Environmental Review Manual

for Indian Health Service Programs

Prepared by the

Office of Environmental Health and Engineering

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Department of Health and Human Services
Indian Health Service

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DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Indian Health Service
Rockville MD 20852

JAN 31 2007

TO: Area OEHE Directors

FROM: Director
Office of Environmental Health and Engineering

SUBJECT: Revised and updated "Environmental Review Manual for Indian Health Service Programs"

This "Environmental Review Manual for Indian Health Service Programs, January 2007" is the environmental review procedure of the Indian Health Service (IHS) and supports the environmental management policy of the IHS. It is the policy of the IHS to ensure that its programs manage their activities in an environmentally sound manner that supports its mission and ensures compliance with environmental laws and regulations.

This Manual is to be used by all IHS programs to assist them in complying with the National Environmental Policy Act and the National Historic Preservation Act and related environmental and historic preservation laws, regulations, Executive Orders, and other requirements. A significant effort was put into descriptions of the requirements and processes for compliance.

We thank those individuals who participated in this effort. A wide range of participants from IHS Areas and Headquarters, who are involved in the environmental review process, contributed to the publication this Manual.

This "Environmental Review Manual for Indian Health Service Programs, January 2007," supersedes the previous IHS versions including the "Environmental Review Manual, March 1993" and the "Environmental Review Manual, March 1993 2nd Edition, January 2000".

Gary J. Hartz, P.E.
Assistant Surgeon General

Enclosure

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PREFACE

This document is intended for use by the Indian Health Service (IHS) Headquarters and IHS Area Office Programs and replaces the previous version initially released in March 1993 and updated in January 2000. This document contains additions and process modifications due to changes in program implementation, laws, and regulations.

This document was prepared to assist IHS program managers in ensuring that IHS programs comply with the major environmental laws, regulations, Executive Orders, and related requirements. This document may be used by all IHS programs including medical, clinical, grants, contracts, administration, management, health facilities, and sanitation facilities programs.

ACKNOWLEDGEMENTS

This revised 2007 version of the IHS Environmental Review Manual resulted from the efforts of a wide range of participants, contributors and collaborators. Input was received from Area- as well as HQ-level IHS personnel involved in the environmental review process. Any errors or oversights should be reported to the IHS Area, Office of Environmental Health and Engineering, which will review the error or oversight and inform IHS Headquarters.

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PART I – EVIRONMENTAL REVIEW GUIDANCE

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Overview and NEPA Procedures

1.1 Introduction/Overview

This manual serves to inform Indian Health Service (IHS) program, facility, and project managers of the requirements for complying with Federal environmental laws, regulations, Executive Orders (EOs), and agency administrative policies and procedures. IHS program, facility, and project managers will use this document to review their proposed actions and determine what additional actions must be completed to meet their compliance requirements.

Part I of this manual provides an overview of the IHS Environmental Review Process, with particular focus on the actions required for compliance with the National Environmental Policy Act (NEPA). In addition to an overview of NEPA, this section provides information and guidance on the following IHS environmental review procedures:

- Use of the Environmental Review and Documentation Form (the "Checklist")
- Consideration of Categorical Exclusions and Exceptional or Extraordinary Circumstances
- Environmental Assessments
- Environmental Impact Statements

As will be discussed, the environmental review process also serves as an opportunity to become informed of and adopt a proactive approach towards the wide spectrum of environmental issues that can affect (or be affected by) IHS programs, facilities, and projects. To assist the IHS program, facility, and project manager in these considerations, Part II of this manual provides reference sections that outline the compliance requirements of the major laws and Executive Orders that address the following:

- Historic Properties
- Threatened and Endangered Species
- Water Resources
- Floodplains
- Real Property
- Air Quality
- Petroleum
- Solid Waste Disposal
- Hazardous Substances
- Environmental Justice
- Socioeconomics
- Noise
- Visual Resources
- Wilderness Areas
- Important Farmland and Soils
- Coastal Resources
- Wild and Scenic Rivers

Where useful, supporting documentation for each section (e.g., examples of permits, agency correspondence, maps), are provided in appendices immediately following each section.

1.2 Responsibilities and Requirements

Any person, Tribal, state or Federal entity who takes part in an IHS funded, permitted, or approved activity must comply with the many Federal, Tribal, state, and local environmental laws. The IHS, as a Federal agency, must comply with these laws and has a particular responsibility to consider the impacts of its actions on the environmental and cultural aspects of its customers, the American Indian and Alaska Native people.

IHS activities and programs that may require environmental review and compliance include, but are not limited to, the following:

- Grants and programs that provide grants;
- Contracting and Acquisitions;
- Custodial and grounds maintenance;
- Clinical programs-Dental, Radiology, Pharmacy, Diabetes, etc.;
- Health Facilities-hospitals, health centers, clinics;
- Real Property-transfer and acquisition;

- Construction (including sanitation facilities, renovations, and ground disturbing activities).

The Director, IHS, has delegated to Area Directors the authority to carry out the requirements of Federal environmental laws, EOs, and regulations in accordance with the Department of Health and Human Services policies and procedures [contained in revised Part 30 of the HHS General Administration Manual (GAM), Environmental Protection] within their respective Areas. The Director, OEHE, HQ, has been delegated similar authority for IHS Headquarters.

All IHS Area Directors and Area program managers are responsible for compliance with all applicable environmental laws, regulations, and EOs. IHS Area Directors and program managers are held accountable for compliance with these laws and regulations. Those responsibilities are established in environmental laws and regulations and in IHS policy. Area Directors may further delegate authorities to program managers, such as Service Unit Directors and the OEHE Director, who have sufficient authority in their program areas to make the decision to execute projects or programs (i.e., authority to expend IHS funds).

A typical Area Office program could address environmental compliance with the following:

- Notification to Area program managers of their responsibilities for compliance with environmental regulations and delegations of authorities.
- Identification of a NEPA Coordinator for the Area to provide technical assistance to program, facility, and project managers and coordination with regulatory and other Federal agencies.
- Delegation of final approval authority to the Director, Area OEHE, for various environmentally related actions, including permit applications, monitoring reports, and FONSI or Record of Decision documents.
- Appropriate training for program managers and NEPA coordinators to ensure effective program implementation and compliance.

All Area NEPA coordinators should maintain current information on cultural and natural resources for their specific areas.

To assure compliance with NEPA and related environmental regulations, certain types of agency actions will routinely be reviewed. These actions primarily involve construction that may impact cultural or natural resources. All actions that result in construction require completion of the Environmental Review and Documentation Form.

In addition to construction-related actions, other program or project activities that normally are categorically excluded may require Environmental Assessments or Environmental Impact Statements. It is necessary for the Area Program Directors and managers to have general knowledge of NEPA requirements in order to identify such actions.

General Responsibilities of the Action Proponent (Program, Facility, or Project Manager)

- Identify the purpose and need of the proposed action
- Locate funding
- Consult with the appropriate Program Director at the initiation of the proposed action
- Review environmental documents for consistency and accuracy with respect to mission goals
- Ensure review and approval of all documents by the NEPA coordinator
- Execute the decision, ensuring that any mitigation and associated monitoring of significant environmental impacts occurs.

1.3 The National Environmental Policy Act

The National Environmental Policy Act (NEPA) of 1969 is the basic national charter for protection of the environment. It establishes the policy, sets goals, and provides the means to carry out that policy [40 CFR 1500.1]. NEPA mandates the integration of environmental considerations into the overall planning processes of Federal agencies. The NEPA process is an environmental planning tool that can provide an efficient method of protecting, restoring, and enhancing the environment while achieving the mission of the Indian Health Service (IHS).

NEPA is a planning process that requires that environmental concerns are considered in determining the final action. You must incorporate the NEPA process into program, facility or project planning and decision-making at the proposal stage. NEPA mandates the investigation of a reasonable range of alternatives for every project and an analysis of the environmental impacts of those alternatives before making a decision. The NEPA process conforms to the following sound planning principles:

- Systematic, interdisciplinary, and logical
- Analytic, not encyclopedic
- Includes information
- Precedes a decision
- Written supporting documentation
- Ensures the integration of all environmental review procedures required by law so that such procedures can run "concurrently rather than consecutively" (Council on Environmental Quality [CEQ] 40 CFR 1500.2 [c]).

NEPA is the single most commonly applied environmental law. It mandates that IHS consider and document the effects that its major actions will have on the environment. Nearly all actions proposed by IHS will require some aspect of the NEPA process to be applied.

When an action is proposed, the IHS program, facility, or project manager must answer the following question:

"Will the proposed action be a major Federal action significantly affecting the quality of the human environment?"

This question is central to the NEPA process.

Determining the likelihood of environmental consequences (those "affecting the quality of the human environment") and the level of their significance is at the heart of the NEPA process.

The NEPA analysis for a proposed IHS major action typically follows a well-defined review sequence consisting of the following steps (a visual presentation of this sequence is presented in Figure 1):

- A determination of any applicable IHS-specific categorical exclusions (this determination is usually performed via completion of the Environmental Information and Documentation Checklist.)
- Identification of any exceptional or extraordinary circumstances that may negate use of the categorical exclusion.
- If warranted, an Environmental Assessment (EA) and an associated Finding of No Significant Impact (FONSI) or Notice of Intent (NOI) for an EIS.
- If warranted, an Environmental Impact Statement (EIS) and Record of Decision (ROD).

Although for the purposes of explanation these steps are presented as a sequence, in practice they may be thought of as a continuum. In some cases, proposed actions will proceed directly to an Environmental Assessment; many other proposed actions will go no further than completion of the Checklist.

NEPA is not just a paperwork exercise. The process is an opportunity to become informed and take proactive action on a wide range of environmental issues that can affect (or be affected by) IHS actions. Unfortunately, undue focus and attention (especially by the courts) has

been placed on the documentation of agency compliance with NEPA. Many people mistakenly believe that *documents*—such as the EA or the EIS—are "NEPA" instead of the *process*. While certain NEPA documentation is required and is important, it is the environmental decision-making process that NEPA truly emphasizes. Effective environmental planning should adhere closely to and incorporate the NEPA process.

NEPA and IHS Policy

Everyone must comply with environmental laws—individuals, organizations, businesses, corporations, and Federal agencies.

As a Federal agency, the Indian Health Service must comply with the same environmental requirements as any of the entities listed above. In addition, Federal agencies, like the IHS, must comply with other laws that are directed at Federal agencies and with Executive Orders of the President of the United States. The National Environmental Policy Act and National Historic Preservation Act are two laws that apply only to Federal agencies, except where another law delegates that responsibility to other entities.

IHS NEPA policy is based on CEQ regulations, Department of Health and Human Services (HHS) policy, and Public Health Service (PHS) or HHS grants policy statements.. In general, IHS policy requires administering agency programs in a way that complies with these requirements and furthers the Federal government's objective of managing Federal programs in a manner which protects and enhances the human environment to the maximum extent feasible. This policy applies to all IHS programs, services, functions, activities, operations, and actions.

IHS personnel must be familiar with the requirements of all levels of environmental review, which includes the categorical exclusions (CATEX) and its exceptions, the Environmental Assessment (EA) and the Environmental Impact Statement (EIS), to ensure that projects requiring more analysis are adequately reviewed under NEPA.

1.4 Planning and NEPA Compliance Processes

Implementing the NEPA analysis process early in project or program planning is the recommended approach and will prevent unnecessary costs, delays, and impacts. Environmental analysis should begin when IHS begins planning to take an action to satisfy an objective, to fix a problem, or to address a need. Consideration of environmental concerns and constraints associated with a grant, contract, a particular site, approach, concept, or field operations early in the project planning process allows IHS to:

- Determine what procedures and documents are necessary.
- Investigate alternatives before too much effort has gone into planning.
- Change the program concepts or operational requirements to resolve potential environmental issues rather than compensate for them as an unexpected expense.
- Determine what other environmental statutory requirements apply.

NEPA analysis, when conducted early in the planning process is an effective planning tool, not a paperwork constraint. If performed correctly, this analysis will help IHS programs and projects to:

- Avoid costly modification or design to compensate for environmental constraints.
- Avoid or minimize environmental degradation.
- Avoid foreclosing reasonable alternatives.
- Avoid non-compliance with pertinent environmental laws.
- Minimize delays and costs due to environmental/public controversy.

The IHS developed the Environmental Information and Documentation Checklist to assist its programs in complying with environmental requirements. This Checklist is a reminder to each IHS Program person or employee that they must review the Checklist items to determine if permits are required,

consultations (informal or formal, but documented in writing) with other agencies must occur, and additional information or data must be obtained, before the IHS proceeds with the Program's proposed action.

The ultimate purpose of the IHS environmental review process is to determine if the proposed IHS action is a major Federal action that will have a significant impact on the environment. If it is a major Federal action that will have a significant impact on the environment, then the IHS is required to write an Environmental Impact Statement (EIS).

An EIS is a detailed document that discusses a Federal proposal from the planning stages through its envisioned completion. An EIS must include a statement of purpose and need, discuss alternatives considered and not considered, discuss various affected environments in detail, provide documentation and data to justify decisions affecting those environments, and all of the data, documents, and references used must be physically part of the final EIS unless the reference is generally available to the public. The average time to develop and write an EIS is 12 to 18 months, but it could be much longer, depending on the complexity or controversy. Federal agencies usually contract for the writing of an EIS at a cost of tens of thousands of dollars.

It is possible to have a proposed major Federal action that will not have a significant impact on the environment. That finding of no significant impact is determined by developing an Environmental Assessment (EA) for the proposed action. An EA is supposed to be a concise document that contains many of the same items as an EIS but in much less detail. Litigation over the years since NEPA was enacted has lengthened the EA, sometimes to the same size as some EISs. In the IHS, EAs are usually written by IHS staff; however, in more complex situations, the writing of the EA may be assigned to a contractor at a significant additional cost to the project (in 2006 dollars, a contracted EA could range from $20,000 to $40,000, depending on the proposed IHS Federal action contemplated).

Based on the IHS's past experience, certain actions will not significantly impact the environment, or certain proposed actions will not significantly impact the environment if the agency does certain activities prior to performing the proposed action. Under NEPA, these actions may be categorically excluded from the NEPA review process, meaning the IHS program does not need to develop an EA or EIS. However, the categorical exclusion only applies to one law, NEPA, and does not exempt the IHS program from any other environmental law. The IHS program must still comply with the requirements of those other laws, including the Clean Water Act, Endangered Species Act, National Historic Preservation Act, Safe Drinking Water Act, etc. (a comprehensive inventory of these laws and Executive Orders is provided in Appendix D).

The IHS construction activities that may be categorically excluded are specific types of construction that occur at IHS-owned and -leased facilities, specific types of construction that are funded by IHS at Tribally owned or leased and managed facilities, and the construction of sanitation facilities. The Checklist is used to assist IHS program, facilities, and project managers in determining if the categorical exclusion applies to their action. Figure 1 illustrates the environmental review process. Appendix B provides the Federal Register notice that details the IHS-specific categorical exclusions, as well as the exceptional and extraordinary circumstances that should be considered for every project.

Building on the basic outline for environmental planning and the results of the Checklist, the following steps comprise a more detailed approach to implementing the NEPA process for IHS programs, facilities and projects that require more analysis (the steps are listed in the box on Page 7).

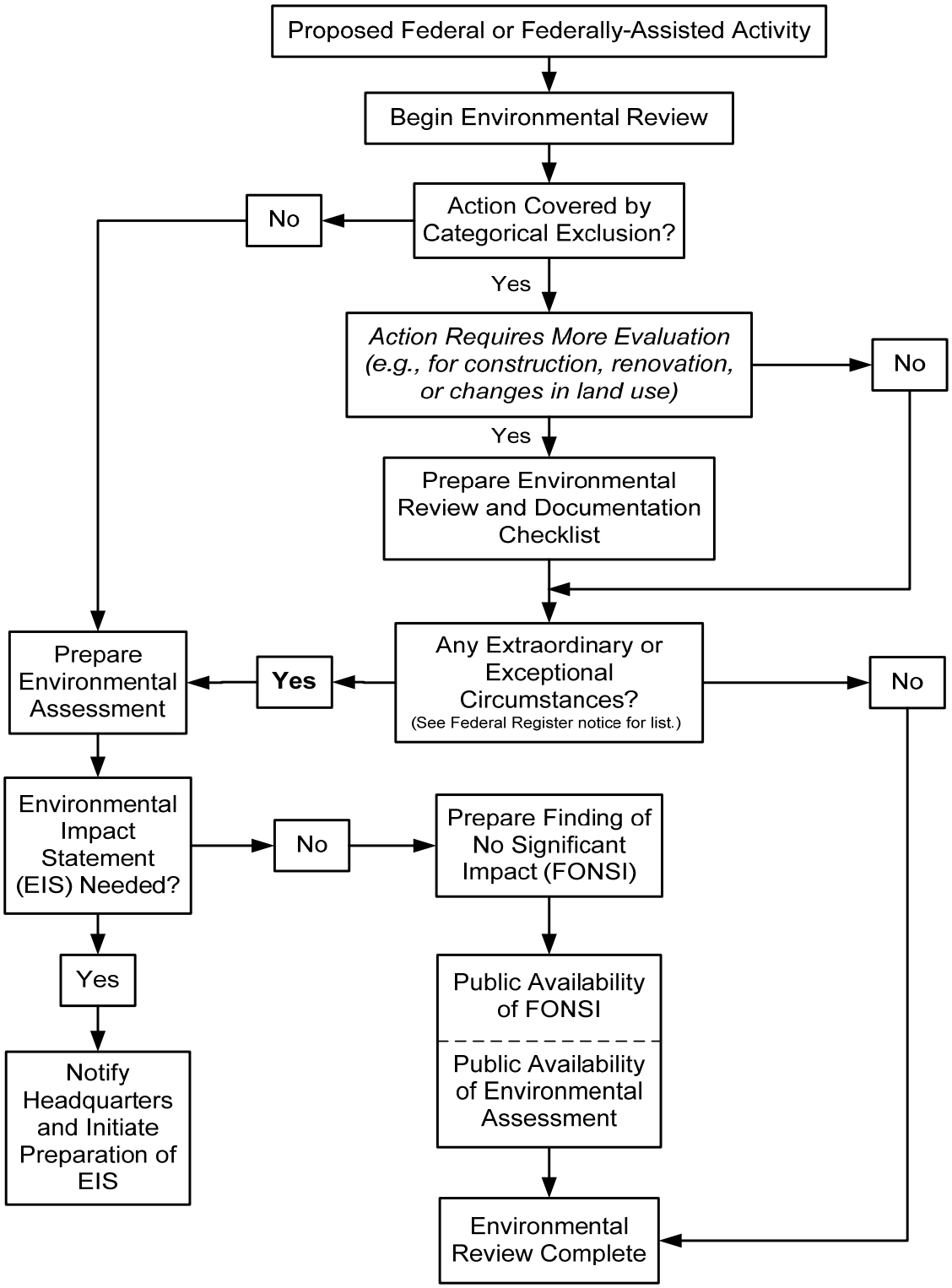

Figure 1. IHS Environmental Review Procedure.

