association with a famous person, or its architectural features.
terrestrial_archeological_site	The location of a registered archeological site.
cultural_restricted_area	An area that needs to be preserved due to the sensitive nature of the archeological or historic site. The area designated as restricted is intended to prevent access or development that will disturb the site.
historic_river_alignment_line	Lines marking the historic river alignments of locations in the recent epoch.

Question No. 14 Does the archaeological site or cemetery fall within areas potentially affected by the proposed project? (Note, "Affected" can include physical, visual, or even auditory effects.)

Entity Type Name	Definition
cultural_study_site	A site under study for archeological or historic resources.

historic_river_alignment_line	Lines marking the historic river alignments of locations in the recent epoch.
historic_structure_site	A structure that has cultural significance due to its historic background, association with a famous person, or its architectural features.
archeological_artifact_point	Objects of archeological significance which, due to their size or nature, have not been removed from the site.
historic_feature_site	Historically or culturally significant points of interest. These include monuments, memorials, landmarks, museums, historic markers, interpretive sites, etc.
cultural_probable_sensitive_site	A site suspected to contain archeological or historic resources that has not been verified by a detailed archeological study.
cultural_restricted_area	An area that needs to be preserved due to the sensitive nature of the archeological or historic site. The area designated as restricted is intended to prevent access or development that will disturb the site.
historic_district_area	A group of related buildings or streetscapes that demonstrate the historical development of an area.
flora_fire_area	An area where a historically recorded fire has occurred. The fires may be wild or man-made prescribed burns.
cultural_survey_site	A site where detailed investigation has been conducted for cultural resources. This investigation could involve test pits, excavation areas, surface surveys, etc.
historic_bald_eagle_nesting_site	Areas or points which have historic record of being locations for bald eagle nesting.

Question No. 15 Has the known archaeological site been evaluated for eligibility on the National Register of Historic Places?

Entity Type Name	Definition
cultural_survey_site	A site where detailed investigation has been conducted for cultural resources. This investigation could involve test pits, excavation areas, surface surveys, etc.
historic_structure_site	A structure that has cultural significance due to its historic background, association with a famous person, or its architectural features.
archeological_artifact_point	Objects of archeological significance which, due to their size or nature, have not been removed from the site.
flora_fire_area	An area where a historically recorded fire has occurred. The fires may be wild or man-made prescribed burns.
cultural_study_site	A site under study for archeological or historic resources.
cultural_restricted_area	An area that needs to be preserved due to the sensitive nature of the archeological or historic site. The area designated as restricted is intended to prevent access or development that will disturb the site.
historic_feature_site	Historically or culturally significant points of interest. These include monuments, memorials, landmarks, museums, historic markers, interpretive sites, etc.

cultural_probable_sensitive_site	A site suspected to contain archeological or historic resources that has not been verified by a detailed archeological study.
coke_oven_centerline	Large ovens used to produce coke, which is needed in the extraction of metals from ore.
historic_district_area	A group of related buildings or streetscapes that demonstrate the historical development of an area.
historic_bald_eagle_nesting_site	Areas or points which have historic record of being locations for bald eagle nesting.
historic_river_alignment_line	Lines marking the historic river alignments of locations in the recent epoch.

Question No. 16 Was the known archaeological site or cemetery determined to be eligible for the National Register of Historic Places?

Entity Type Name	Definition
cultural_probable_sensitive_site	A site suspected to contain archeological or historic resources that has not been verified by a detailed archeological study.
historic_bald_eagle_nesting_site	Areas or points which have historic record of being locations for bald eagle nesting.
historic_river_alignment_line	Lines marking the historic river alignments of locations in the recent epoch.
historic_feature_site	Historically or culturally significant points of interest. These include monuments, memorials, landmarks, museums, historic markers, interpretive sites, etc.
historic_district_area	A group of related buildings or streetscapes that demonstrate the historical development of an area.
flora_fire_area	An area where a historically recorded fire has occurred. The fires may be wild or man-made prescribed burns.
cultural_survey_site	A site where detailed investigation has been conducted for cultural resources. This investigation could involve test pits, excavation areas, surface surveys, etc.
cultural_restricted_area	An area that needs to be preserved due to the sensitive nature of the archeological or historic site. The area designated as restricted is intended to prevent access or development that will disturb the site.
archeological_artifact_point	Objects of archeological significance which, due to their size or nature, have not been removed from the site.
historic_structure_site	A structure that has cultural significance due to its historic background, association with a famous person, or its architectural features.
cultural_study_site	A site under study for archeological or historic resources.