1. Identify and develop purpose and need of the proposed action.
2. Consider all environmental effects to determine which level of NEPA documentation is required.
3. Prepare the proper documentation:
   a. Categorical Exclusion
   b. Environmental Assessment
   c. Environmental Impact Statement
4. Identify appropriate mitigation, as necessary.
5. Prepare the NEPA decision document.
6. Have the decision document signed.

Step #1. Identify and Develop Purpose and Need of the Proposed Action

Developing a clear statement of the purpose and need is critical to the entire process. An ill-defined purpose and need can induce delays (by not focusing the analysis), waste resources (by examining alternatives that do not solve the problem), and result in the development of inadequate solutions for fulfilling the need. The development of the purpose and need is the framework for the entire NEPA analysis and decision-making processes that follow

The "purpose and need" is a requirement for an EA or EIS. Proposals for IHS actions or assistance or request for proposals may include the information that could be used for a purpose and need analysis in the NEPA document. Other sources that can provide supporting data include Health Systems Planning documents, grant requests, preliminary engineering reports, studies, the SDS Priority List, and the Project Summary.

Need:

- Describe the underlying deficiencies or problems and its significance at the specific location
- Supporting data or information
- Specific relation to the IHS mission
- Discuss the timing of the need, including no action; e.g., why now?

Purpose:

- What is needed to remedy the need?
- What measures will be used to determine if the need is being remedied?
- How will you know you have successfully addressed the need?

Step #2. Consider All Environmental Effects to Determine Which Level of NEPA Documentation is Required

Early in the planning process (whether the activity is a grant, contract, maintenance and improvement, renovation, or construction), IHS personnel should begin the environmental review (an internal scoping process) to determine the range of potentially significant environmental effects raised by the proposed action.

This initial review should be an iterative process that relies upon the following informational resources:

- Professional experience with similar projects and/or similar environmental issues.
- Relevant experience and expertise of other IHS personnel throughout the Area, including the Area NEPA coordinators.
- Completed NEPA documentation (Environmental Impact Statements or Environmental Assessments only) for past projects with similar scopes and issues.
- Tribal, local, regional, state, or Federal regulatory agencies with jurisdiction over the project area.

Each of these sources (as well as others that may apply) should be consulted in this initial consideration period.

In addition, and according to the NEPA planning process, the IHS program, facility, or project managers should determine if the proposed action is a *major Federal action significantly affecting the quality of the human environment*.

As defined by GAM 30–00–30A, an "action" is a signed decision by a responsible Department official resulting in:

1. Approval, award, modification, cancellation, termination, use or commitment of Federal funds or property by means of a grant, contract, purchase, loan, guarantee, deed, lease, license or by any other means;
2. Approval, amendment or revocation of any official policy, procedures or regulations including the establishment or elimination of a Department program; or
3. Submission to Congress of proposed legislation which, if enacted, the Department would administer.

A Major Federal Action includes actions with effects that may be major and that are potentially subject to Federal control, responsibility, or funding. A Federal action is "major" if it has the potential for significant environmental impact. Judicial, administrative, civil, or criminal enforcement activities are not termed "actions."

Simply put, any action taken by IHS is considered a Federal action and some IHS actions are major Federal actions under NEPA.

What Does "Significantly" Mean?

Significance is a complex, subjective term as used in the NEPA process. CEQ regulations define significance in terms of the context of the action and the intensity of the impacts (CEQ 40 CFR §1508.27). Note that the word "significance" (regarding environmental impacts) has a legal definition, and therefore should not be used indiscriminately in a NEPA document.

Context requires analysis and evaluation of the effects from several aspects, such as society as a whole, the affected region, the affected interests, and the local situations. Both short- and long-term effects are relevant.

The intensity of environmental effects refers to the severity of an effect. When evaluating the intensity of an effect, the following factors should be considered (CEQ §1508.27(b)):

- Beneficial and adverse effects
- Degree to which public health or safety is affected
- Unique characteristics of the geological area
- Controversial nature of the action
- Uncertain effects, or unique or unknown facts
- Precedent-setting actions
- Cumulative effects
- Degree to which historic landmarks are affected
- Degree to which endangered or threatened species or their habitats may be affected
- Potential for violation of Federal, state, or local environmental laws

The significance or potential significance of the effects of a proposed action determines the need for an EIS. To evaluate the effects, each individual environmental resource must be systematically assessed.

While most IHS activities will not trigger an EIS, you must still evaluate the level of impact of the action on each resource. An action with significant effects on one or more environmental resources is considered to have significant effects for the purposes of NEPA analysis. Also, the sum of less-than-significant effects may result in significant cumulative effects for the entire proposed action.

The following is a general list of environmental parameters that may be evaluated in determining significance. These parameters are highly subjective and may often have no clear thresholds. This list is not complete, and local conditions or concerns may require additional parameters.

- water quality and quantity
- land use
- waste disposal
- historic properties
- noise
- vegetation
- hazardous materials
- aesthetics
- air quality
- recreational resources
- wildlife
- geology/soils

- socioeconomic characteristics
- environmental justice

In addition to effects on resources, you need to consider potential public controversy that may affect the decision to prepare an EIS. A proposed action that is likely to create public controversy over its effect on the human environment will probably require an EA or an EIS. Controversy is included by the CEQ as a factor in the intensity of an effect (CEQ §1508.27 (b)(4)).

What is meant by the "Human Environment"?

Human environment is defined comprehensively, in the CEQ regulations, to include the natural and physical environment. An action that has only economic or social effects will not necessarily require preparation of an EA. However, when the action has effects on the physical or natural environment and has interrelated social or economic effects, all of the effects must be treated in the NEPA analysis.

What does "effect" mean?

"Effects" are the probable consequences of a proposed project and its alternatives on environmental resources. Under NEPA, "effect" and "impact" are used interchangeably; however, "effect" is being used more often because it softens the negative connotation of an "impact."

What are "extraordinary or exceptional circumstances"?

All categorically excluded proposed actions must be reviewed to determine whether they trigger extraordinary or exceptional circumstances which would invalidate the categorical exclusion. Extraordinary or exceptional circumstances—defined under Section 30-50-30 of the HHS GAM 30, published in the Federal Register Notice (65 FR 10230)—are aspects of a project that are normally not encountered that have the potential of affecting the environment. Extraordinary circumstances are:

- Unique situations presented by specific proposals, such as scientific controversy about the environmental effects of the proposal;
- Uncertain effects or effects involving unique or unknown risks;
- Unresolved conflict concerning alternate uses of available resources within the meaning of Section 102(2)(E) of NEPA.

The extraordinary or exceptional circumstances that can preclude the use of the categorical exclusions are summarized below and presented in detail in Appendix B.

1) Those with the potential to change the existing environment where such change violates directives or other controls.
2) Those with the potential or real threat of violation, or continued violation, of an applicable Federal, state, or local law or requirement for environmental protection or public health and safety.
3) Those likely to cause controversy with respect to the types or extent of the resulting environmental effects where such controversy is based on pertinent and substantial issues.
4) Those involving the use of technology where the possible effects are highly uncertain or involve unique or unknown risks and where such technology has not been assessed previously for environmental impact.
5) Those which have adverse effects on unique geographic characteristics (e.g., historic, archeological, or cultural resources, park recreation or refuge lands, wilderness areas, wild and scenic rivers, sole or principal drinking water aquifers, prime farmlands, wetlands, floodplains, coastal management zones or ecological or critical areas including those listed on the Department of Interior's National Register of National Landmarks).
6) Those which establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.

7) Those which have adverse effects on properties listed or eligible for listing on the National Register of Historic Places.
8) Those which have adverse effects on species listed by the Federal Government as Endangered or Threatened Species, or which have adverse effects on any designated critical habitat for these species.
9) Those which require assessment in accordance with Executive Order 11988 (Floodplain Management), or Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act.
10) Thos which involve the use, transfer, or lease of real property which has been determined, after investigation in accordance with the provision of CERCLA 120(h), to have been used as a storage facility for hazardous waste for more than one year.
11) Construction projects which are significantly greater in scope or size than normally experienced for a particular category of action.

Step #3. Prepare the Proper Documentation

As discussed, any IHS activity (including approving a grant; purchasing a modular building, medical equipment, or chemicals; and construction activities) that may change or alter the environment will require an environmental review by the appropriate IHS Area program and Area NEPA Coordinator. These activities include changes or alterations to land, to buildings (renovations and maintenance and improvement), to the view, to the landscape, to air quality, and in noise levels.

There are three levels of environmental review and documentation that may be required:

Categorical Exclusion (CATEX) (§1508.4)

Most IHS activities that are major Federal actions do not significantly affect the quality of the human environment and may not require substantive NEPA documentation. However, you must still analyze and document why those activities qualify for a categorical exclusion. This analysis and documentation is performed by, at a minimum, completing the Environmental Information and Documentation Checklist (Appendix A). The categorical exclusions available for IHS actions are provided in Appendix B.

IHS program, facility, and project managers must be familiar with these provisions in order to identify actions that may require an EA or EIS. In addition, IHS requires documentation of an environmental review for each construction and renovation project to identify any exceptional or extraordinary circumstances and to ensure compliance with all environmental laws, regulations, and Executive Orders.

More detailed information on categorical exclusions is presented in Section 2.0 (Part I) of this manual.

Environmental Assessment (EA) (§1508.9)

EAs are written when environmental effects are uncertain or when the proposed project does not fit into the IHS or HHS categorical exclusions. Most EAs completed by IHS will be for construction-type activities; however, IHS has prepared EAs for non-construction grant awards because they were used for other than their original grant activities and they had potential environmental effects**.**

Actions that may require an EA include (GAM 30-50-30):

- Major recommendations or reports made to Congress on proposals for legislation in instances where the Department or OPDIV/STAFFDIV has primary responsibility for the subject matter involved.
- Actions involving extraordinary or exceptional circumstances.
- Actions involving cumulative impacts. An EA will be required if the action is connected to another action that may require an environmental impact statement or when reviewed with other proposed actions that may have cumulative significant impacts.

The purpose of the EA is to determine if an EIS is needed or to satisfy a specific environmental requirement; for example, the IHS requires an EA for proposals for a new solid waste landfill or a new wastewater plant that may discharge to local waters. The result of an EA is a written decision on whether to prepare an EIS, and the determination is either documented in a Finding of No Significant Impact (FONSI) or a notice of intent (NOI) to do an EIS.

A FONSI is a determination that an EIS is not required because there will be no significant impacts, and that the project or program may proceed. This determination should be made by a responsible decision-maker who has not participated extensively in project or program development; however, the official should have an understanding of the type of project or program being considered and the potential environmental effects of such projects or programs. In all IHS areas, that decision-making authority was delegated to the Area Director.

More detailed information on environmental assessments is presented in Section 3.0 (Part I) of this manual.

Environmental Impact Statement (EIS) (§1502)

EISs are written when significant environmental impacts are likely to occur. The EA determines the significance of environmental impacts and the need for an EIS. Any actions which appear to require an EIS should be discussed with the NEPA coordinator at IHS headquarters. Preparation of EISs will be coordinated by the IHS Area NEPA coordinator. If an EIS is required for an IHS action, the affected programs can expect the process to take a minimum of 12 months and probably longer (see Figure 2).

More detailed information on environmental impact statements is presented in Section 4.0 (Part I) of this manual.

Step #4. Identify Appropriate Mitigation, as Necessary

In environmental documentation, mitigation strategies must be developed and analyzed "even for effects that by themselves would not be considered significant." IHS personnel should identify all "relevant, reasonable mitigation measures that could improve the project," even if they fall outside the jurisdiction of the agency. The analysis should include both the effectiveness of mitigation measures and the effects if the project were to proceed without mitigation. It is important to be clear as to whether mitigation is integral to the project and included as part of the alternative, or dependent on factors such as funding or permission from another agency.

CEQ regulations define five mitigation elements as:

- Avoiding the effect altogether by not taking a certain action or parts of an action.
- Minimizing effects by limiting the degree or magnitude of the action and its implementation.
- Rectifying the effect by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the effect over time by preservation and maintenance operations during the life of the action.
- Compensating for the effect by replacing or providing substitute resources or environments.

Avoiding an impact is usually easier and cheaper than having to compensate for an impact, and the other elements logically follow if avoidance is not possible (USACE). Examples of the types of mitigation include:

- **Avoid:** Preserve a public access point; redesign project around critical habitat or an archeological site.
- **Minimize:** Use less riprap and more vegetation for channel side slope protection.
- **Rectify:** Recontour and revegetate disturbed areas; restore flow to former wetlands.
- **Reduce:** Control erosion; place restrictions on movements of construction

and maintenance personnel and equipment.

- **Compensate:** Develop a greenbelt habitat using dredged material.

Step #5. Prepare the NEPA Decision Document

Decision documents record the reasons for selecting a particular alternative. They are part of the record for deciding whether any significant effects would result from alternatives analyzed. In the IHS environmental review process, decision documents for major Federal actions are:

- For a CATEX —A completed Environmental Information and Documentation Checklist signed by the appropriate IHS officials. The appropriate CATEX categories should be identified on this Checklist.
- For an EA — A Finding of No Significant Impact (FONSI) must be prepared after completion of the EA and incorporation of public comment, and signed by the responsible IHS official, usually the Area Director.
- For an EIS — A Record of Decision (ROD) must be prepared after completion of the EIS and incorporation of public comment, and signed by the responsible IHS official, the Area Director.

Finding of No Significant Impact (FONSI)

If the EA analyses show no significant impacts, then a FONSI must be completed in order to conclude the EA process. This document is based on the EA and comments of agencies and the public. The FONSI states which alternative has been selected, very briefly describes other alternatives considered in the EA, and discusses how criteria were used and how they were weighed in the selection process. The FONSI is separate from the EA and should stand alone.

In cases in which a mitigated EA has been prepared, the impact has been reduced to below a significance threshold through the use of mitigation. The environmentally preferable alternative as indicated in the EA must also be identified. If it is not the selected alternative, reasons for non-selection must be clearly stated. In a FONSI, the reasons must be described for rejecting all alternatives except the one ultimately selected.

Mitigated FONSI

When the EA analysis includes mitigation that is built into the preferred alternative to reduce impacts to the point where they are no longer significant, a mitigated FONSI is prepared. It is important to document the fact that the NEPA process is concluding with a mitigated FONSI.

If mitigation is integral to an alternative, it should be clearly stated in the EA, and adopting that alternative in the FONSI makes the mitigation binding. Any mitigation that is dependent on funding or other factors must be specifically adopted and stated as such in the FONSI. Consider attaching a matrix or table to the FONSI itemizing mitigations, critical milestones, and responsible parties.

The mitigation measures must be implemented to avoid a future requirement to prepare an EIS.

Record of Decision (ROD)

When an EIS has been prepared, the ROD documents the preferred alternative, mitigation measures, and the decision rationale.

Besides stating the decision, CEQ requires that a ROD include the following:

- Summary description of all alternatives analyzed in the EIS.
- Identification of the environmentally preferable alternative.
- The decision rationale or criteria (e.g., cost, degree of environmental impact, technical considerations, degree to which objectives were met, logistics) that were used in selecting an alternative, alternatives compared to criteria, and criteria weighting.
- Clear statement of which mitigation measures will be implemented and a summary of any monitoring or other

enforcement plans. The description of mitigation and monitoring should be specific enough to enable the public to determine whether measures have been effectively implemented, but not be so specific as to duplicate the EIS.

- Statement of whether all practical means to avoid or minimize environmental harm from the selected alternative have been adopted, and if not, why not.

An average ROD should be approximately 10 pages. It should give enough information on the alternatives and their impacts, the decision-maker's rationale in selecting the chosen alternative, and the extent of mitigation and monitoring the public can expect, so that the reader can understand these major issues without referring to the EIS.

Step #6. Have the Decision Document Signed

The FONSI or ROD is signed by the IHS Area Director or designee after all consultation and associated findings are completed.

If the preferred alternative would be located in or adversely affect a floodplain or wetland, a wetland or floodplain assessment must be included in the EA or EIS. If the final preferred alternative still results in adverse impact to a floodplain or a wetland but results in a FONSI, a final finding of the wetland or floodplain assessment must be attached to the FONSI. The notice of finding is also attached to the ROD.

Information gathered as part of the Section 106 (NHPA) or Section 7 (ESA) consultation should be included in the EA/EIS document. The FONSI/ROD must include a statement about consultation under Section 106 and Section 7.

Public Notification

CEQ NEPA regulations require public notification of the FONSI/ROD or mitigated FONSI/ROD, and the level of public notification should be appropriate for the scope of the proposal. For example, a proposal for a local project affecting only local constituents may only require the notification of regional Federal agency offices and local environmental offices and the local community. However, a FONSI/ROD on a proposed action of national concern would require notification of all appropriate headquarters offices of Federal agencies, state points of contact, and any interested or affected local constituents.

For most IHS actions, a notice should be published in a local newspaper for one day or posted at appropriate locations in the community. This notice should include a project description, a statement that an environmental assessment has been completed, and a statement that the assessment is available for review. The FONSI should be available for 30 days if the action is controversial or impact analysis is close to an EIS (GAM 30).

In the case of a mitigated FONSI, submit the EA and draft FONSI for a minimum of 30 days of public comment and review before implementing the action.

With regard to public comments received during this period, it is not necessary (nor required) to comment on comment letters. However, written public comments should be included in an appendix of the final document.

The ROD or a summary must be published in the Federal Register as well as in the local newspaper of record. Coordinate the publication of the ROD with IHS headquarters.

1.5 EA/EIS Preparation Options

The IHS program, facility, or project manager, in consultation with the Area NEPA Coordinator, has the choice of whether to rely on internal staff or contractors to develop the Environmental Assessment or Environmental Impact Statements (the Environmental Information and Documentation Checklist can typically be completed without the assistance of a contractor). It is worth noting that using a contractor to prepare either of these documents does not reduce or eliminate the agency’s responsibility throughout the process.

Appropriate IHS staff should participate in public meetings, review and concur with draft documents, arrange for local distribution of the documents, and prepare the FONSI/ROD. In addition, if data collection is contracted, the

contractor will need to rely on IHS project staff to provide existing data sources and to help gain access to and interpret the data. Project staff need to be informed of in-progress reviews and other meetings to ensure quality control.

Preparing an EA or EIS necessitates a significant workload on the responsible IHS project office, even if most of the preparation is contracted.

EA/EIS Preparation Options

Option 1: Preparation by Available Technical In-House Staff: The document is prepared at the earliest possible stage of project planning using only in-house staff that have the training and expertise to adequately address technical NEPA issues. The staff may perform the data gathering, analysis, and write the document, while the program, facility, or project manager takes on all the organizational tasks such as manuscript preparation and meeting logistics.

An objective team leader must be appointed to resolve differences of opinion and to elicit a response from participants as needed.

Option 2: Partial or Complete Preparation by Contractor: If resource constraints preclude in-house preparation, a portion, or all, of the work may be contracted. In this case, the IHS program, facility, or project manager is responsible for:

- Developing a concise scope of work or guidance document for the contractor;
- Developing contractor selection criteria;
- Managing the procured delivery order or purchase request;
- Supplying the contractor with IHS data;
- Overseeing the content of the final EA/EIS.

Throughout the preparation of the EA/EIS, the program, facility, or project manager should actively collaborate with the contractor to ensure:

- An accurate representation of IHS policy and operations;
- A correct assessment of the environmental conditions and alternatives;
- A timely, cost-effective exchange of information and document revision.

Selecting a Contractor

If Option 2 is preferred, the IHS program, facility, or project manager must carefully develop the selection criteria for the contractor, including the following:

- Technical expertise in the NEPA process, documentation, permitting, etc.;
- Proven experience in NEPA documentation (i.e., well-established and reputable firm with long experience in preparing NEPA documents, consulting, compliance training, etc.);
- Staff expertise to address relevant resource issues and mitigation strategies;
- Familiarity with Tribes and Indian Lands;
- Established contracting mechanisms in place for Federal work (e.g., GSA Federal Supply Schedule).

Other Considerations Regarding Environmental Documents

Since IHS performs the environmental review of activities in which it is the responsible Federal agency, the cost of the environmental review is not carried as a line item in the activity's budget. These costs can include required studies (e.g., threatened and endangered species surveys, cultural resources surveys, etc.), environmental permits, mitigation costs, and costs for consultants to prepare the environmental documents. Such costs should be included in program and project cost estimates.

Additionally, regulatory or consultation agencies have internal review times for environmental documents or permits that are mandated by law, regulation or guidance. **Sufficient time should be incorporated into the project schedule to address these requirements**.

1.6 Legal Considerations

A tabular summary of current Federal environmental laws and Executive Orders that directly relate to NEPA compliance is presented in Appendix D. The IHS project and program

manager (as well as additional individuals with delegated authority) should be familiar with these laws and Orders in order to fully comply with environmental issues that are identified during the environmental review process.

1.7 Training Requirements

Training on environmental compliance responsibilities is essential to ensure appropriate implementation of IHS environmental policy. The level and type of training required varies from the detailed knowledge required by the Area NEPA Coordinator to the general knowledge required by Area Program Directors and Managers to identify projects which require compliance with environmental laws.

The Area Director and Area OEHE Director should encourage an annual environmental briefing for Area Office, Division, and Program managers. The Area NEPA Coordinator should attend training on NEPA, NHPA, and related environmental requirements on a biannual basis to keep the Coordinator up to date on new regulations and requirements.

At a minimum, periodic training should be scheduled for program, facility, and project managers and a training plan should be developed for the Area NEPA Coordinator to ensure that IHS actions are the result of informed decisions. Environmental compliance responsibilities should routinely be covered in orientation programs for new employees, especially program, facility, and project managers and their staff that review proposals with activities that could affect the environment, including individuals directly involved in grant awards, construction, operation, and maintenance and improvement activities.

This completes the overview of the NEPA process. Sections 2, 3, and 4 provide additional discussion of the different levels of environmental review and documentation--categorical exclusion, environmental assessment, and environmental impact statement.

2.0 The Categorical Exclusion

Categorical Exclusions (CATEXs) are classes of actions that "do not individually or cumulatively have a significant effect on the human environment . . ." under normal circumstances. CEQ encourages agencies to use the CATEX process where appropriate to reduce paperwork and conserve resources.

CATEXs are not exemptions from the NEPA process; they are the minimum level of analysis required under NEPA for actions that have been determined by IHS not to have the potential for significant effects. ***Please note that if an action falls into the category of CATEX, it does not exempt you from compliance with other environmental laws and regulations such as the Endangered Species Act, the National Historic Preservation Act, or the Clean Water Act***.

In order to categorically exclude the proposed action, it must fit into one or more of the CATEX categories listed in Appendix B. Determining whether one of these categories applies usually requires the level of analysis provided in the Environmental Review and Documentation Checklist. The only IHS construction activities categorically excluded are specific types of construction that occur at IHS-owned and -leased facilities, specific types of construction that are funded by IHS at Tribally owned or leased and managed facilities, and the construction of sanitation facilities.

All IHS programs may use the Checklist to review their own activities. Other IHS funded activities, like grant awardees, may use it as a reference for the requirements that they may need to consider if they must submit environmental documents to the awarding IHS program.

The Categorical Exclusion Process

(1) Before you decide your proposed action may qualify for a specific categorical exclusion, you should consider:

- Purpose and need for the proposed action;
- Background and history of the proposed action;
- Description of proposed action;
- Description of existing environment;
- Determinations of other environmental documents, if any;
- Potential environmental consequences;
- Site sketches, digital photos, location maps, etc.

(2) The next step in analysis is to determine if any exceptional or extraordinary circumstances are present that would make a CATEX determination inappropriate (the specific circumstances are detailed in Section K of the IHS NEPA Federal Register Notice provided in Appendix B). Some actions that would normally be categorically excluded could require additional environmental review and, for this reason, responsible personnel should be alert for circumstances that dictate the need to prepare an EA or EIS.

(3) Once the appropriate documentation required for the specific categorical exclusion is completed, the NEPA process is completed. However, if the proposed action:

- Does not fit into an IHS or HHS categorical exclusion;
- Has, or might have, exceptional or extraordinary circumstances; or
- Has, or might have, individual or cumulative significant environmental effects;

then a more detailed level of environmental evaluation (i.e., an EA or EIS) is required. If there is any uncertainty regarding the potential for significant effects from the proposed action, you may proceed directly to an EA.

While public participation is not specifically required for a CATEX in the regulations, some outside input on issues, especially from environmental agencies, may be necessary to determine if significant issues exist that could render use of a CATEX inappropriate.

It is important to note that even after a CATEX is determined to apply to the proposed action, IHS must still comply with all other applicable

laws and regulations; e.g., permits are required if storm water is discharged or wetlands are impacted. The research and completion of environmental permitting for the proposed action should be considered a parallel, rather than a substitute, requirement for the proposed action. IHS personnel should ensure compliance with all applicable environmental laws and regulations before project implementation.

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3.0 The Environmental Assessment (EA)

An Environmental Assessment (EA) is a concise public document that serves to provide sufficient evidence and analysis for determining whether to prepare an EIS or a FONSI. The primary purpose of an EA is to determine if a proposed action might have significant impacts. An EA is needed for:

- Any program, project or action for which IHS is not sure if there might be significant impacts requiring preparation of an EIS; or
- Any action that the responsible IHS program, facility, or project manager determines may need additional analysis or may elicit community involvement.

CEQ regulations require brief discussions of the need for the proposed action (e.g., grant or project), of alternatives as required by NEPA, of environmental effects of the proposed action and alternatives, and a listing of agencies and persons consulted. The EA document, supported by the necessary appendices and technical data, is to be concise for meaningful review and decision.

Preparation of an EA should follow the same evaluation process as for an EIS, including focusing on the issues pertinent to the decisions to be made, and be of sufficient length to address those issues. For IHS direct implementation, the program, facility, or project manager shall complete the Environmental Information and Documentation Checklist as a starting point for issues that may be of concern. In addition, the design and preparation of the EA should be coordinated with the Area NEPA Coordinator.

The decision to write an EA may be made "at any time in order to assist agency planning and decision making." This would apply when:

- Conflicts exist about alternative uses of natural resources;
- No CATEX applies;
- A normally categorically excluded action may have exceptional or extraordinary circumstances.

Public Involvement in an EA

IHS should involve environmental agencies, applicants, and the public, to the extent practicable, in preparing EAs. The goals of public participation are to:

- Reach better decisions;
- Inform the public of activities, plans, and decisions;
- Encourage public understanding;
- Be aware of and responsive to public values;
- Understand the public's needs and concerns; and
- Broaden the information base.

CEQ regulations require public input during the EA process when it is feasible for the agency to do so; however, no formal responses to public comments are required. However, the EA should reflect the fact that comments were considered in the preparation of the document. It is also recommended that any comments and responses be included in an appendix of the EA.

No formal time frames are established by CEQ for public input during the EA process. However, public involvement must occur before the decision is made.

Scoping, or requesting early input before the analysis formally begins, is good NEPA practice and will make for a sound process and document. While public scoping is encouraged where an interested or affected public exists, issuing offices are only required to involve appropriate Federal, state, and local agencies and any affected Indian tribe. The method of scoping is left to the discretion of the program, facility, or project manager.

For a limited number of actions, the FONSI and its related EA will be made available for public review for 30 days before a final determination is made whether to prepare an EIS and before the action may begin. This procedure will be followed when the proposed action is, or is

closely similar to, one that normally requires an EIS or when the proposed action is one without precedent (CEQ §1501.4(e)) [HHS GAM 30–50–50]

Contents of an EA

Although CEQ does not require a particular format for EAs, the format similar to that of an EIS may facilitate the writing of the EIS if that is the determination of the EA. An example EA format is presented in Appendix C.

Unless the EA is more than 50 pages, a summary, an abstract, and a table of contents are not needed. Presented below is a suggested format for an EA.

Cover Sheet

The cover sheet should include the name, title, and address of the decision-maker. The cover sheet should also list the program or project title, lead and cooperating agencies, type of document, and the agency point-of-contact (POC). The cover sheet should never exceed one page.

Summary (Optional)

If the EA is longer than 50 pages, a 1- to 2-page, stand-alone summary of important issues and major findings may be appropriate.

Table of Contents (Optional)

If an EA is longer than 50 pages, include a table of contents. There are no CEQ regulations regarding the Table of Contents, but readers will benefit from use of a hierarchical numbering system throughout the document.

Purpose of and Need for Action

This section should discuss *who* wants to do *what* and *where, when,* and *why* they want to do it. Summarize the need for the proposed action and list the objectives (purposes).

This chapter should identify laws, regulations, or other EISs or EAs that influence the scope of this EA. In addition, identify any other lead or cooperating agencies involved in the process and summarize the decisions to be made.

Major relevant issues should be profiled in this chapter, along with a brief summary of any scoping/public involvement process. Discuss general scoping information and the issues that were dismissed and issues that were kept for analysis and led to effect topics.

Alternatives Including the Proposed Action

This section discusses how the need for the proposed action will be addressed by the various alternatives. Provide a description of the proposed action, the no action alternative, and a range of reasonable alternatives that meet objectives as laid out in the purpose and need and that reduces or eliminates effects to important environmental resources. If IHS has a preferred alternative at the time an EA is released for public review, it should be identified.

Normally, an EA should fully analyze a range of reasonable alternatives. However, if scoping and preliminary analyses show that no reasonable alternatives exist and that the proposal does not have the potential for significant impacts, the EA may instead include a discussion of alternatives considered but rejected. Each discussion should include the reasons why the alternative was dismissed from further analysis. In this case, the EA would analyze only the no action alternative and the proposed action.

To facilitate review, this section should include comparative summaries of effects, features of alternatives, and a discussion of the degree to which each alternative accomplishes the purpose or fulfills the need identified in the purpose and need section. If a cost-benefit or other economic report has been completed, and relative costs and benefits of alternatives will be used in making decisions between alternatives in the EA, relevant information should be summarized in the EA or the cost-benefit analysis should be attached as an appendix.

This section should also identify the environmentally preferable alternative, which is selected as the alternative that best promotes the policies set forth in Section 101 of the NEPA statute.

Affected Environment

A description of the affected environment is not required for an EA. However, a discussion of the existing conditions must then be incorporated into the discussion of environmental consequences. This allows for all current and future conditions of a single resource to be discussed together and provides for a consistent format between EAs and EISs.

In NEPA, "affected" environment means resources expected to experience environmental effects. Collecting data for resources that are not likely to be affected is a useless exercise. Adequately describing the affected environment usually requires knowledge about the extent of effects, and the description may be refined as effect analysis on a particular proposal proceeds.

Where applicable and available, collecting precise and adequate data on the present status (location, nature, condition, scope, size, etc.) of affected resources is critical in determining effects, and must be available before useful NEPA analysis can begin. A geographic information system (GIS) or other mapping system can form the basis for excellent environmental characterization and analysis. Quality data help in making quality decisions. The resources listed in the General Outline for an EA (Appendix C) provide an example of resources to consider.

Once alternatives and issues have been defined, determine the affected environment. The analysis boundary may be different for each resource. Sometimes boundaries can be delineated; for instance, the effects on vegetation may be confined to the right-of-way or easement for a proposed pipeline. The effect on water quality may be the entire length of the river where treated wastewater is discharged. If another upstream source discharges to the same river, this section of river may also be part of the analysis area for water quality.

Sometimes the analysis boundary for a resource will change with different alternatives. For example, analyzing three or four different locations for a pipeline means analyzing effects to vegetation in those locations.

Environmental Consequences

Like an EIS, the analysis in an EA must discuss direct, indirect, and cumulative impacts:

- *Direct Impacts* occur at the same time and place.
- *Indirect Impacts* occur later in time or farther away, but are still reasonably foreseeable.
- *Cumulative Impacts* are those that result from the incremental impact of the action when added to other past, present, and other reasonable foreseeable future actions, regardless of what agency or individual undertakes those other actions.

In addition to types of effect, the EA should include discussions of their significance for each alternative, and any proposed mitigation, especially if the mitigation sustains a finding of no significant effect. If the potential for significant impact exists, an EIS is the more appropriate NEPA document. Mitigation should be included as part of the NEPA process.

Significance is a relative term, so the context, duration, and intensity of effects must be evaluated and compared to effects of ongoing activities.

However, legal challenges on EAs have been won on the basis that the EA depended on inappropriate mitigation to reduce effects to below a "significance" threshold. In other words, it is not wise to use an EA when an EIS is clearly required.

At the end of the EA, a brief "conclusions" section should summarize all major findings, including whether impairment of resources is likely to occur.

For relatively simple EAs, shorter than 30-40 pages, many readers find the environmental consequences section more readable if it is organized by alternative, with resource topics as subheadings. For EAs longer than this, the section may be followed more easily if it is organized by resource topic, with alternatives as subheadings. Either is acceptable. The General

Outline for an EA in Appendix C shows the latter of these approaches.

List of Preparers

Include a list of individuals that helped prepare the EA, along with their qualifications, agency affiliation, and area of responsibility (GAM 30-50-40B8).

List of Agencies and Persons Consulted

List those agencies, organizations, and persons that were contacted for information and that assisted in identifying important issues, developing alternatives, or analyzing effects in the EA/EIS process. This should not be confused with the list of preparers. This list includes agencies and persons outside IHS. For both an EA and EIS, maintain a list of all people who contribute any information to the project or who inquire about the project.

Bibliography and Glossary

A bibliography and a glossary of terms and acronyms should be part of an EA.

Appendix

The appendix should be circulated with the EA or be readily available upon request. Information included must meet the following criteria:

- It was prepared in connection with the EA (and not incorporated by reference only).
- It substantiates any analysis fundamental to the EA.
- It is analytic and relevant to the decision to be made.

Publishing an EA

Public notification of a FONSI is required in a local media outlet, such as a local newspaper. Posting of a notice at appropriate locations in the community is acceptable, where local newspapers are not available. The notice should include a description of the project, state that an environmental assessment has been completed, and indicate the availability of the assessment for review (GAM 30-50-50).

4.0 The Environmental Impact Statement (EIS)

An EIS is written if a proposed major Federal action will have a significant impact on the human environment. The IHS uses the EA process to determine the significance of a project or program and the need for an EIS. Any actions which appear to require an EIS should be discussed with the NEPA coordinator at IHS headquarters. ***Preparation of EISs will be coordinated by the IHS Area NEPA coordinator***.

If there is the potential for significant impacts and an EIS is required, there are a few more steps to take in addition to the steps for an EA. Because of the extra steps and the more detailed environmental analyses, an EIS can take two or three times as long to complete as an EA (from 18 months to 3 years). A sample timeline comparing the EA and EIS processes is presented on the following page.

Public Involvement in an EIS

One of the fundamental differences between an EA and EIS is the public involvement and notification component of the process.

Notice of Intent

CEQ specifies that a Notice of Intent (NOI) to prepare an EIS must be placed in the Federal Register. The notice must:

- Describe the proposed action and alternatives developed to date.
- Describe the intended scoping process and tell when and where any scoping meetings might be held.
- Give the name and address of a contact.

Scoping

Scoping is an early and open process to determine the scope of environmental issues and alternatives to be addressed in an EIS. Both internal scoping with appropriate staff and external scoping with the interested and affected public should be conducted.

Scoping helps to:

- Determine important issues;
- Eliminate issues that are not important or relevant;
- Identify relationships to other planning efforts or documents;
- Define a time schedule of document preparation and decision-making;
- Refine purpose and need, agency objectives and constraints, and the range of alternatives; and
- Identify potential American Indian and Alaska Native issues and the likelihood of Tribal and state agency formal interests in the proposed actions.

Any interested or jurisdictional Federal, state, local, or Tribal agencies or units of government must be contacted to obtain early input. If it would be advantageous, those entities may be invited to be cooperating agencies. If an agency has jurisdiction by law, be sure that the contact information is carefully documented, preferably, in writing.

The public plays an integral role in scoping, and public scoping is required for any EIS.

Project proponents should use public scoping sessions as well as other means to gather early input on EISs. Newsletters, ads in local or national media, or open houses are also means of gathering early public input.

Draft EIS Notice of Availability/Filing with EPA

Draft EISs will be available for public review for a minimum of 45 calendar days (GAM 30-50-70D) from the day the EPA's Notice of Availability (NOA) is published in the Federal Register. CEQ also requires that draft (and final) EISs are filed with EPA.