Question No. 17 Is the proposed project site located on lands currently under lease for agriculture?

Entity Type Name	Definition
agricultural_tract_area	Location of agricultural tract areas

agricultural_outlease_area Department of Defense land areas that are leased to private concerns for agricultural use. The Department of Defense receives lease payment and the land is maintained by the private concern.

Question No. 18 Is the proposed project site located on prime or unique farmland soil?

Entity Type Name	Definition
soil_unit_area	An area with similar soil characteristics. The size of the units used for an installation differs based upon the smallest area of land that is managed for a particular land use.

This section consists of questions on the Critical Area, the 100-foot buffer and CZMA Federal Consistency Determinations.

Question No. 20 Is the proposed project located within areas designated by your state as part of the coastal zone?

Entity Type Name	Definition
hydrobasin_storage_area	A subarea of a watershed, specifically established for executing a UNET hydrologic model.
floodway_area	Leveed areas through which flood flows are diverted from the main river channel into adjacent sub basins to lower downstream river stages to reduce flooding in critical areas also known as a spillway.
shoreline_buffer_nobuild_area	The buffer area that is 100 feet landward of the mean high tide coastline and any tidal waterways.
shoreline_buffer_critical_area	An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.
shoreline	The boundary where land meets the edge of a large body of fresh or salt water. The shoreline is the mean high water line between high and low tide.
watershed_drainage_area	A specific subarea of a watershed.

Question No. 21 BLANK

Entity Type Name	Definition
shoreline	The boundary where land meets the edge of a large body of fresh or salt water. The shoreline is the mean high water line between high and low tide.
hydrobasin_storage_area	A subarea of a watershed, specifically established for executing a UNET hydrologic model.
floodway_area	Leveed areas through which flood flows are diverted from the main river channel into adjacent sub basins to lower downstream river stages to reduce flooding in critical areas also known as a spillway.

shoreline_buffer_critical_area	An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.
shoreline_buffer_nobuild_area	The buffer area that is 100 feet landward of the mean high tide coastline and any tidal waterways.
watershed_drainage_area	A specific subarea of a watershed.

Question No. 22 Is the project considered "water-dependent"?

Entity Type Name	Definition
canal_centerline	An artificially dug waterway with or without flow which is used as a transportation artery.
dam_site	A barrier to obstruct the flow of water.
depth_contour_line	Connecting points on the bottom of a water body representing some fixed depth of water with respect to a specified reference.
depth_maintenance_area	An area beneath the surface of water which has been maintained free of obstacles or subsurface debris such that the depth of water is at least a specific amount with reference to some datum.
distance_marker_point	A marker or location a specific distance from a known origin along a water course. Sometimes known as a river mile.
distance_zone_area	Areas where specific distances to the natural scenic importance of the area are documented.
ditch_aqueduct_centerline	Manmade or improved waterway designed to transport water for irrigation or other use.
airboat_trail_centerline	A designated path in the water course where airboats have jurisdiction to travel.

Question No. 23 Is the proposed project consistent with any zoning established by state or local government(s) for the coastal zone?

Entity Type Name	Definition
floodway_area	Leveed areas through which flood flows are diverted from the main river channel into adjacent sub basins to lower downstream river stages to reduce flooding in critical areas also known as a spillway.
watershed_drainage_area	A specific subarea of a watershed.
shoreline_buffer_nobuild_area	The buffer area that is 100 feet landward of the mean high tide coastline and any tidal waterways.
shoreline	The boundary where land meets the edge of a large body of fresh or salt water. The shoreline is the mean high water line between high and low tide.
hydrobasin_storage_area	A subarea of a watershed, specifically established for executing a UNET hydrologic model.

shoreline_buffer_critical_area An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.