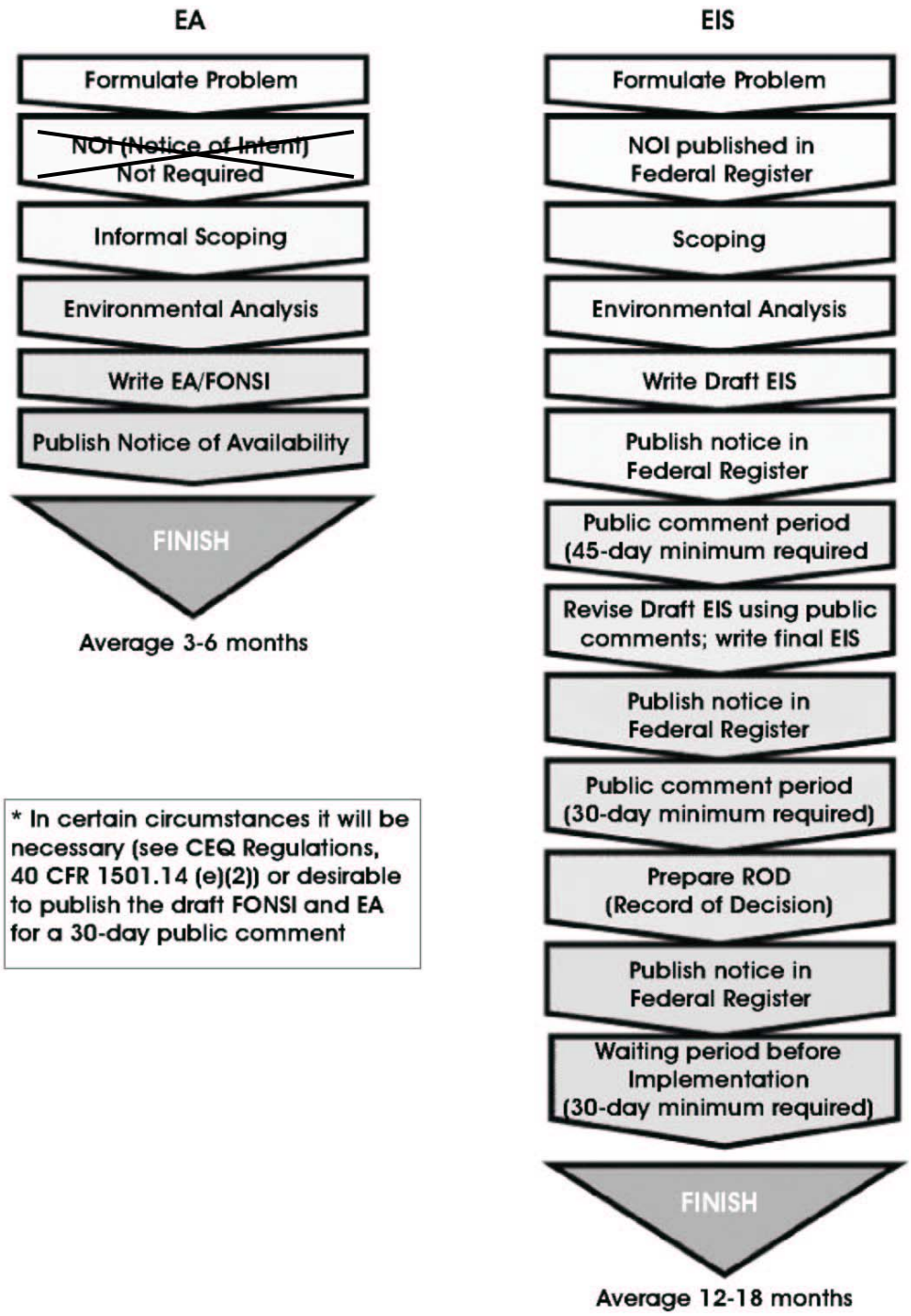

Figure 2 – Comparing EA and EIS Timelines

After the draft or final EIS is filed, EPA publishes a NOA in the Federal Register to inform the public that a draft or final EIS is ready for public review. The publication of the NOA serves as the beginning of the 60-day public review period on the draft EIS or the 30-day waiting period before the record of decision is signed on the final EIS.

The draft or final EIS must be transmitted to all appropriate agencies, must be available to the general public, and copies of the EIS must be filed with the EPA.

Public Meetings

Meetings should take place no sooner than 30 days from the time EPA's NOA is published. CEQ regulations require a public input session if:

- Substantial environmental controversy over the proposed action or substantial interest in holding the session exists.
- Another agency with jurisdiction over the action has requested a session and has provided reasons for its request.

The format may be a "workshop," "meeting," "hearing," or other option, but attendees must be allowed to express reasonable substantive concerns with the draft EIS. Attendees should be reminded that the purpose of the session is to collect input on the ***adequacy*** of the EIS and not to express preferences for or against the proposal. Advertise the meeting by a reliable method such as a purchased ad, direct mail, electronic mail, notices posted in local gathering spots or with communities or other organizations. Press releases are not considered as reliable or effective as written ads.

Affected Environment

CEQ requires that NEPA documents "succinctly describe the environment of the area(s) to be affected or created by alternatives under consideration." Describe only those resources that may experience or cause impact or be affected if the proposal or alternatives are implemented. If specific resources would not be affected or effects would be negligible, list them as "issues and resources considered, but eliminated from detailed study." Data and analyses in this section should be part of the record, commensurate with the intensity, context, and duration of the impact.

An EIS is to be ***analytic*** rather than ***encyclopedic***. As part of the EIS, append, summarize, or incorporate by reference all background material, highly technical material, and less important descriptive information. Summarize the relevant information in the NEPA document. Make the resource itself "reasonably available for inspection" on the draft EIS.

Materials that should be incorporated by reference include other NEPA documents, lists of common plants and animals, historic resource studies, detailed air and water quality data and standards, separate scientific studies, compilations of demographic and socioeconomic data, and published works.

Considerations when writing an EIS include, but are not limited to:

- Possible conflicts between the proposed action and land use plans, policies, or controls for the area concerned;
- Energy requirements and conservation potential;
- Natural or depletable resource requirements and conservation potential;
- Urban quality, historic and cultural resources, and design of the built environment;
- Socially or economically disadvantaged populations;
- Wetlands and floodplains;
- Prime and unique agricultural lands;
- Endangered or threatened plants and animals and their habitats;
- Important scientific, archaeological, and other cultural resources;
- Ecologically critical areas, Wild and Scenic Rivers, or other unique natural resources;

- Public health and safety;
- Sacred sites; and
- Tribal concerns.

If these are irrelevant issues in the EIS, include them in the discussion of issues and resources considered, but eliminated from detailed study.

Environmental Consequences

The prediction of impacts of each alternative is the next section of an EIS. This section is usually more detailed and addresses more resources than the same chapter in a typical EA.

This discussion of environmental consequences must be accurate and focused. This discussion should include a presentation of the issue(s) introduced by the proposed action and the specific effects of these issues (the "effects analysis"). The effects analysis predicts the magnitude of that relationship. For example:

Issue	Effect Analysis (magnitude)
Constructing a road would shift or disturb the soils and make the adjacent stream muddy	Suspended solids in the river would increase from its present 10-15 ppm to 1,000 ppm for 4-6 weeks during construction

CEQ requires that the effect analysis:

- Be concise, clear, and to the point;
- Emphasize real environmental issues;
- Provide reasonable alternatives to the proposed action that minimize adverse effects;
- Be of high quality, using accurate scientific analyses;
- Be scrutinized by other agencies and the public; and
- Include a discussion of effects (direct and indirect, both adverse and beneficial; cumulative; unavoidable; short-term uses vs. long-term productivity; irreversible and irretrievable commitments of resources).

The measurement of effect must be accurate, scientifically credible, and understandable to the lay reader. This is why it is helpful to include a section on impact indicators preceding the impact analysis for each topic. That section can lay out the criteria or thresholds used to quantify and interpret effects in terms of their ***context***, ***duration***, and ***intensity***.

For instance, in the example above the effect is quantified as:

Suspended solids in the river would increase from its present 10-15 ppm to 1,000 ppm for 4-6 weeks during construction.

This is adequate for intensity and duration. However, the reader needs a context to understand the relative importance of the effect. You can compare the effect to a relevant standard, such as the state's water quality standards for suspended solids. The threshold would be defined as:

Any increases in suspended solids that violate the state's water quality standard for this parameter would be considered a 'major' effect.

Then state:

The increase in suspended solids from 10-15 ppm to 1,000 ppm is well below the state's water quality standard for this river (3,000 ppm).

Then interpret this for a lay audience. The conclusion might be:

Because the impact would last only 4-6 weeks and be well below the standard, it would be a minor, short-term adverse effect to water quality.

Defining thresholds and effect indicators may require consultation with resource experts, literature searches, and best professional judgment.

Notice that criteria were cited (state standards) in the determination of the intensity (in this case, minor) of the effect. Criteria, or thresholds, help to establish understanding for the severity and magnitude of the impact. If the analysis simply stated that the suspended solids would increase from 10-15 ppm to 1,000 ppm for 4-6 weeks, the

public and the decision-maker would be unable to fully understand the extent of the effect.

Short-term Use/Long-term Productivity: Along with cumulative effects, evaluate the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity. Include this as a separate section in the EIS. In other words, are any long-term management possibilities or resource productivity being traded for the immediate use of the land? Will taking action in combination with other actions have an impact on a particular ecosystem? Is it a sustainable action that can continue over the long term without environmental problems?

Irreversible or Irretrievable Commitments of Resources: This section of the chapter describes any permanent commitments of resources that would be involved if the alternative were implemented. Irreversible effects are those which are permanent. An effect to a resource is irreversible if the resource cannot be reclaimed, restored, or otherwise returned to its condition prior to disturbance. An irretrievable commitment of resources is the effect to resources that, once gone, cannot be replaced. It is important to not worry about the semantics of these terms and instead be thorough in the disclosure to the public of any long-term, permanent effects to resources.

Adverse Effects that Cannot Be Avoided: If the action will result in effects that cannot be fully mitigated or avoided, state them in this section. The focus is on “real” issues that would involve major effects if action were taken.

5.0 Where to Go for Help

CEQ Guidance

ceq.eh.doe.gov/nepa/regs/guidance.html

EPA NEPA Overview

www.epa.gov/compliance/about/nepa.html

FHWA Environmental Guidance

www.fhwa.dot.gov/environment/index.htm

NRCS NEPA Overview

policy.nrcs.usda.gov/scripts/lpsiis.dll/H/H_190_610_A_10.htm

USACE Engineering Manual 1110-2-1205, Engineering and Design – Environmental Engineering for Flood Control Channels www.usace.army.mil/publications/eng-manuals/em1110-2-1205/toc.htm

6.0 Definitions and Acronyms

The controlling definitions for terms under CEQ's NEPA regulations are contained in 40 CFR 1508 (noted in parentheses). Some of these definitions are provided as a supplement to those regulatory definitions.

Categorical exclusion (CATEX) (40 CFR 1508.4) — Actions which do not individually or cumulatively have a significant effect on the human environment and which are described in one of the categorical exclusion lists in Appendix A, and for which, no exceptional circumstances exist, and therefore, neither an environmental assessment nor an environmental impact statement is required.

Environmental planning and impact assessment — Within IHS, this process is synonymous with the NEPA process.

Cooperating agency (1508.5) — A Federal agency other than the one preparing the NEPA document (lead agency) that has jurisdiction over the proposal by virtue of law or special expertise and that has been invited to be a cooperating agency by the lead agency. State or local governments, and/or Indian tribes, may be designated cooperating agencies as appropriate (see 1508.5 and 1502.6).

Cumulative actions (1508.25) — Actions that, when viewed with other actions in the past, the present, or the reasonably foreseeable future, regardless of who has undertaken or will undertake them, have an additive effect on the resource the proposal would affect.

Cumulative effect (1508.7) — The effects of cumulative actions.

Direct effect (1508.8) — An effect that occurs as a result of the proposal or alternative in the same place and at the same time as the action.

Environmental Assessment (EA) (1508.9) — A brief NEPA document that is prepared to (a) help determine whether the impact of a proposal or alternatives could be significant; (b) aid IHS in compliance with NEPA by evaluating a proposal that will have no significant impacts, but that may have measurable adverse impacts; or (c) evaluate a proposal that either is not described on the list of categorically excluded actions, or is on the list but exceptional circumstances apply.

Environmental Impact Statement (EIS) (1508.11) — A detailed NEPA document that is prepared when a proposal or alternatives have the potential for significant impact on the human environment.

Environmentally preferred alternative (1505.2) — Of the alternatives analyzed, the one that would best promote the policies in NEPA Section 101. This is usually selected by the interdisciplinary team members. It is presented in the NEPA document (draft and final EIS or EA) for public review and comment.

Exceptional circumstances — Circumstances that, if they apply to a project described in the IHS categorical exclusion lists, mean a CATEX is inappropriate and an EA or an EIS must be prepared because the action may have measurable or significant impacts.

Finding of No Significant Impact (FONSI) (1508.13) — A determination based on an EA and other factors in the public planning record for a proposal that, if implemented, would have

no significant impact on the human environment.

Historic Properties — As defined at 36 CFR 800.16(l) as ". . . any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria."

Human environment (1508.14) — Defined by CEQ as the natural and physical environment, and the relationship of people with that environment (1508.14).

Impact topics — Specific natural, cultural, or socioeconomic resources that would be affected by the proposed action or alternatives (including no action). The magnitude, duration, and timing of the effect to each of these resources is evaluated in the impact section of an EA or an EIS.

Indirect effect (1508.8) — Reasonably foreseeable impacts that occur removed in time or space from the proposed action. These are “downstream” impacts, future impacts, or the impacts of reasonably expected connected actions (e.g., growth of an area after a new water system is complete).

Issues — Issues are environmental, social, and economic effects that may occur if the proposed action or alternatives (including no action) are implemented or continue to be implemented.

Lead agency (1508.16) — The agency either preparing or taking primary responsibility for preparing the NEPA document.

Major Federal action (1508.18) — Actions that have a large Federal presence and that have the potential for significant impacts to the human environment. They include adopting policy, implementing rules or regulations; adopting plans, programs, or projects; ongoing activities; issuing permits; or financing projects completed by another entity.

Mitigated EA — An EA that has been written to incorporate mitigation into a proposal or to change a proposal to reduce impacts to below significance.

Mitigation (1508.20) — Avoiding, minimizing, rectifying, reducing or eliminating, or compensating for the effects on the environment by the proposed action.

Notices of availability — Separate notices submitted to the Federal Register that the draft EIS and the final EIS are ready for distribution.

Notice of intent (1508.22) — The notice submitted to the Federal Register that an EIS will be prepared. It describes the proposed action and alternatives, identifies a contact person in IHS, and gives time, place, and descriptive details of the agency's proposed scoping process.

Preferred alternative (1502.14 (e)) — The alternative an IHS decision-maker has identified as preferred at the draft EIS stage or in the EA. Identification of the preferred alternative helps the public focus its comments during review of the NEPA document.

Proposal (1508.23) — The stage at which IHS has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal. The goal can be a project, plan, policy, program, and so forth. NEPA begins when the effects can be meaningfully evaluated.

Record of Decision (ROD) (1505.2) — The decision document for an EIS. It includes a statement of the decision made, a detailed discussion of decision rationale, and the reasons for not adopting all mitigation measures analyzed, if applicable.

Scoping (1508.25) — Internal IHS decision-making on issues, alternatives, mitigation measures, the analysis boundary, appropriate level of documentation, lead and cooperating agency roles, available references and guidance, defining purpose and need, and so forth. External scoping is the early involvement of the interested and affected public, especially in an EIS process.

Tiering (1508.28) — The use of broader, programmatic NEPA documents to discuss and analyze cumulative regional impacts and define policy direction, and the incorporation by reference of this material in subsequent narrower NEPA documents to avoid duplication and focus on issues “ripe for decision” in each case. Tiering can occur to either an EA or an EIS.

Acronyms

CATEX: Categorical exclusion

CEQ: President's Council on Environmental Quality

EA: Environmental Assessment

EIS: Environmental Impact Statement

EO: Executive Order

EPA: Environmental Protection Agency

ESA: Endangered Species Act

FONSI: Finding of No Significant Impact

HHS: Health and Human Services

IDT: Interdisciplinary team

NEPA: National Environmental Policy Act

NHPA: National Historic Preservation Act

NMFS: National Marine Fisheries Service

NOA: Notice of Availability

NOI: Notice of Intent

ROD: Record of Decision

SOF Statement of Findings

Appendix A:

IHS Environmental Information and Documentation Checklist

Users Guide to the Checklist

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Indian Health Service

ENVIRONMENTAL INFORMATION AND DOCUMENTATION

Tribe:	Reservation:
Project, Program, Grant Description & Location:	

Action includes purchasing, construction, alteration, renovation, or leasing activities, new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by the Indian Health Service.

Note: A "Yes" or "No" response is required for every question. Answer each item completely with adequate supporting information to justify your response. **Depending upon the context and intensity, any consideration listed below can result in an Environmental Assessment.**

Consideration	**Will the proposed action/activity affect the Consideration?** Provide supporting information for your responses and explain any mitigations to be implemented.
1. Will the proposed action result in a known violation or continuance of a violation of applicable (Federal, Tribal, State or local) laws or requirements for protection of environment or public health and safety?	**Yes or No**
2. Will the proposed action result in a conflict with existing or proposed Federal, Tribal, state, and local land use plans?	**Yes or No**
3. Is there a controversy with respect to environmental effects of the proposed action based on reasonable and substantial issues?	**Yes or No**
4. Is the proposed action significantly greater in scope than normal for the area or does it have significant unusual characteristics?	**Yes or No**
5. Does the proposed action establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	**Yes or No**
6. Does the proposed action have significant adverse direct or indirect effects on park land, other public lands, or areas of recognized scenic or recreational value? (For example, consider how your activity will affect the view?)	**Yes or No**

Tribe:	Reservation:
Project, Program, Grant Description & Location:	

Action includes purchasing, construction, alteration, renovation, or leasing activities, new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by the Indian Health Service.

Consideration	**Will the proposed action/activity affect the Consideration?** Provide supporting information for your responses and explain any mitigations to be implemented.
7. Does the proposed action include construction of a new municipal solid waste landfill at a new solid waste disposal site?	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed.
8. Will the proposed action create a need for additional capacity at solid waste disposal facilities?	**Yes or No**
9. Does the proposed action include construction of a new wastewater treatment facility that will discharge treated sewage effluent to the waters of the U.S.?	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed.
10. Will the proposed action create a need for additional capacity at wastewater treatment facilities?	**Yes or No**
11. Will the proposed action create a need for additional capacity in the drinking water supply?	**Yes or No**
12. Are there other considerations about the proposed action that could adversely affect the environment and/or public health and safety?	**Yes or No**
13. Will the proposed action create a need for additional capacity in health care facilities and for health care services?	**Yes or No**

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Project, Program, Grant Description & Location:	

Action includes purchasing, construction, alteration, renovation, or leasing activities, new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by the Indian Health Service.

Consideration	**Will the proposed action/activity affect the Consideration?** Provide supporting information for your responses and explain any mitigations to be implemented.
14. Will the proposed action create a need for additional energy supply or generation?	**Yes or No**
15. Will the proposed action create a need for additional capacity in educational facilities?	**Yes or No**
16. Will the proposed action create a need for additional capacity in transportation systems?	**Yes or No**
17. Historic Preservation: a. Does the proposed action involve the purchase, construction, alteration, renovation, or lease of real property or portion of real property that is more that 50 years old?	**Yes or No**
b. Will the proposed action adversely affect properties listed, or eligible for listing, on the National Register of Historic Places? [Buildings, archaeological sites, National Historic Landmarks; objects of significance to a Tribe including graves, funerary objects, and traditional cultural properties. For assistance, consult with the State Historic Preservation Officer (SHPO) or the Tribal Historic Preservation Officer (THPO)])	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed.

Tribe:	Reservation:
Project, Program, Grant Description & Location:	

Action includes purchasing, construction, alteration, renovation, or leasing activities, new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by the Indian Health Service.

Consideration	**Will the proposed action/activity affect the Consideration?** Provide supporting information for your responses and explain any mitigations to be implemented.
18. Endangered Species Act: Is the proposed action likely to adversely affect a plant or animal species listed on the Federal or applicable state list of endangered or threatened species or a specific critical habitat of an endangered or threatened species? (Consult with Fish & Wildlife Service or NOAA Fisheries Service. Discovering an endangered or threatened species in the project area will stop the project, and the Endangered Species Act has significant fines and penalties for violations.)	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed.
19. Will the proposed action require major sedimentation and erosion control measures? (Consider earth disturbing activities including construction or expansion of a parking lot.)	**Yes or No**
20. Will the proposed action violate a storm water permit or a wastewater discharge permit either for construction or on-going operations? (Earth disturbing activities may require a Notice of Intent (NOI) to be covered under a storm water general permit or individual permit from the EPA or other agency and a storm water control plan, including some parking lot construction activities. A discharge of wastewater to the environment may require a permit from Tribal, local or state authorities, or EPA.)	**Yes or No**
21. Safe Drinking Water Act: Will the proposed action impact an EPA designated sole source aquifer? (Designation of sole source aquifer puts restrictions and conditions on Federal expenditures, projects, and grants.)	**Yes or No**

Tribe:	Reservation:
Project, Program, Grant Description & Location:	

Action includes purchasing, construction, alteration, renovation, or leasing activities, new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by the Indian Health Service.

Consideration	**Will the proposed action/activity affect the Consideration?** Provide supporting information for your responses and explain any mitigations to be implemented.
22. Wetlands and Water Resources (lakes, rivers, ponds, streams, etc.): Will the proposed action violate a Section 404 (Clean Water Act) permit for actions in a wetland and/or Section 10 (Rivers and Harbors Act) permit for actions in a stream or river? (Activities in or near a wetland or river may require a permit from the U.S. Army Corps of Engineers or U.S. Coast Guard. Includes: construction in or near any wet or dry waterway, stream crossings, intake structures, outfalls, etc.)	**Yes or No**
23. Floodplains: a. Is the proposed action located in either a 100-year or, for critical actions, a 500-year floodplain? (If Flood Insurance Rate Maps do not exist for the project site, a floodplain survey or consultation may be required. Also may need to consider if the facility will require flood insurance).	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed (unless a class action review status can be established for the proposed action; document the class action determination).
b. Will the proposed action adversely impact flood flows in a floodplain or support development in a floodplain?	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed.
24. Existing site: Would the proposed action, involving the purchase, construction or lease of **new** facilities (including portable facilities and trailers), substantially increase the capacity of an **existing** health care facility?	**Yes or No** If the answer is **Yes**, then an Environmental Assessment is needed.
25. New site: Does the proposed action involve purchase, construction, or lease of **new** facilities (including portable facilities and trailers) where such action is for buildings equal to or more than 12,000 square feet (1080 square meters) of useable space when more than 5 acres (2 hectares) of surface land area are involved at a **new site**?	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed.

Tribe:	Reservation:
Project, Program, Grant Description & Location:	

Action includes purchasing, construction, alteration, renovation, or leasing activities, new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by the Indian Health Service.

Consideration	**Will the proposed action/activity affect the Consideration?** Provide supporting information for your responses and explain any mitigations to be implemented.
26. New site: Does the proposed action involve purchase, construction, or lease of health care facilities (other than buildings) for projects equal to or more than 5 acres (2 hectares) of surface land area at a **new site**?	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed.
27. Does the proposed action involve the sale or transfer of real property, on which any hazardous substance was stored for one year or more, known to have been released, or disposed of? (Provide relevant documentation for any hazardous substance releases. See 40 CFR 373.2(b), 302.4, and 261.30 for reportable quantities.)	**Yes or No**
28. Does the proposed action involve the sale or transfer of real property, on which underground or above ground storage tanks are located?	**Yes or No**
29. Will the proposed action violate Tribal, local, state, or Federal law on the use and storage of hazardous substances or the transportation, storage, and disposal of hazardous wastes or medical wastes? (Activities that may generate reportable quantities include air conditioning repair and service, pesticide application, motor pools, automobile repair, welding, landscaping, agricultural activities, print shops, hospitals, clinics, medical centers, etc. Repair, renovation, or demolition activities can generate waste that has asbestos-containing materials, asbestos, lead-based paint, PCBs, CFCs, etc.)	**Yes or No**
30. Will the proposed action adversely affect community air pollution for a long period of time? (Consider if your activity must conform to an applicable air quality implementation plan.)	**Yes or No**

Tribe:	Reservation:
Project, Program, Grant Description & Location:	

Action includes purchasing, construction, alteration, renovation, or leasing activities, new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by the Indian Health Service.

Consideration	**Will the proposed action/activity affect the Consideration?** Provide supporting information for your responses and explain any mitigations to be implemented.
31. If the proposed action is implemented, will it have a disproportionately high and adverse human health or environmental impact on the Tribe, low-income populations, or minority populations?	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed
32. Will the proposed action adversely affect community noise levels?	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed
33. Wilderness Act: Will the proposed action adversely impact a Wilderness Area? (Wilderness Areas are specifically designated areas of land.)	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed
34. Farmland Protection Policy Act: Will the proposed action convert significant agricultural lands to non-agricultural uses and exceed 160-point score on the farmland impact rating?	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed
35. Coastal Zone Management Act: Will the proposed action directly affect a Coastal Zone in a manner inconsistent with the State Coastal Zone Management Plan? (All Federal programs or projects in the coastal zone must comply with the consistency provisions of the Act. Each coastal state should have a state office to manage its coastal zone development and use.)	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed

Tribe:	Reservation:
Project, Program, Grant Description & Location:	

Action includes purchasing, construction, alteration, renovation, or leasing activities, new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by the Indian Health Service.

Consideration	**Will the proposed action/activity affect the Consideration?** Provide supporting information for your responses and explain any mitigations to be implemented.
36. Wild and Scenic Rivers Act: Will the proposed action adversely affect a wild, scenic, or recreational river area or create conditions inconsistent with the character of the river? (A consideration for activities that are in or near any wild and scenic waterway including construction of stream/river crossings, intake structures, outfalls, etc.)	**Yes or No** If the answer is Yes, then an Environmental Assessment is needed

Based on the available record, the IHS has made the following determination on the proposed activity/action/undertaking. The record was examined to identify potential extraordinary or exceptional circumstances which would require further environmental review. (State if an Environmental Impact Statement or Environmental Assessment is needed, or which Categorical Exclusion applies to this activity/action/undertaking).

Tribe:	Reservation:
Project, Program, Grant Description & Location:	

I certify that to the best of my knowledge and ability the information presented herein is true and correct (enter appropriate information in the shaded blanks):

(1)		
Signature (Grantee or responsible, knowledgeable person who completed this document)	Title or Position (e.g., as appropriate, Tribal chair, utility director, diabetes coordinator, project/facility engineer, etc., or Federal official or officer, etc.)	Date
(2)		
Signature Service Unit Director/District Engineer	Title or Position (Service Unit Director, District Engineer)	Date
(3)		
Signature IHS Area Program Coordinator/Manager	Title or Position (e.g., as appropriate, IHS diabetes coordinator, facility manager/director, DSFC Director, etc.)	Date
(4)	AREA NEPA COORDINATOR	
Signature Area NEPA Coordinator		Date
(5)	ASSOCIATE DIRECTOR, AREA OEHE	
Signature, Associate Director, Area OEHE		Date
(6)	DIRECTOR, ENGINEERING SERVICES	
Signature, Director, ES (as appropriate)		Date

*Signatories may vary at the IHS Area. At minimum, signatures (1) through (4) are required, and signature (5) is required for all non-OEHE actions or activities

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Instructions for the
Environmental Information and Documentation Checklist

Welcome to the IHS Environmental Review Information and Documentation Checklist (hereinafter referred to as the "Environmental Checklist" or "Checklist"). This Checklist has been developed to assist the IHS program, facility, or project manager (e.g., engineer, environmental health officer, and other responsible officials) in complying with the requirements of the National Environmental Policy Act (NEPA). In addition, this Checklist (and the accompanying Environmental Review Manual) also provides information on other Federal environmental laws, regulations, Executive Orders, and related requirements.

When to Use and Complete the Environmental Checklist

The Environmental Checklist is typically completed by an IHS program, facility, or project manager as the first level of documented analysis of whether the proposed project that includes construction, renovation, or changes in land use (construction) will require the additional analysis of an Environmental Assessment (EA) or will meet the requirements to be categorically excluded. To determine if an IHS action (or undertaking) may be categorically excluded, the action must be compared with the list of extraordinary or exceptional circumstances that could disallow the use of the categorical exclusions. The categorical exclusions and exceptions are listed in the Federal Register notice published January 6, 1993 (58 FR 569), which is provided in Appendix B of the IHS Environmental Review Manual (2007 version).

Categorical exclusions (CATEXs) are classes of actions that "do not individually or cumulatively have a significant effect on the human environment…" under normal circumstances. As discussed in Part I, Section 2.0 of the Manual, it is important to remember that the only specific types of construction activities that are eligible for IHS categorical exclusion. As stated in Appendix B, those include specific types of construction that occur at IHS owned and leased facilities, specific types of construction that are funded by IHS at tribally owned or leased and managed facilities, and the construction of sanitation facilities. If your proposed construction project is determined to fulfill the CATEX requirements by the Area NEPA Coordinator and the responsible Federal official, the completed Environmental Checklist will serve as the documentation for this decision.

Because the Checklist serves as the first level of review, it is required for any proposed IHS activity that involves construction, renovation, or changes in land use. However, it is also critical to remember that the term "environmental review" may often mean much more than completing and submitting the Checklist for your project. For example, if wetlands or storm water issues are associated with the project, permits may be required from state and federal regulatory agencies before your project can proceed. Consequently, the Checklist should be viewed as an initial "global view" of your project's potential environmental impacts and requirements, rather than an automatic completion of the process.

Due to the time that may be required to research various resource issues, it is well-advised to begin your review and completion of the Checklist early in the proposed project cycle. At the same time, however, it is important to complete this Checklist only when the project scope and proposed location have been well-defined, since many of the questions refer to the specific location of the proposed action.

With regard to the issue of proposed projects involving scattered sites, the Checklist should be completed for the general area of these sites, rather than a specific location (completing the Checklist questions for the general area may actually assist you in proactively identifying resource issues that could be avoided by project re-design or relocation).

You do not need to hire a professional to complete the Checklist. The questions on the Checklist can be answered by someone who is familiar with the proposed scope of the activity and the resource issues associated with the area of the project. For additional information and guidance, you should also consult with the IHS program that will be providing the funding, as in the case of a sanitation facilities construction project.

Structure of the Checklist

The Checklist consists of 36 questions, each of which requires either a "Yes" or a "No answer. These questions can be very broad (e.g., does the action have "significant unusual characteristics?") or very specific (e.g., Endangered Species Act). In addition to a "Yes" or "No" answer, each of these questions will also require 1) supporting information to substantiate your response and 2) explanations of any mitigation actions that you are proposing to eliminate or reduce adverse effects of your project. Where appropriate, specific guidance for a question is provided with the question (guidance has also been provided for each question in the accompanying Cross Reference/Information Resources Table.

For a number of these questions, answering "Yes" indicates that an Environmental Assessment is required for the project (e.g., a new wastewater treatment plant or solid waste disposal facility). For other questions, a "Yes" answer indicates that further research and consultation with your Area NEPA coordinator are recommended to determine the nature of the potential impact(s) covered by that specific question.

Following the set of environmental review questions is where the IHS determination is recorded with regard to 1) whether any further environmental review is required or 2) whether a specific categorical exclusion may apply to the proposed action(s). This determination will be made by the responsible IHS official. If this activity will be done under a Title V construction project agreement, the environmental responsibility rests with the Tribe. Following this determination page is the certification page, which will be signed by the responsible IHS official with authority for the Environmental Review Process.

Documenting Your Information Resources and Responses

As you will discover, answering many of the Checklist questions will require consultation with one or more information resources (e.g., Tribal Planning, U.S. Fish and Wildlife Service, U.S. EPA). It is critical that these consultations are documented and provided as supplemental information to the completed Checklist. Types of information that could be used are outlined below.

PRINTED MATERIALS: Useful documents include land use plans, zoning maps, city master plans, environmental baseline surveys, environmental assessments, environmental impact statements and studies. Information from these resources must be current and must represent accepted methodologies; i.e., not so old that changing conditions make them irrelevant. Citations for the material should include enough information so that an outside reviewer can locate the specific reference; e.g., author, document title, publication date, and page number.
Examples include:

- The Record of Decision;
- Finding of Suitability to Transfer, Finding of Suitability to Lease, GSA Property Suitability Determination Form;
- Federal Property Information Checklist;
- Environmental Baseline Surveys;
- Preliminary Assessment Reports;
- Environmental Assessments;
- Draft or final Environmental Impact Statements; and
- Tribal or City/County master plan or zoning map.

Possible sources of these documents include as appropriate, the Tribe, BIA, IHS, HUD, the property owner, military base environmental office, local governmental organizations, local public library, and Tribal/City/County planning offices.

PERSONAL CONTACT: Personal contacts are useful when the individual contacted is an accepted authority on the subject(s), and the interview is documented. Supporting documentation should include the name, organization, title of the person contacted, phone number, and the date of the conversation. Examples include EPA officials, EPA hotlines, officials from Tribal, state or local planning offices and environmental offices, or an environmental officer of an agency.

SITE VISIT: A site visit does not usually involve any testing or measurements. A site visit is an important method for initial screening of the issues, but for some of the categories it may be inadequate for final evaluation. Supporting documentation should include date of the site visit, by whom, and the supporting observation; photographs may also assist in evaluating the activity/action/undertaking.

Updating the Checklist

Since conditions can change after project initiation or grant award, the Checklist should be reviewed at selected milestones to insure the original determination is still applicable. If not, then a new or supplemental Checklist should be completed and a determination made based on that new document or on the original document and the additional supplemental information.

The Environmental Checklist Approval Process

As indicated above, the Checklist approval process involves submitting the completed Checklist to your Area NEPA Coordinator for review, discussion and comment. Once the Area NEPA Coordinator is satisfied with the accuracy and completeness of your submittal, the appropriate officials in your Area Office or at Headquarters will conduct a final review and certification of this form (see Page 9 of the Checklist).

Use of the IHS Environmental Review Manual as a Resource

The 2007 revision of the IHS Environmental Review Manual contains a significant amount of detailed information that has been designed, in part, to assist you in accurately and successfully completing the Checklist. The Manual consists of two Parts: Part I is the Environmental Review Guidance and is designed to provide a comprehensive overview of the IHS environmental review process. This discussion includes an overview, responsibilities and requirements, a review of

NEPA, and a review of the categorical exclusion, the environmental assessment, and the environmental impact statement.

Part II contains reference sections specifically focused on a regulated area. Each of these sections is self-contained and highly-detailed overviews that will assist you in determining your compliance needs specific to that area. These sections include:

- Historic Properties
- Threatened and Endangered Species
- Water Resources
- Floodplains
- Real Property
- Air Quality
- Petroleum
- Solid Waste Disposal
- Hazardous Substances
- Environmental Justice
- Socioeconomics
- Noise
- Visual Resources
- Wilderness Areas
- Significant Farmland and Soils
- Coastal Resources
- Wild and Scenic Rivers

These sections have been developed, in part, to assist you in completing the Environmental Checklist questions. They have also been developed to assist you in identifying and achieving compliance with the regulatory requirements associated with these resource areas.

Information Resources Table

As an additional supplement to assist you in the completion of the Checklist, the following Information Resources Table has been developed for your use. This table provides the following information:

- A cross reference for each Checklist question to the appropriate Environmental Review Manual sections;
- Suggested information resources; and
- Where appropriate, the regulatory citation for the categorical exclusion or extraordinary or exceptional circumstance that applies to the particular issue (to be used for the categorical exclusion determination on Page 8 of the Checklist).

Information Resources Table for the IHS Environmental Review Checklist

Checklist Question	Topic	Review Manual Reference Section(s)	Suggested Information Resources	Refer to Categorical Exclusion(s) (I) or (J) OR Extraordinary or Exceptional Circumstance (K)*
1	Violation of Environmental Protection or Public Health and Safety Regulations	Section 1.0 (Part I)	• Applicable Federal Agencies • Tribal Agencies	K3
2	Conflict with Existing or Proposed Land Use Plans	Section 1.0 (Part I)	• Tribal Planning • Tribal EPA	
3	Controversy with Respect to Environmental Effects Based on Reasonable and Substantial Issues	Section 1.4 (Part I)	• Tribal Council • Tribal Administration • Public meetings	K3
4	Action Greater in Scope than Normal or with Significant Unusual Characteristics	Section 1.4 (Part I)	• Project Scope • Project Summary Document	K11
5	Precedent or Decision in Principle About Future Actions with Potentially Significant Environmental Effects	Section 1.4 (Part I)	• Tribal Departments	K6
6	Adverse Effects on Park Land, Other Public Land, or Areas of Recognized Scenic or Recreational Value	Sections 13, 14	• Tribal and Resource Agencies	K5
7	Construction of a New Municipal Solid Waste Landfill	Section 8.0	• Project Documents	J1
8	Creating a Need for Additional Capacity at Existing Solid Waste Disposal Facilities	Section 8.0	• Tribal Solid Waste Department. • U.S. EPA	J2

* - Indicates the letter of the related item as listed in the Federal Register 58 (6 January 1993): 569-572.