This section addresses alterations, maintenance and repairs to structures eligible for the National Register of Historic Places.

Question No. 24 Does the project involve alterations, maintenance, or repairs to an existing structure?

Entity Type Name	Definition
structure_existing_site	An existing structure that was created, by man, for occupation, storage, or to facilitate an activity.

Question No. 25 Is the structure either listed on or determined eligible for the National Register of Historic Places?

Entity Type Name	Definition
historic_feature_site	Historically or culturally significant points of interest. These include monuments, memorials, landmarks, museums, historic markers, interpretive sites, etc.
historic_district_area	A group of related buildings or streetscapes that demonstrate the historical development of an area.
historic_structure_site	A structure that has cultural significance due to its historic background, association with a famous person, or its architectural features.

Question No. 26 Is the structure greater than 50 years old?

Entity Type Name	Definition
historic_structure_site	A structure that has cultural significance due to its historic background, association with a famous person, or its architectural features.
historic_district_area	A group of related buildings or streetscapes that demonstrate the historical development of an area.
historic_feature_site	Historically or culturally significant points of interest. These include monuments, memorials, landmarks, museums, historic markers, interpretive sites, etc.

Question No. 27 Has the structure been evaluated to determine eligibility for listing on the National Register of Historic Places?

Entity Type Name	Definition
historic_district_area	A group of related buildings or streetscapes that demonstrate the historical development of an area.
historic_feature_site	Historically or culturally significant points of interest. These include monuments, memorials, landmarks, museums, historic markers, interpretive sites, etc.

historic_structure_site A structure that has cultural significance due to its historic background, association with a famous person, or its architectural features.

Question No. 28 Was the structure determined to be eligible for the National Register of Historic Places?

Entity Type Name **Definition**

historic_feature_site Historically or culturally significant points of interest. These include monuments, memorials, landmarks, museums, historic markers, interpretive sites, etc.

historic_district_area A group of related buildings or streetscapes that demonstrate the historical development of an area.

historic_structure_site A structure that has cultural significance due to its historic background, association with a famous person, or its architectural features.

This section contains a question regarding potential impacts on rare, threatened and endangered species.

Question No. 33 Does the proposed project involve any actions located within 1,000 feet of any Federal Candidate, State watchlist, or other species or habitat enjoying a special designation assigned by Federal or state agencies?

Entity Type Name **Definition**

preserve_area An area of forest that is being managed as a preserve due to its unique characteristics such as an old growth area or good species habitat area.

shoreline_buffer_critical_area An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.

fauna_special_habitat_site A site or location where the specific species associated with the habitat require special attention according to law. These are normally threatened, sensitive, or endangered species habitats.

flora_replanting_site An site where flora has been reintroduced.

flora_special_plant_site A site or location where there are threatened, endangered, or sensitive floral species.

Question No. 96 Have areas within 1,000 feet of the project site been surveyed within the last 10 years for threatened or endangered species or critical habitat designated under the Federal Endangered Species Act or under equivalent state law?

Entity Type Name **Definition**

flora_special_plant_site A site or location where there are threatened, endangered, or sensitive floral species.

preserve_area An area of forest that is being managed as a preserve due to its

	unique characteristics such as an old growth area or good species habitat area.
flora_replanting_site	An site where flora has been reintroduced.
fauna_special_habitat_site	A site or location where the specific species associated with the habitat require special attention according to law. These are normally threatened, sensitive, or endangered species habitats.
shoreline_buffer_critical_area	An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.

This section addresses issues related to planned cutting or removal of trees, proper disposal of real estate (timber) and the impacts associated with the Migratory Bird Treaty Act.

Question No. 37 Do the trees provide nesting habitat for migratory birds?

Entity Type Name	Definition
forest_interior_dwelling_specie	FIDS are habitat areas with specific characteristics that are attractive to neo-tropical migratory bird species.

This section contains questions regarding the proposed project's potential to create a bird/aircraft strike hazard and the use of bird repellent or exclusion devices to minimize bird/aircraft strikes.