Environmental Checklist Cross-Reference/Information Resources Table, cont'd

Checklist Question	Topic	Review Manual Reference Section(s)	Suggested Information Resources	Applicable Categorical Exclusion(s) OR Extraordinary or Exceptional Circumstance
9	Construction of a New Wastewater Treatment Facility	Section 3.0	• Tribal Planning • Tribal Utility	J2
10	Creating a Need for Additional Capacity at Existing Wastewater Treatment Facilities	Section 3.0	• Tribal Planning • Tribal Utility	
11	Creating a Need for Additional Capacity in the Drinking Water Supply	Section 3.0	• Tribal Planning • Tribal Utility	
12	Other Considerations That Could Adversely Affect the Environment and/or Public Health and Safety	Section 1.0 (Part I) Section 11	• Tribal Health Department • Applicable Federal Agencies	K1
13	Creating a Need for Additional Capacity in Health Care Facilities and for Health Care Services	Section 11	• Tribal Health Department • Tribal Clinic • IHS Health Facilities and Planning • Contact IHS for IHS owned or leased facilities	
14	Creating a Need for Additional Energy Supply or Generation	Section 11	• Tribal Utility • Local Electrical Utility	
15	Creating a Need for Additional Capacity in Educational Facilities	Section 11	• Tribal Planning • Tribal /BIA Education • County School District	
16	Creating a Need for Additional Capacity in Transportation	Section 11	• Tribal Planning • State DOT	

Environmental Checklist Cross-Reference/Information Resources Table, cont'd

Checklist Question	Topic	Review Manual Reference Section(s)	Suggested Information Resources	Applicable Categorical Exclusion(s) OR Extraordinary or Exceptional Circumstance
17a	Historic Preservation – Real Property More than 50 Years Old	Section 1.0	• Tribal Planning or Cultural Resources • State Historic Preservation Office • National Register of Historic Places	K5
17b	Historic Preservation – Properties Listed or Eligible for Listing on the National Register of Historic Places	Section 1.0	• Tribal Planning or Cultural Resources • State Historic Preservation Office • National Register of Historic Places	K7
18	Endangered Species Act	Section 2.0	• Tribal Fish and Game • U.S. Fish and Wildlife Service • NOAA Fisheries Service • State Fish and Game	K8
19	Sedimentation and Erosion Control Measures	Section 3.0	• Tribal Planning • U.S. EPA • U.S. Army Corps of Engineers	
20	Storm Water and NPDES Permitting	Section 3.0	• Tribal Utility • Tribal EPA and Planning • U.S. EPA	
21	Safe Drinking Water Act – Impact on an EPA Designated Sole Source Aquifer	Section 3.0	• Tribal Utility • Tribal Planning • U.S. EPA	K5
22	Wetlands and Water Resources	Section 3.0	• Tribal Planning • U.S. Fish and Wildlife Service • U.S. Army Corps of Engineers • FEMA	K9

Environmental Checklist Cross-Reference/Information Resources Table, cont'd

Checklist Question	Topic	Review Manual Reference Section(s)	Suggested Information Resources	Applicable Categorical Exclusion(s) OR Extraordinary or Exceptional Circumstance
23a, b	Floodplains	Section 4.0	• Tribal Planning • U.S. Geological Survey • U.S. Army Corps of Engineers • FEMA	K9
24	Purchase, Construction, Lease of New Facilities Substantially Increasing Capacity	Section 5.0	• Tribal Planning • Tribal Real Estate • Project Summary Document	I4a
25	Building Size Greater Than 12,000 Square Feet on More Than 5 Acres at a New Site	Section 5.0	• Tribal Planning • Tribal Real Estate • Project Summary Document	I4b
26	Projects Equal to or More Than 5 Acres of Surface Land Area at a New Site	Section 5.0	• Tribal Planning • Tribal Real Estate • Project Summary Document	I4b
27	Hazardous Substance Storage for One Year or More, Known to Have Been Released, Or Disposed Of	Section 9.0	• Tribal EPA • U.S. EPA	K10
28	Underground and Aboveground Storage Tanks	Section 7.0	• Tribal EPA • U.S. EPA	
29	Use, Storage, Transportation and Disposal of Hazardous Substances	Section 9.0	• Tribal EPA • U.S. EPA	K2
30	Impact on Community Air Pollution	Section 6.0	• Tribal EPA • U.S. EPA	K2

Environmental Checklist Cross-Reference/Information Resources Table, cont'd

Checklist Question	Topic	Review Manual Reference Section(s)	Suggested Information Resources	Applicable Categorical Exclusion(s) OR Extraordinary or Exceptional Circumstance
31	Human Health or Environmental Impact on Tribe and Low-Income or Minority Populations	Sections 10.0; 11.0	• Tribal Planning • U.S. EPA • U.S. DOJ	K2, K3
32	Community Noise Levels	Section 12.0	• Tribal Planning • Tribal EPA • U.S. EPA	
33	Wilderness Areas	Section 14.0	• Tribal Planning • Tribal Real Estate • U.S. Forest Service • National Park Service • U.S. EPA	K5
34	Farmland Protection	Section 15.0	• Tribal Planning • USDA NRCS	K5
35	Coastal Zone Management	Section 16.0	• Tribal Planning • Sate Coastal Management Agency	K5
36	Wild and Scenic Rivers	Section 17.0	• National Park Service • U.S. Army Corps of Engineers • Bureau of Land Management • Bureau of Indian Affairs • U.S. Forest Service	K5

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Appendix B: Categorical Exclusions Available for IHS Actions

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DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

SEP 30 1992

Office of the Assistant Secretary
for Health
Washington DC 20201

TO: Assistant Secretary for Management and Budget

FROM: Assistant Secretary for Health

SUBJECT: Categorical Exclusions for Certain Indian Health Service Actions from Provisions of the National Environmental Policy Act--ACTION

ISSUE

Council on Environmental Quality (CEQ) regulations and Department of Health and Human Services (HHS) policy (see General Administration Manual (GAM), Part 30) permit the establishment of categorical exclusions from provisions of the National Environmental Policy Act (NEPA). Categorical exclusions applying to actions taken by or on behalf of the Public Health Service (PHS) are approved by the Assistant Secretary for Health, in accordance with HHS GAM 30-20-20-C, and published in the Federal Register, in accordance with CEQ requirements. Approved exclusions are forwarded to the Assistant Secretary for Management and Budget (ASMB) for concurrence.

DISCUSSION

The proposed Federal Register Notice (attached) lists classes of Indian Health Service (IHS) actions that have no significant impact on the environment and, therefore, are categorically excluded from requirements to conduct further evaluation under NEPA.

A draft of the proposed categorical exclusions was reviewed by staff from the office of the ASMB; there were no recommendations or objections. In addition, the list has been reviewed by CEQ and was revised to incorporate their recommendations; CEQ has concurred with publication in the Federal Register.

RECOMMENDATION

I recommend that you concur with the categorical exclusions for the IHS listed in the attached Federal Register Notice by signing the approved line below.

DECISION

Approved _____ Disapproved _____ Date OCT 16 1992

James O. Mason

James O. Mason, M.D., P.H.

Attachment

RECEIVED 10/26 Logged

6071

Federal Register / Vol. 58, No. 3 / Wednesday, January 6, 1993 / Notices 569

Indian Health Service

National Environmental Policy Act; Categorical Exclusions

AGENCY: Indian Health Service (IHS), HHS.

ACTION: List of IHS program actions that are categorically excluded from the requirement to conduct further evaluation under the National Environmental Policy Act (NEPA).

SUMMARY: This notice provides a list of classes of IHS actions that normally do not have a significant impact on the environment and, therefore, do not require environmental impact statements (EIS) or environmental assessments (EA) under Council on Environmental Quality (CEQ) regulations (40 CFR parts 1500–1508) or Department of Health and Human Services (HHS) procedures (HHS General Administration Manual Part 30). All actions involving construction are reviewed to determine if extraordinary or exceptional circumstances exist that prevent the action from meeting the criteria established for this listing.

EFFECTIVE DATE: January 6, 1993.

FOR FURTHER INFORMATION CONTACT: Director, Division of Environmental Health (DEH), Office of Environmental Health and Engineering (OEHE), IHS, Public Health Service (PHS), HHS, room 5A–39, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857; or telephone (301) 443–1043.

SUPPLEMENTARY INFORMATION: Regulations of the CEQ at 40 CFR parts 1500–1508 require Federal agencies to adopt procedures to supplement and implement their regulations. The HHS, by giving notice in the **Federal Register** (45 FR 76519), has adopted such procedures and included them in the HHS General Administration Manual Part 30. The CEQ approved the HHS procedures on October 2, 1980. Paragraphs 1507.3 and 1508.4 of the CEQ regulations provide for the definition of categories of actions that do not individually or cumulatively have a significant effect on the human environment and therefore, do not require the preparation of an EIS or an EA. Paragraph 30–20–40 of the HHS General Administration Manual establishes categories of exclusion for Departmental actions and provides for the listing of actions by Operating Divisions within the Department. The IHS, as an agency of the PHS, hereby gives notice of its listing of actions which normally can be categorically excluded from further environmental review.

If a proposed action belongs to an excluded category but one or more extraordinary or exceptional circumstances (as defined in Part K) apply, then an EA must be prepared for the purpose of determining whether an EIS is warranted.

The IHS provides comprehensive health care services to more than 1 million American Indians and Alaska Natives. The goal of the IHS program is to raise the health status of American Indians and Alaska Natives to the highest level possible. In carrying out this goal, the program has three main objectives: (1) To deliver the highest quality health services possible; (2) to assist tribes and native corporations to develop their capacity to manage health programs; and (3) to serve as an advocate for American Indians and Alaska Natives in health related matters.

The IHS program is carried out through a health services delivery system, designed to provide a broad mix of preventive, curative, rehabilitative, and environmental services. The type of health services delivery system

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employed varies from Area to Area. Population, health indices, and facilities and services available from sources other than the IHS are evaluated to determine the methods IHS uses to provide services.

The IHS program consists of two major systems: (1) A Federal health care delivery system, administered by Federal employees, and (2) a tribal health delivery system, administered by tribes and tribal groups under grants, contracts or cooperative agreements. The categorical exclusions apply to IHS program actions whether carried out directly by the IHS, or funded or otherwise sponsored by the IHS. The IHS contracts, grants, and cooperative agreements are actions defined in NEPA and are subject to the IHS review procedures established to ensure NEPA compliance, including provisions covering extraordinary and exceptional circumstances. The NEPA compliance for the tribal health care delivery system is ensured through IHS administrative procedures for contracts, grants, and cooperative agreements.

The selection of IHS program actions to list as categorical exclusions has been determined, in part, by agency experience in complying with NEPA, during the past 10 years. Actions required to provide health care services will not have significant impact on the environment except when exceptional or extraordinary circumstances exist. The IHS has categorically excluded these actions, since enactment of NEPA; however, actions involving construction normally have required completion of an environmental review/assessment.

The IHS administers programs for the construction of domestic sanitation facilities (water, wastewater, and solid waste) for Indian homes and communities, construction of new or replacement health care facilities and staff quarters, and renovations to existing health care facilities and quarters units.

Environmental reviews/assessments of construction projects undertaken during the past 10 years have concluded that an EIS was not required for any of them. Approximately 2,300 sanitation facilities construction projects and fewer than 60 health care facilities/staff quarters construction projects have been approved during this time.

The type of program and procedures employed to administer the construction of sanitation facilities for Indian homes and communities, and the consistent determinations that these projects do not have a significant impact on the environment, are the basis for the decision to list most sanitation facilities projects ~~are~~ as categorically excluded.

Factors considered in making this determination include:

1. Projects are undertaken to improve health and/or environment.

2. Projects are untaken at the request and with approval of the tribal governing body, which provides for discussion and evaluation of the project and its impacts.

3. Projects are normally constructed on tribally owned or individually owned tribal land within reservation boundaries.

4. Projects are constructed to comply with all current applicable environmental regulations and plans and specifications are submitted to State and Federal agencies as necessary for review and comment.

5. Projects are constructed to provide utilities (water, sewer, solid waste) either for existing American Indian or Alaska Native homes or for new homes constructed with Federal, tribal, State or other resources. New homes are constructed at sites and locations approved by the Tribal Governing Board. Utilities are not provided for future development or undeveloped parcels, and capacity provided is limited to that routinely provided by standard engineering practice for the current design population.

6. The IHS projects fall into the category of minor construction projects based on cost. During the last 10 years, 85 of the 2,300 projects exceeded $1 million, and the average estimated cost was $250,000.

7. Standard IHS procedures require documentation of an environmental review of each construction project to identify any exceptional or extraordinary circumstances and to ensure compliance with all environmental laws, regulations, and executive orders; e.g., those concerning floodplains, wetlands, endangered species, etc. This review is required early in the project planning process.

The categorical exclusion for construction of health care facilities and staff quarters has been limited to renovation or new construction at existing health care delivery sites, and construction or development of relatively small facilities at new locations. The procedures noted in item 7 above for sanitation facilities construction projects also apply to all health care facility and staff quarters construction projects. Most health care facility and staff quarters renovation projects can be classified as minor construction projects based on cost. Fewer than 200 major renovation projects have been undertaken and only a few were funded at a level exceeding $1 million.

Categorical Exclusions

A. Health Services

Direct delivery of medical, dental, nursing, and other related health services; e.g., patient care/counseling administered from hospitals, health centers, health stations, satellite clinics, and in private homes by IHS staff or contract providers to authorized recipients.

B. Research

Research activities that are consistent with the mission of IHS including: (a) Biological and behavioral studies conducted in laboratories, clinics, and the field; (b) studies on the development and delivery of prevention and treatment services and their administration and financing; and (c) evaluations of prevention and treatment.

C. Pesticides

Application of pesticides which are not classified for restricted use under provisions of the Federal Insecticide, Fungicide and Rodenticide Act when used for routine pest control purposes.

D. Contracts, Grants, and Cooperative Agreements

Contracts, grants, and cooperative agreements and continuations, supplements, extensions, and amendments of these documents for IHS programs or actions that are categorically excluded. (Includes Self-Determination Act contracts, Contract Health Care contracts, etc.)

E. Technical Assistance

Action involving the provision of technical assistance to American Indian and Alaska Native tribes and groups, other Federal agencies, State and local governments, and non-profit organizations are excluded. These actions include but are not limited to:

1. The provision of technical assistance to American Indian and Alaska Native tribes and groups for the purpose of developing management capabilities needed to enable eventual tribal assumption of health program operation;

2. The provision of technical assistance to American Indian and Alaska Native tribes and groups for the purpose of developing capabilities in the areas of epidemiology, disease reduction, injury prevention, environmental improvement, and the operation and maintenance of sanitation facilities; and

3. The assignment of IHS personnel to agencies/organizations for the purpose of providing technical expertise (e.g.,

investigation, diagnosis, consultation, counseling) in health programs.

F. Management and Administrative Support

Routine management and administrative support actions.

G. Training, Education, and Manpower Development

The award of training grants, scholarships, and the provision of other types of training and educational assistance are excluded. These actions include:

1. Support for development of professional and paraprofessional health competencies;
2. Support for development of American Indian and Alaskan Natives health management capabilities;
3. Support for development of tribal and community capabilities in the areas of environmental improvement, disease reduction, injury control, and operation and maintenance of sanitation facilities;
4. Support for training and education of IHS personnel necessary for the efficient accomplishment of the IHS program; and
5. Educational activities including development of disease prevention and treatment and presentation of such material to American Indian and Alaskan Natives.

H. Statistics, Data Processing, and Information Gathering

Actions associated with statistics and information collection and dissemination are excluded. These actions typically involve:

1. Collection of demographic or morbidity data and analysis for program management and budget justification purposes;
2. Epidemiologic studies;
3. Environmental surveillance activities (e.g., sample collection, analysis, and monitoring of air, food, water, and wastewater) to determine quality as a basis for ensuring necessary corrective action;
4. Engineering studies and investigations including soil boring and test well drilling to gather data for the purpose of determining engineering feasibility and to permit facility design;
5. Updating existing data bases and data processing;
6. Printing and distributing reports; and
7. Developing new/redesignating existing data systems to meet specific program needs.

I. Indian Health Service Owned and Leased Facilities

Actions related to the IHS owned and leased facilities, or actions funded by IHS at tribally owned (or leased) and managed facilities as listed below, are excluded:

1. Maintenance and day-to-day operation of the physical plant and repairs to plant and equipment, or replacement-in-kind of utilities and building components;
2. Acquisition of equipment, provided all requirements for permits, registrations, and licenses are met, and provided the equipment involves use of generally accepted technology;
3. Building alteration or renovation that does not substantially change the function or general appearance of existing buildings;
4. Construction or lease of new facilities (including portable facilities and trailers) where such lease or construction:

(a) Is at the site of an existing health care facility and the facility capacity is not substantially increased,

(b) Is for buildings of less than 12,000 square feet of useable space when less than five acres of surface land area are involved at a new site, or

(c) Is for projects other than buildings when less than five acres of surface land area are involved at a new site;

5. Facility planning and design including funding of such activities;
6. Acquisition of space by lease, use agreement, transfer, gift or similar arrangement for which:

(a) The intended use of the space is consistent with the functional design of the building, and

(b) The acquisition is consistent with an applicable master plan, if such plan exists;

7. The acquisition, sale, release, abandonment, closure or transfer of real property, provided the action:

(a) Is consistent with any applicable master plan, if such a plan exists,

(b) Conforms to local zoning and land use ordinances, if such ordinances exist,

(c) Is consistent with the functional design of the facility,

(d) Would not violate applicable Federal, State, or local environmental protection or historic preservation laws, and

(e) Satisfies the requirements of applicable comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) section 120 (h) provisions.

J. Construction of Sanitation Facilities

Actions associated with construction of sanitation facilities to serve Indian homes and communities, except that the following actions are not excluded:

(1) Construction of a sanitary landfill at a new solid waste disposal site, and

(2) Construction of a new wastewater treatment facility with direct discharge of treated sewage to surface waters.