Question No. 39 Is the proposed project located within 1,000 feet of an active runway or approach path?

Entity Type Name	Definition
airfield_surface_centerline	The center of runways and taxiways as measured from the edge of the paved surface.
airfield_surface_marking_line	Markings placed on an airfield surface which aid in its use. Examples are landing indicators, runway designators and route/intersection points.
air_accident_zone_area	Areas at the end of runways or beneath approach and departure flight paths where there is a higher potential for aircraft accidents. These areas include clear zones, and accident potential zones (APZ) I and II. Clear zones are areas immediately beyond the end of the runways with a high potential for accidents. These areas are traditionally acquired by the Government in fee and kept clear of obstructions to flight. All of these zones are used in the analysis of land use compatibility with surrounding communities.
airfield_surface_site	The surface areas that aircraft utilize. These include runways, taxiways, parking ramps, landing strips, helipads which may be components of airport and heliport facilities.
airfield_light_point	The location of dedicated airfield lights used to illuminate runways, taxiways, or helipads as well as to guide ground traffic.

Question No. 40 Will the project require construction of storm water retention or detention basins (or otherwise result in standing surface water)?

Entity Type Name	Definition
floodway_area	Leveed areas through which flood flows are diverted from the main river channel into adjacent sub basins to lower downstream river stages to reduce flooding in critical areas also known as a spillway.

This section consists of questions related to fence alignments and other construction methods which could impact the movement of wildlife, especially deer.

Question No. 42 Does the project involve the construction or installation of fencing?

Entity Type Name	Definition
fence_line	The line, along which, a fence has been erected.

Question No. 43 Could the constructed and installed fence significantly alter movement patterns for wildlife, especially deer?

Entity Type Name	Definition
insecta_migration_corridor_line	An area or route along which certain insecta species are known to migrate from one habitat to another.
fence_line	The line, along which, a fence has been erected.
riparian_forest_buffer_project_	An area that has been identified for the establishment of a riparian forest buffer. Riparian forest buffer project areas are only the areas where the natural environment needs to be enhanced through a replanting effort, fencing to harbor the natural regeneration process, or some other means to create a forested buffer area.
reptilia_migration_corridor_line	An area or route along which certain reptilia species are known to migrate from one habitat to another.
pisces_migration_corridor_line	An area or route along which certain pisces species are known to migrate from one habitat to another.
mammalia_migration_corridor_lin	An area or route along which certain mammalia species are known to migrate from one habitat to another.
fauna_general_migration_corrid	An area or route along which an aggregate of fauna species are known to migrate from one habitat to another.
crustacea_migration_corridor_li	An area or route along which certain crustacea species are known to migrate from one habitat to another.
aves_migration_corridor_line	An area or route along which certain aves species are known to migrate from one habitat to another.
amphibia_migration_corridor_line	An area or route along which amphibian species are known to migrate from one habitat to another.
mollusca_migration_corridor_line	An area or route along which certain mollusca species are known to migrate from one habitat to another.

Question No. 44 Could the shift in movement patterns divert deer onto the airfield or across a public roadway?

Entity Type Name	Definition
aves_migration_corridor_line	An area or route along which certain aves species are known to migrate from one habitat to another.
crustacea_migration_corridor_li	An area or route along which certain crustacea species are known to migrate from one habitat to another.
fauna_general_migration_corrid	An area or route along which an aggregate of fauna species are known to migrate from one habitat to another.
insecta_migration_corridor_line	An area or route along which certain insecta species are known to migrate from one habitat to another.
mammalia_migration_corridor_lin	An area or route along which certain mammalia species are known to migrate from one habitat to another.
mollusca_migration_corridor_line	An area or route along which certain mollusca species are known to migrate from one habitat to another.
pisces_migration_corridor_line	An area or route along which certain pisces species are known to migrate from one habitat to another.
reptilia_migration_corridor_line	An area or route along which certain reptilia species are known to migrate from one habitat to another.
riparian_forest_buffer_project_	An area that has been identified for the establishment of a riparian forest buffer. Riparian forest buffer project areas are only the areas where the natural environment needs to be enhanced through a replanting effort, fencing to harbor the natural regeneration process, or some other means to create a forested buffer area.
fence_line	The line, along which, a fence has been erected.
fauna_hazard_area	An area where there are hazards due to wildlife activities. This includes bird aircraft strike hazard (BASH) areas, and deer strike areas.
amphibia_migration_corridor_line	An area or route along which amphibian species are known to migrate from one habitat to another.

This section addresses the proposed project's expected impact on storm water and wastewater management.

Question No. 19 Will the project create more than 5,000 square feet of impervious surface, or will it create enough impervious surface to require a storm water management plan according to applicable state or local regulations?

Entity Type Name	Definition
watershed_drainage_area	A specific subarea of a watershed.
shoreline	The boundary where land meets the edge of a large body of fresh or salt water. The shoreline is the mean high water line between high and low tide.
floodway_area	Leveed areas through which flood flows are diverted from the main river channel into adjacent sub basins to lower downstream river stages to reduce flooding in critical areas also known as a spillway.

hydrobasin_storage_area	A subarea of a watershed, specifically established for executing a UNET hydrologic model.
shoreline_buffer_critical_area	An area of land extending from the shoreline or from the landward boundary of any adjacent tidal wetland where development is regulated. Activities within this critical area have the greatest potential for affecting water quality as well as fish, plant, and wildlife habitat.
shoreline_buffer_nobuild_area	The buffer area that is 100 feet landward of the mean high tide coastline and any tidal waterways.

Question No. 67 Does the proposed project include any wastewater discharges from the facility (new facility, facility addition, or facility modification)?

Entity Type Name	Definition
wastewater_line	A pipe used to carry a substance from location to location (main line, service line, force main line, etc).

Question No. 68 Is the wastewater discharged to the sanitary sewer?

Entity Type Name	Definition
wastewater_discharge_point	Any location where wastewater pipes directly discharge effluent.
wastewater_drain_field_area	The area of influence where perforated pipe placed in gravel trenches carries effluent from a waste storage containment for percolation into the earth.
wastewater_flow_direction_arr	A flow direction arrow indicates the direction of flow through a line, valve, or component.
wastewater_inlet_point	The location where waste water is collected and received into the utility system.
wastewater_line	A pipe used to carry a substance from location to location (main line, service line, force main line, etc).

Question No. 69 Is the wastewater discharged to a storm drain?

Entity Type Name	Definition
wastewater_line	A pipe used to carry a substance from location to location (main line, service line, force main line, etc).
storm_sewer_inlet_point	The location where water is collected and received into the utility system.
storm_sewer_flow_direction_ar	A flow direction arrow indicates the direction of flow through a line, valve, or component.
storm_sewer_drainage_basin_a	An area in which surface runoff collects and from which it is carried by a drainage system.
storm_sewer_discharge_point	Any location where storm sewer pipes directly discharge effluent.
storm_sewer_culvert_line	Interception and removal of ground water or surface water.
storm_sewer_reservoir_point	The location where storm sewer water is collected.
storm_sewer_armor_point	Any location where armor stone is used for erosion protection in an open channel.

This section addresses the application of pesticides and the proposed project's consistency with the base's Integrated Pest Management Plan.

Question No. 45	Will the project involve application of any pesticides?
Entity Type Name	Definition
pest_management_site	A site where specific actions are being taken to control insects, rodents, or other pests.

Question No. 46	Is the method of application consistent with the provisions of the integrated pestmanagement plan?
Entity Type Name	Definition
pest_management_site	A site where specific actions are being taken to control insects, rodents, or other pests.

This section addresses compliance with the Safe Drinking Water Act, protection of Station groundwater resources and water conservation requirements and practices.

Question No. 62	Does the proposed project involve potable water wells or water supply lines?
Entity Type Name	Definition
water_system_flow_direction_a	A flow direction arrow indicates the direction of flow through a line, valve, or component.
water_line	A pipe used to carry a substance from location to location (main line, service line, vent line, etc).
water_well_point	A shaft dug or drilled into the earth for the purpose of extracting water from subsurface aquifers, collecting groundwater environmental samples, injecting water or other fluids into subsurface aquifers, or extracting contamination or other impurities from subsurface aquifers.