K. Extraordinary or Exceptional Circumstances

Under extraordinary circumstances, the normally excluded actions described above may have a significant environmental effect; such actions are not categorically excluded. Actions that can be characterized by, or may cause any of, the conditions described below are examples of actions that are not categorically excluded:

1. Those with potential to change the existing environment where such change violates directives or other controls that are imposed by any governmental body having jurisdiction, for the purpose of protecting or otherwise affecting that environment;
2. Those with potential or real threat of violation, or continued violation, of an applicable Federal, State, or local law or requirement imposed for protection of the environment or to ensure public health and safety;
3. Those likely to cause controversy with respect to the types or extent of the resulting environmental effects where such controversy is based on pertinent and substantial issues;
4. Those involving the use of technology where the possible effects are highly uncertain or involve unique or unknown risks and where such technology has not been assessed previously for environmental impact;
5. Those which have adverse effects on unique geographic characteristics (e.g., historic, archeological, or cultural resources, park recreation or refuge lands, wilderness areas, wild or scenic rivers, sole or principal drinking water aquifers, prime farmlands, wetlands, floodplains, coastal management zones or ecological or critical areas including those listed on the Department of Interiors National Register of National Landmarks);
6. Those which establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects;
7. Those which have adverse effects on properties listed or eligible for listing on the National Register of Historic Places;
8. Those which have adverse effects on species listed by the Federal Government as endangered or Threatened Species, or which have adverse effects on any designated critical habitat for these species;
9. Those which require assessment in accordance with Executive Order 11988 (Floodplain Management), or Executive

Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act; and

10. Those which involve the use, transfer, or lease of real property which has been determined, after investigation in accordance with the provisions of CERCLA 120 (h), to have been used as a storage facility for hazardous waste for more than 1 year; and

11. Construction projects which are significantly greater in scope or size than normally experienced for a particular category of action.

Dated: December 29, 1992.

Michel E. Lincoln,

Deputy Director.

[FR Doc. 93–173 Filed 1–5–93; 8:45 am]

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Appendix C: Suggested Outline for an Environmental Assessment

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Appendix C: Suggested Outline for an Environmental Assessment

COVER LETTER

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Discuss Direct and Indirect Effects and Cumulative Effects

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Discuss Direct and Indirect Effects and Cumulative Effects

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REFERENCES

GLOSSARY AND ABBREVIATIONS

APPENDICES

Appendix D: Legal Considerations

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Appendix D: Legal Considerations

Table 1. Federal Environmental Laws that Directly Relate to NEPA Compliance.

Environmental Law	Formal Requirements	Implications and Regulations
American Indian Religious Freedom Act (AIRFA)	Directs agencies to respect the practice of traditional American Indian religions, including access to religious sites and use of ceremonial items.	Identify potentially concerned tribes; consult with them during environmental analyses.
Archeological and Historic Preservation Act (AHPA)	Requires Federal agencies provide for "...the preservation of historical and archeological data (including relics and specimens) which might otherwise be irreparably lost or destroyed as the result of...any alteration of the terrain caused as a result of any Federal construction project or Federally licensed activity or program.	It made it clear that all Federal agencies were authorized to fund archeological investigations, reports, and other kinds of activities to mitigate the impacts of their projects on important archeological sites.
Archeological Resources Protection Act (ARPA)	Requires permits for activities that disturb archeological resources located on Federal and Tribal lands. Provides for civil and criminal penalties for persons disturbing archeological resources on Federal and Tribal land without a permit.	Archeologists performing work for the IHS on Federally owned land or Indian land must meet permit requirements.
Architectural Barriers Act	Requires public buildings to be accessible to persons with disabilities.	Consider accessibility issues and the environmental impact of accessibility solutions during the environmental review. See Uniform Federal Accessibility Standards (UFAS).
Clean Air Act (CAA)	Requires agencies to act in conformity with State Implementation Plans (SIP) that set air quality standards.	Review SIP, determine current air quality, project potential changes, and seek alternatives that meet standards. Document this in the environmental analyses.

Environmental Law	Formal Requirements	Implications and Regulations
Clean Water Act (CWA)	Established the basic structure for regulating discharges of pollutants into the waters of the United States. Gave EPA the authority to implement pollution control programs, such as setting wastewater standards and water quality standards for all contaminants in surface waters. The Act made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. It recognized the need for planning to address the critical problems posed by nonpoint source pollution.	Requires NPDES permits for wastewater treatment facility discharges, requires storm water permits and management plans; regulates construction in wetlands.
Coastal Barrier Resources Act	Prohibits new Federal expenditures or financial assistance for any purpose impacting the Coastal Barrier Resources System. Specified exceptions to this prohibition are allowed only after consultation is carried out with the Secretary of the Interior.	Ensure consultation is conducted for activities within areas covered by the Act (maps of the system are available at Regional Fish and Wildlife Service Offices).
Coastal Zone Management Act (CZMA)	Requires that Federal actions be consistent with the State coastal zone management plan to the maximum extent practicable.	Review State Coastal Zone Management Plan, and pursue alternatives that are consistent with it. Determine whether a consistency determination is required and, if so, prepare it and submit it to the appropriate state(s).
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	Requires reporting of releases and clean up of hazardous substances. Requires addressing contamination prior to property transfer. Requires plans for cleanup of contaminated sites, and disclosure to public of hazardous materials and processes.	To protect IHS interests, identify potential for presence of contamination on proposed new property acquisitions or dispositions in environmental analyses through Phase I and sometimes Phase II remediation studies.
Department of Transportation Act (formerly Section 4(f), now codified at 49 U.S.C. § 303)	Stipulates that the Federal Highway Administration will not approve any transportation project which requires the use of any publicly owned public park, recreation area, or wildlife or waterfowl refuge, or any land from an historic site of national, state, or local significance unless there is no feasible and prudent alternative to the use, and all possible planning to minimize harm resulting from such use is included.	Examine alternatives if park, historic, or recreational land is needed for a transportation project.

Environmental Law	Formal Requirements	Implications and Regulations
Endangered Species Act (ESA)	Requires consultation with U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) to ensure actions do not jeopardize threatened or endangered species, or their habitat.	Determine if the proposed activity or action will affect listed fish, wildlife, plants, and habitats. Consult with FWS or NMFS when the proposed action "may affect" endangered or threatened species or their habitat. The presence of endangered or threatened species may require operational controls to avoid or minimize effects.
Environmental Quality Improvement Act	Declares a national policy for enhancement of environmental quality, assigns primary responsibility to State and local governments. It requires Federal departments and agencies conducting or supporting public works activities which affect the environment to implement the policies established under existing law	The Act establishes an Office of Environmental Quality, to be directed by the Chairman of the Council on Environmental Quality.
Farmland Protection Policy Act	Establishes criteria for identifying and considering the effects of Federal actions on the conversion of farmland to non-agricultural uses.	Identify potentially affected prime farmland (including lands subject to indirect or cumulative effect); explore alternatives to minimize impacts.
Federal Land Policy and Management Act (FLPMA)	Establishes a policy of retaining public lands and directed the BLM to manage them under the principles of multiple use and sustained yield.	Be aware of BLM's multiple use mandate.
Fish and Wildlife Coordination Act	Requires consultation with Fish and Wildlife Service on proposed actions that will control or modify National waters.	Study potential impacts on waters, and consult as needed.
Flood Disaster Protection Act	Mandates flood insurance for Federally backed or insured mortgages and loans.	(See EO 11988 and EO 11990)
Historic Sites Act	Establishes National Historic Landmark (NHL) program and declares a national policy to preserve sites, buildings and objects significant in American history.	Consider impacts on NHLs in environmental analysis and minimize harm to the maximum extent possible.

Environmental Law	Formal Requirements	Implications and Regulations
Marine Mammal Protection Act (MMPA)	Prohibits takings of marine mammals; that is to harass, hunt, capture, collect, or kill or attempt to harass, hunt, capture, collect, or kill any marine mammal. Requires permits for takings of marine mammals and consultations with NMFS if impacts to marine mammals are possible.	Consider impacts to marine mammals from proposed action in the environmental analysis and documentation. Make sure to obtain all necessary permits and conduct consultations with NMFS when planning for actions which may impact marine mammals. Document consultations and results of permit applications.
National Historic Preservation Act (NHPA)	Requires agencies to identify historic properties that may be affected by their actions, and to consult with State Historic Preservation Officer and others about alternatives and mitigation in the event the proposed action affects an eligible or listed historic property.	Conduct surveys, etc., to identify historic properties and determine potential effects. Consult, execute and implement agreements to address adverse effects. Identify and investigate archeological resources to minimize potential 30-day work stoppage (NAGPRA).
Native American Graves Protection and Repatriation Act (NAGPRA)	Requires consultation with Indian Tribes upon discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony.	Identify culturally affiliated tribes or groups, consult with them, and seek to develop plans of action and implement appropriate mitigation (NHPA).
Noise Control Act	Prohibits removal of noise control devices or rendering them inoperable. Requires EPA to act as Federal coordinator for noise control efforts and establishing noise control standards.	Ensure that proposed new construction or operations and aircraft landing, take-off and launching patterns that may increase noise in neighboring communities are evaluated for potential noise impacts.
Resource Conservation and Recovery Act (RCRA)	RCRA banned all open dumping of waste, encouraged source reduction and recycling, and promoted the safe disposal of municipal waste. RCRA also mandated strict controls over the transportation, treatment, storage, and disposal of hazardous waste. RCRA established the basic "cradle to grave" approach to hazardous waste management that exists today.	Identify potential for generation of hazardous wastes and opportunities to minimize or eliminate wastes during environmental analysis. Identify potential site contamination. Units may be subject to state and Federal waste management requirements. Phase I and Phase II remediation studies may be required.
Safe Drinking Water Act (SDWA)	Sets standards for drinking water quality and regulates activities affecting drinking water supplies. Allows designation of sole source aquifers.	Analyze existing water quality and potential impacts on it. Determine if a sole source aquifer is affected by your proposed activity or action.

Environmental Law	Formal Requirements	Implications and Regulations
Soil and Water Resources Conservation Act	Provides for continuing appraisal of U.S. soil, water and related resources, including fish and wildlife habitats, and a soil and water conservation program to assist landowners and land users in furthering soil and water conservation.	Use Federal and state cooperative arrangements on forestry, fish and wildlife, and soil and water conservation should be used to the fullest extent practical.
Toxic Substances Control Act (TSCA)	Regulates specific chemical substances, including PCBs (polychlorinated biphenyls) and asbestos.	Address presence of substances in environmental review, as needed.
Wild and Scenic Rivers Act	Federal agencies cannot provide assistance to any project that will adversely affect designated rivers.	Consider impacts on wild and scenic rivers in environmental analyses.
Wilderness Act	Prohibits or restricts certain Federally assisted activities in designated areas.	Consider impacts to the character and integrity of designated and proposed wilderness areas.

Table 2. Executive Orders that Directly Relate to NEPA Compliance.

Executive Order (EO)	Formal Requirements	Implications and Regulations
EO 11514: Protection and Enhancement of Environmental Quality	Directs agencies to monitor, evaluate, and control activities so as to protect and enhance the quality of the environment.	Underscores the need for quality environmental analyses, monitoring of mitigation measures.
EO 11593: Protection and Enhancement of the Cultural Environment	Directs agencies to identify, evaluate and protect historic properties under their ownership or control.	Similar to National Historic Preservation Act requirements.
EO 11988: Floodplain Management	Directs agencies to evaluate the potential effects of any action it takes in a floodplain, and consider alternatives to avoid adverse effects.	Delineate floodplain. Discuss project impacts on, and potential development of, floodplains in environmental analysis. Consider alternatives. Specific 8-step review process is set forth in guidelines maintained by Federal Emergency Management Agency (FEMA).
EO 11990: Protection of Wetlands	Directs agencies to "minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.	Comply with the CWA Section 404 requirements regarding proposed activities that will occur in wetlands.
EO 12088: Federal Compliance with Pollution Control Standards	Directs an agency to prevent, control and abate environmental pollution with respect to Federal facilities and activities under Federal control. (Partially revoked by EO 13148)	Reinforces application of other environmental laws and requirements.

Executive Order (EO)	Formal Requirements	Implications and Regulations
EO 12372: Intergovernmental Review of Federal Programs	Requires state and local governments to coordinate and review the processes of proposed Federal financial assistance and direct Federal development programs.	Strengthens the Federalism requirements of the state and local governments to coordinate policies and programs as laid forth in the Intergovernmental Cooperation Act of 1968.
EO 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations	Directs Federal agencies to identify and address any disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.	When such analysis is required by NEPA, each agency shall analyze the environmental effects, including human health and economic and social effects, of Federal actions, including effects on minority and low-income communities.
EO 13006: Locating Federal Facilities on Historic Properties in our Nations Central Cities	Directs Federal agencies to give priority to the use of historic buildings in historic districts in central business areas.	Where applicable, identify historic buildings in central business districts (CBDs), analyze their use potential, and consider as priority alternatives in NEPA review.
EO 13007: Indian Sacred Sites	Directs Federal agencies to avoid, where possible. impeding access to, or physically damaging, Indian sacred sites.	Consult with Indian Tribes during NEPA analysis to identify possible impacts. Respect confidentiality of information on sacred sites.
EO 13045: Protection of Children from Environmental Health Risks and Safety Risks	Directs Federal agencies to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children.	Where applicable, identify environmental health and safety risks that are disproportionately affecting children and address measures to mitigate these risks in environmental analyses. Follow recommendations on Federal strategies issued by the Task Force on Environmental Health and Safety Risks to Children as established by the order.
EO 13101: Greening the Government through Waste Prevention, Recycling, and Federal Acquisition	Where applicable, the Federal government to improve its use of recycled products and environmentally preferable products and services.	Include discussions of the potential of proposed projects or actions to improve use of recycled products in environmental analyses.

Executive Order (EO)	Formal Requirements	Implications and Regulations
EO 13148: Greening Government Through Leadership In Environmental Management	Directs each Federal agency to integrate environmental accountability into day-to-day decision-making and long-term planning processes and across its missions, activities, and functions.	DHHS and its agencies must report annually on the progress that it has made in complying with all aspects of the order. Requirements include reducing release of EPCRA toxic chemicals; reducing use of specific chemicals; and establishing actions that are to be taken to reduce, manage, and eliminate the use of specific ozone-depleting substances at facilities. Also, Agencies are requested to report the status of Environmental Management System implementation.

Additional Relevant Executive Orders

EO 11738 Environmental Acts and Federal Contracts Grants or Loans

EO 11987 Exotic Organisms

EO 12114 Environmental Effects Abroad of Major Federal Actions

EO 12372 Intergovernmental Review of Federal Programs

EO 12580 Superfund Implementation

EO 12777 Sec 311 Federal Water Pollution Control Act

EO 12873 Federal Acquisition Recycling

EO 12915 North American Agreement on Environmental Cooperation

EO 12916 Border Environment Cooperation

EO 12995 Amendment to EO 12873 Federal Acquisition Recycling

EO 12996 Wildlife Refuge System

EO 13016 Amendment to EO 12580 Superfund Implementation

EO 13045 Protection of Children

EO 13093 Amending EO 13061 and 13080 American Heritage Rivers

EO 13084 Revoked by 13175 Consultation and Coordination with Indian Tribal Governments

EO 13089 Coral Reef Protection

EO 13112 Invasive Species

EO 13123 Greening the Govt Through Energy Mgt

EO 13143 Amending 10173 Waterfront Protection

EO 13149 Greening the Govt Federal Fleet

EO 13150 Federal Workforce Transportation

EO 13158 Marine Protected Areas

EO 13175 Tribal Consultation

EO 13186 Migratory Birds

EO 13195 Trails for America

EO 13211 Energy Effects of Federal Regulations

EO 13212 Actions to Expedite Energy-Related Projects

EO 13221 Energy Efficient Standby Power Devices

EO 13229 Environmental Health Risks and Safety Risks to Children

EO 13274 Environmental Stewardship

EO 13287 Preserve America

EO 13302 Amending EO 13212-Actions to Expedite Energy-Related Projects

EO 13308 Further Amdt to EO 12580 As Amended Superfund Implementation

EO 13327 Federal Real Property Asset Management

EO 13352 Facilitation of Cooperative Conservation

PART II – REFERENCE SECTIONS

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1.0 Historic Properties

NEPA requires consideration of the impacts of proposed Federal actions on the "human environment", e.g., the natural and physical environment and the relationships of people to that environment. Thus, NEPA analyses are concerned with all aspects of the environment, including the natural, social and cultural environment, as well as relationships between natural and cultural aspects of the environment.

Culturally valued aspects of the environment generally include historic properties, other culturally valued pieces of real property, cultural use of the biophysical environment, and such "intangible" sociocultural attributes as social cohesion, social institutions, lifeways, religious practices, and other cultural institutions. These impacts are usually analyzed either as impacts on "cultural resources," or as "social impacts," or as both.

In addition to NEPA, other Federal laws and regulations require the Federal government to consider historic properties, or cultural resources, in their activities and planning. Two key statutes are discussed in this section:

- National Historic Preservation Act of 1966 (NHPA)
- Native American Graves Protection and Repatriation Act of 1990 (NAGPRA)

Since IHS may need to comply with NEPA, NHPA, and NAGPRA, it should do so in a coordinated manner.

Sections 1.1 and 1.2 address compliance with section 106 of NHPA. Section 1.3 addresses compliance with NAGPRA and discovery situations.

1.1 Overview/Introduction to Section 106 of NHPA

IHS is required by Section 106 of the NHPA to take into account the effects of its undertakings on historic properties, and to afford the Advisory Council on Historic Preservation (ACHP[1]) an opportunity to comment on the effects. The process by which IHS does so is outlined in the ACHP's regulations, 36 CFR Part 800, and is commonly referred to as the Section 106 review process. Compliance with Section 106 is carried out as part of IHS's overall planning process for its undertakings, when the broadest range of project alternatives can be considered and implemented. Thus, IHS should integrate and coordinate its Section 106 compliance with other project and environmental planning efforts, including NEPA compliance.

The Section 106 process is an open, public process with steps, findings, and determinations made by IHS in consultation with other parties and supported by accurate and complete documentation. IHS's project administrative record must support its compliance with 36 CFR Part 800.

The Department of Health and Human Services (DHHS) policies and procedures relative to the identification and protection of historic properties are included in the Department's *General Administrative Manual (GAM)*. The Public Health Services' (PHS) *Grants Policy Statement* includes provisions that must be followed in awarding grants to ensure adequate consideration of impacts on historic properties. In 2006, DHHS circulated a new draft grants policy that may supersede the above policies when approved by the Secretary of DHHS.