Question No. 65	Does the proposed project involve withdrawing water from groundwater sources?
Entity Type Name	Definition
chemical_waste_polluted_groun	Area where chemical waste residues are present in the groundwater at concentrations considered to be detrimental to the environment.

This section addresses requirements for existing or proposed fuel storage tanks and fueling operations; new or existing heating oil, fuel oil, and jet fuel requirements; and permits required for removal or installation of new fueling tanks and operations

Question No. 74 Will the proposed project be located on or near an aboveground storage tank, an underground storage tank, or fuel lines?

Entity Type Name	Definition
regulated_underground_storage	A receptacle or chamber used for storing bulk fuels or chemicals of which 10 percent or more is located beneath the surface of the ground.
regulated_aboveground_storag	A receptacle or chamber used for storing bulk fuels or chemicals of which 90 percent or more is located above the surface of the ground.
fuel_tank_site	An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.

Question No. 75 Does the proposed project have a petroleum auxiliary power system, heating system, generator, fire pump or other petroleum engine that would require petroleum aboveground or underground storage tank or fuel piping?

Entity Type Name	Definition
regulated_underground_storage	A receptacle or chamber used for storing bulk fuels or chemicals of which 10 percent or more is located beneath the surface of the ground.
regulated_aboveground_storag	A receptacle or chamber used for storing bulk fuels or chemicals of which 90 percent or more is located above the surface of the ground.
fuel_tank_site	An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.

This section addresses the disturbance of or construction on oil contaminated sites and the notification procedures required by MDE. If petroleum contamination is found during excavation of project, please contact the PW coordinator at (301)-757-4825.

Question No. 81 Does the proposed project involve digging or construction of on an oil-contaminated soil area?

Entity Type Name	Definition
hazards_potential_concern_site	A site of suspected environmental contamination.
chemical_waste_polluted_soil_a	Area where chemical waste residues are present in the soil at concentrations considered to be detrimental to the environment.

Question No. 82 Does the proposed project involve extraction of petroleum-contaminated groundwater (such as cooling water or construction dewatering)?

Entity Type Name	Definition
chemical_waste_polluted_soil_a	Area where chemical waste residues are present in the soil at concentrations considered to be detrimental to the environment.

Question No. 83 Will the petroleum-contaminated groundwater be discharged to storm sewer?

Entity Type Name	Definition
storm_sewer_stilling_basin_site	The location where the energy from turbulent water flow is reduced.
storm_sewer_reservoir_point	The location where storm sewer water is collected.
storm_sewer_line	A pipe used to carry a substance from location to location (main line, service line, vent line, etc).
storm_sewer_culvert_line	Interception and removal of ground water or surface water.
storm_sewer_open_drainage_li	Interception and removal of ground water or surface water by natural means.
storm_sewer_inlet_point	The location where water is collected and received into the utility system.
storm_sewer_discharge_point	Any location where storm sewer pipes directly discharge effluent.

Question No. 84 Will the petroleum-contaminated groundwater be discharged to a sanitary sewer?

Entity Type Name	Definition
wastewater_discharge_point	Any location where wastewater pipes directly discharge effluent.
wastewater_drain_field_area	The area of influence where perforated pipe placed in gravel trenches carries effluent from a waste storage containment for percolation into the earth.
wastewater_inlet_point	The location where waste water is collected and received into the utility system.

This section addresses the proposed project's impact on existing groundwater monitoring wells, the installation of new wells, the removal of existing wells and all required permits.

Question No. 85 Will the proposed project require a monitoring well to monitor groundwater (such as, for contamination monitoring, water level monitoring, or water extraction)?

Entity Type Name	Definition
groundwater_quality_monitoring	Equipment installed at a predetermined location for the automatic or manual periodic collection of environmental groundwater samples.

Question No. 86 Will the proposed project involve work over or near current groundwater monitoring?

Entity Type Name	Definition
groundwater_quality_monitoring	Equipment installed at a predetermined location for the automatic or manual periodic collection of environmental groundwater samples.

Question No. 87 Is there a potential that the project will cause contamination to be spilled on the ground surface or to reach groundwater?

Entity Type Name	Definition
chemical_waste_polluted_groun	Area where chemical waste residues are present in the groundwater at concentrations considered to be detrimental to the environment.
chemical_waste_polluted_surfa	Area where chemical waste residues are present in the surface water at concentrations considered to be detrimental to the environment.

This section addresses issues that pertain to asbestos.

Question No. 89 Have you verified the absence of asbestos in the project area?

Entity Type Name	Definition
asbestos_containing_materiel_p	A room, space, or other location where an asbestos containing materiel (ACM) is present.

Question No. 90 Is asbestos abatement required?

Entity Type Name	Definition
asbestos_containing_materiel_p	A room, space, or other location where an asbestos containing materiel (ACM) is present.

This section addresses lead paint.

Question No. 91 Have you verified the absence of lead paint?

Entity Type Name	Definition
lead_paint_hazard_point	A room, space, or other location where a paint or coating containing lead is present.

Question No. 92 Is lead abatement required?

Entity Type Name	Definition
lead_paint_hazard_point	A room, space, or other location where a paint or coating containing lead is present.

This section addresses issues related to new construction, including floodplains, nuisance wildlife and indirect impacts to structures eligible for the National Register of Historical Places.

Question No. 30 Is the proposed new construction located within view of any structure listed on or determined eligible for the National Register of Historic Places?

Entity Type Name	Definition
historic_district_area	A group of related buildings or streetscapes that demonstrate the historical development of an area.
historic_structure_site	A structure that has cultural significance due to its historic

historic_feature_site	background, association with a famous person, or its architectural features.
	Historically or culturally significant points of interest. These include monuments, memorials, landmarks, museums, historic markers, interpretive sites, etc.

Question No. 31 Is the proposed project located within the 100-year floodplain (on Flood Insurance Rate maps, available from the your installation's natural resource manager, your local planning office, or directly from the Federal Emergency Management Agency)?

Entity Type Name	Definition
flood_zone_area	Areas subject to 100-year, 500-year and minimal flooding.
flood_contour_line	A line representing the limit or extent of probable flooding associated with the area.
flood_event_area	An area where a particular flood event has occurred.

This section addresses the proposed project's access requirements and proximity to Installation Restoration Sites.

Question No. 71 Is the proposed project located within the boundaries of an Installation Restoration site?

Entity Type Name	Definition
land_reclamation_project_site	Sites where an ecosystem has been reclaimed or enhanced by man's efforts. This includes the restoration or creation of wetlands, dunes, stable shorelines, etc.
environmental_restoration_site	A geographic area where an active environmental study or project is underway to remediate pollutants located in the soil, sediment, surface water, or groundwater.

Question No. 72 Will the proposed project involve disturbance or excavation of soil?

Entity Type Name	Definition
environmental_restoration_site	A geographic area where an active environmental study or project is underway to remediate pollutants located in the soil, sediment, surface water, or groundwater.
fuel_tank_site	An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.
land_reclamation_project_site	Sites where an ecosystem has been reclaimed or enhanced by man's efforts. This includes the restoration or creation of wetlands, dunes, stable shorelines, etc.

APPENDIX B INFORMATION SOURCES

The following regulations, guidance documents, and other technical information sources were considered while performing the review:

40 CFR 1500-1508. Council on Environmental Quality (CEQ) Regulations on Implementation of the National Environmental Quality Act.

46 FR 18026-18038. Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations (40 CFR 1500-1508).

Department of Defense (DoD) Directive 6050.1. Environmental Effects in the United States of DoD Actions.

Eccleston, C. H. 2000. *Environmental Impact Statements – A Comprehensive Guide to Project and Strategic Planning*. John Wiley & Sons, Inc., New York, New York.

Naval Air Station Patuxent River. Undated. *A Guide to the Environmental Planning Checklist*. Naval Air Station Patuxent River, Lexington Park, Maryland.