As defined in the NHPA, historic properties are properties included in or eligible for inclusion in the National Register of Historic Places (NRHP). The NRHP is our nation's official listing of historic properties, e.g, buildings, structures, sites, districts, and objects of national, state, or local significance. The NRHP is maintained by

[1] The ACHP is short for the Advisory Council on Historic Preservation, an independent Federal agency located in Washington, D.C. that was established in the NHPA. For more information about the ACHP, see www.achp.gov.

the National Park Service (NPS) on behalf of the Secretary of the Interior.

Historic properties are quite diverse in nature. For example, historic properties may be a single building or structure, or entire districts or neighborhoods; prehistoric or historic archeological sites; bridges or trails; ships or boats; entire water or agricultural systems or portions thereof; even locations where Indian tribes or other groups have historically carried out religious or cultural practices such as gathering medicinal plants that have made a significant contribution to the social and cultural continuity of that tribe or group. A historic property may even be entirely natural, such as a mountain or other cultural landscape that is significant for the traditional values ascribed to it by an Indian tribe or other group. For more information, refer to the National Register Bulletins www.cr.nps.gov/nr/publications/bulletins.htm for complete descriptions of historic properties.

A historic property is eligible for the NRHP because it is determined to meet the NRHP evaluation criteria, as well as having integrity.

Our Nation's most significant NRHP properties have been designated as National Historic Landmarks (NHLs) by the Secretary of the Interior. Only about 2% of the NRHP properties are NHLs. IHS must follow special requirements for considering NHLs in the Section 106 review process.

National Historic Landmarks

Section 110(g) of the National Historic Preservation Act charges Federal agencies with undertaking planning and other actions to minimize harm to National Historic Landmarks (NHLs).

IHS is required to request the participation of the Secretary of the Interior and Advisory Council on Historic Preservation (ACHP) in the Section 106 process when NHLs may be directly adversely affected. National Park Service contacts are included Section 1.6 of this manual.

The ACHP should give special consideration to NHLs in the review process. (see 36 CFR 800.10)

1.2 Section 106 Compliance Process

Compliance with Section 106 of the NHPA entails a four-step process outlined in 36 CFR Part 800. Usually, IHS will not need to complete all four steps, depending on the specifics of a particular undertaking and its effects on historic properties. IHS may consult on multiple steps in the Section 106 review process with the agreement of the SHPO/THPO so long as the consulting parties and the public have an adequate opportunity to express their views.

1. Initiate the Section 106 process.
2. Identify historic properties.
3. Assess adverse effects.
4. Resolve adverse effects.

Step #1: Initiate the Section 106 Process

1A. Establish the undertaking

The first step in the Section 106 process is for IHS to determine if it is proposing an undertaking that requires compliance with Section 106. An undertaking is defined as:

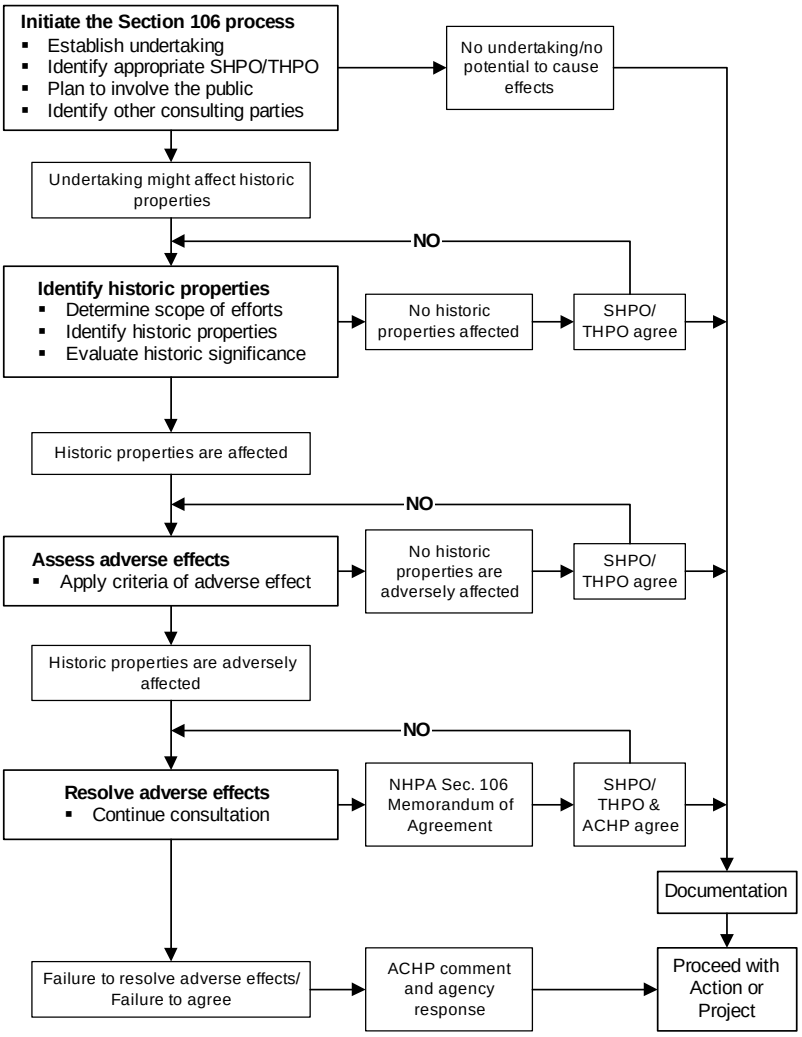
> *A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license or approva. (36 §800.16(y)).*

Most IHS activities qualify as undertakings.

If IHS determines that its undertaking meets this definition and has the potential to cause effects on historic properties, IHS has further obligations under Section 106 and proceeds with the next step (1B) in the review process. If the action is subject to an existing agreement, such as Programmatic Agreement (see step 4) or an alternate agency procedure, then IHS should follow that document or procedure. If no

agreement document or alternative procedure exists, the procedures outlined below must be followed.

Figure 1-1. NHPA Section 106 Process Flow Chart



1B. Consult with the Appropriate SHPO and/or THPO, Other Consulting Parties, and the Public.

IHS then determines with whom it will consult throughout the remainder of the Section 106 review process.

In addition to the appropriate State Historic Preservation Officer (SHPO) and/or appropriate Tribal Historic Preservation Officer (THPO), IHS must identify other interested parties (see 1C below). If there is no formal THPO, IHS must consult with the Tribe. If the Tribe has assumed the SHPO's responsibilities for Section 106 under delegation by the National Park Service, IHS will consult with the THPO instead of the SHPO. If the Tribe has not assumed SHPO responsibilities, IHS consults with both the Tribe and the SHPO.

At various points in steps 2a through 4 in the Section 106 process, IHS is required to make findings or determinations and provide them to the SHPO/THPO and other consulting parties for their concurrence or objection. If the SHPO/THPO fails to respond within 30 days of receipt of an adequately documented request for review of a finding or determination, IHS can assume concurrence with the finding. The SHPO/THPO continues to be involved in next steps, findings, or determinations for review of that undertaking, but cannot reopen a finding or determination that it failed to respond to earlier. The same applies to an Indian tribe regarding undertakings occurring or affecting historic properties on that tribe's Tribal land. The exception is the process of consulting to resolve adverse effects, where no time limits have been established.

1C. Identify other consulting parties

IHS is required to identify and consult with other parties that will have the right to be consulting parties under the terms of the regulations. These include Indian tribes, local governments, and applicants for Federal assistance or permits. Others – such as individuals or organizations that have concern for or knowledge of historic properties or the undertaking - may request to be consulting parties, but that decision is ultimately up to the IHS official.

IHS shall make a reasonable and good faith effort to identify any Indian tribes that may attach religious and cultural significance to historic properties that may be affected by the undertaking and to invite them to be consulting parties. This includes other tribes whose historic Tribal lands may be included in another tribe's reservation. IHS is required to consult with Indian tribes regardless of whether the undertaking is on Tribal lands or off Tribal lands. A tribe that requests to be a consulting party shall be one. IHS should be aware that historic properties of religious and cultural significance frequently may be located on ancestral, aboriginal, or ceded lands of Indian tribes.

1D. Plan to involve the public

IHS, in consultation with SHPO/THPO, must decide how and when to involve the public in the Section 106 process. A formal plan is not required, although that might be appropriate depending on the scale of the undertaking and the magnitude of its effects on historic properties.

Step #2: Identify Historic Properties

IHS is charged with making "*a reasonable and good faith effort to identify historic properties that may be affected by the undertaking*." The "identification" step includes determining the scope of efforts (area of potential effects and preliminary work); identifying properties; evaluating identified properties for NRHP eligibility; and determining the effect of the undertaking on historic properties. This step is carried out in consultation with the SHPO/THPO, involved Indian tribes, and other consulting parties.

IHS personnel should become familiar with the historic properties within their area, and the types of resources likely to be considered historic properties. The Secretary of the Interior's *Standards and Guidelines for Preservation Planning; Identification; and Evaluation* provides guidance on identification of historic properties (http://www.cr.nps.gov/local-

law/arch_stnds_0.htm). In addition, IHS may need to meet state or Tribal standards and guidelines.

The identification effort likely will need to be designed and conducted by a historic preservation professional. Federal historic preservation professional qualifications are detailed in the Secretary's *Professional Qualification Standards*. In addition, there may be state or Tribal qualifications that the professional must meet, and a permit pursuant to Archeological Resources Protection Act (ARPA) or state or Tribal requirements for archeological surveys.

In planning for the identification effort, IHS should take into account past planning, its research and studies and those of others, the magnitude and nature of the undertaking, the degree of Federal involvement, the nature and extent of potential effects on historic properties, and the likely nature and location of historic properties within the area of potential effects.

2A. Determine scope of identification efforts

In this preliminary step, IHS or the historic preservation professional does the following:

- Determines and documents the *Area of Potential Effects (APE)* (as defined below) of the undertaking.
- Reviews existing information about historic properties within the APE.
- Seeks information from parties likely to have knowledge of or concerns about the area.
- Gathers information from Indian tribes about properties to which they attach religious and cultural significance, while remaining sensitive to any concerns they may have about the confidentiality of this information.

IHS, in consultation with the SHPO/THPO, determines and documents the APE, e.g., the area within which IHS proposed activities may directly or indirectly affect historic properties. The regulations define the APE as

> *the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking (36 CFR 800.16(d)).*

For instance, IHS should consider the undertaking's potential for ground disturbance, as well as the potential of the undertaking to cause visual, audible, or atmospheric effects, or to alter a historic property (including its setting or use). If the APE is realigned, it is logical to use topographical features and existing land use patterns when developing the realignment. It is crucial to subject the realignment to the same level of scrutiny and review as the original plan to ensure no historic properties will be affected. IHS documents the APE and the process for establishing it.

The rest of step 2A is focused on gathering existing information about historic properties within the APE. This information helps IHS to determine what it needs to do to identify historic properties that may be affected by the undertaking. Information sources for this analysis are provided on the following page. IHS consults with the SHPO/THPO and involved Indian tribes in gathering existing information.

IHS should be aware that historic surveys performed in the past need to be re-evaluated for their applicability to IHS's specific undertaking. Survey methods might improve over time or a past investigation may have been conducted using a methodology inappropriate for IHS needs. Likewise, a property may need to be re-evaluated for its eligibility to the NRHP because of the passage of time and changing conditions.

Figure 1-1: Some Sources of Information about Historic Properties

- SHPO/THPO, Indian tribes, land managing agencies, and local governments and their records and files
- Historic context studies, overviews of the area
- Archeological studies, including predictive models
- Building or landmark surveys
- County or local histories
- Historic maps, atlases, and photographs
- Tax records
- Ethnographic reports
- Topographic maps and other data indicating landforms that may have been settled or used prehistorically or historically.
- Local universities, archaeological groups, museums & historical societies
- Oral history data collected by historians, anthropologists, and others.
- Soil maps and data, aerial and satellite imaging data, and other data on the distribution of plant communities, water sources, and raw materials potentially used in prehistoric or historic economic activities

2B. Identify historic properties

In step 2B, IHS or the designated historic preservation professional develops and implements a strategy to identify historic properties within the APE, based on the existing information gathered in step 2A and consultation with the SHPO/THPO, involved Indian tribes, and others.

IHS's level of identification effort should be commensurate with the likelihood of historic properties existing in the area, the undertaking's potential effects on historic properties, past identification efforts and their results, and the Secretary's *Standards*. IHS should ensure that identification efforts are developed and carried out by professionals with appropriate expertise and expertise for the historic properties likely to be identified. Various levels of identification effort can include:

- Literature searches
- Reconnaissance surveys
- Sample surveys
- Intensive surveys

IHS may phase its identification efforts if it is considering various project alternatives or alternative locations involving large land areas or having difficulty gaining land access. It would carry out increasingly intensive efforts to identify and evaluate historic properties as it refines its project planning.

IHS should ensure that applicable historic property identification efforts and results are fully documented and describe pertinent background research, research design, methodology employed for the investigation, findings with detailed description of the resources, and appendices, site/building and survey forms, and other information. More specific reporting requirements are detailed in the Secretary's *Standards* and in guidelines issued by SHPO/THPO or tribe having jurisdiction over involved Tribal lands. This report and its appendices should be included as part of the project environmental and Section 106 review documentation.

2C. Evaluate Historic Properties

IHS shall apply the NRHP evaluation criteria to properties identified in order to evaluate whether they may be eligible for the NRHP. If IHS and the SHPO/THPO and the Indian tribe with jurisdiction over involved Tribal lands agree regarding the determination of a property's eligibility, that property is considered to be eligible or ineligible, as may be the case, according to a consensus determination of eligibility. If the property is not considered eligible, a finding is made that no historic properties will be affected. If the property is found to eligible for the NRHP, consultation continues.

If there is disagreement among IHS, the SHPO, THPO, or Indian tribe(s) on whose Tribal lands are affected by the undertaking regarding a property's NRHP eligibility, IHS must seek an official determination of eligibility from the

Keeper of the NRHP (National Park Service) in accordance with 36 CFR 63. Similarly, if the ACHP or Secretary of Interior so requests, or if the site is within a National Landmark, IHS must refer the matter to the Keeper of the National Register. If an Indian Tribe disagrees with a determination of eligibility involving a property to which it attaches religious and cultural significance, then the Tribe can ask ACHP to request that IHS obtain a determination of eligibility. *The decision of the Keeper is final regarding the eligibility of properties to the NRHP*.

2D. Results of Identification Effort and Determination of Effect

To conclude the identification step of the Section 106 process, IHS either makes a finding of **No Historic Properties Affected** or **Historic Properties Affected**. A finding of No Historic Properties Affected is subject to review.

No historic properties affected finding (§800.4(d)(2))

A no historic properties affected finding is appropriate either when no historic properties are present in the APE or historic properties are present, but will not affected by the undertaking.

Review of Finding: IHS requests review of its no historic properties affected finding by the SHPO/THPO, and Indian tribe with Tribal lands affected by the undertaking. It provides them the following documentation:

(1) A description of the undertaking, the Federal involvement, and its area of potential effects (APE), including explanation of how the APE was established (photographs, maps, drawings, as necessary);

(2) A description of steps taken to identify historic properties and the results, including efforts to seek information pursuant to § 800.4(b); and

(3) An explanation of the basis for the determination that no historic properties are present or affected.

IHS also notifies and provides the documentation to the consulting parties, including Indian tribes and makes the documentation available for public inspection.

Criteria for Evaluation

The quality of significance in American history, architecture, archeology, engineering, and culture can be seen in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- that are associated with events that have made a significant contribution to the broad patterns of our history; or
- that are associated with the lives of persons significant in our past; or
- that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- that have yielded or may be likely to yield, information important in prehistory or history.

IHS has fulfilled its Section 106 obligations if it does not receive an objection from the SHPO, THPO, ACHP, or Indian tribe whose Tribal lands the undertaking occurs on or is affected by the undertaking within 30 days of receipt of adequate documentation.

Disagreements regarding determinations of effect: If IHS receives an objection from the SHPO, THPO, or Indian tribe on whose Tribal lands the undertaking occurs or is affected, it must request the ACHP's advisory opinion on the disagreement. Refer to 36 CFR 800.4(d) for a full discussion of IHS responsibilities in disagreements regarding determinations of effect.

Historic properties affected finding (§800.4(d)(1))

If IHS makes a Historic Properties Affected finding, it proceeds to step 3A and applies the criteria of adverse effect to determine whether the undertaking may adversely affect historic properties. (36 CFR §800.5)

Step #3. Assess Adverse Effects

If IHS finds that the undertaking may affect historic properties in step 2D, it then assesses whether the effect may be an adverse effect.

3A. Apply Criteria of Adverse Effects

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.

IHS applies the criteria of adverse effect after consultation with the SHPO, THPO, Indian tribe with affected Tribal lands, and Indian tribes attaching religious and cultural significance to identified properties. IHS also invites and considers the views of the other consulting parties and the public.

No historic properties are adversely affected (§800.5(d)(1)): No Adverse Effect

If IHS determines that there may be an effect to a historic property but that effect is not adverse, a finding of “no adverse effect” is appropriate. IHS submits the following documentation in support of the finding to the SHPO, THPO, Indian tribe with affected Tribal lands, and Indian tribes attaching religious and cultural significance:

(1) A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, and drawings, as necessary;
(2) A description of the steps taken to identify historic properties;
(3) A description of the affected historic properties, including information on the characteristics that qualify them for the National Register;
(4) A description of the undertaking's effects on historic properties;
(5) An explanation of why the criteria of adverse effect were found applicable or inapplicable, including any conditions or future actions to avoid, minimize or mitigate adverse effects; and
(6) Copies or summaries of any views provided by consulting parties and the public.

IHS should protect the confidentiality of locational information about archeological sites and properties of religious and cultural significance to Indian tribes. Section 304 of the NHPA enables IHS to restrict this information from release to the public and this information is exempt from Freedom of Information Act requests.

IHS must retain records of its findings of no adverse effect and make them available to the public, while protecting locational and other information about archeological sites and sites of religious and cultural significance from the public. The public should be given access to the information when they so request, subject to confidentiality protections. Failure of IHS to carry out the undertaking in accordance with the finding requires IHS to reopen the Section 106 process and determine whether the altered course of action constitutes an adverse effect.

Historic properties are adversely affected (§800.5(d)(2))

A finding of adverse effect requires IHS to consult further on ways to resolve it.

Examples of Adverse Effects

- Physical destruction of or damage to all or part of the property;
- Alteration of a property in a manner inconsistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
- Neglect of a property that causes its deterioration (except if recognized qualities of a property of religious and cultural significance to an Indian tribe); and
- Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

Step #4. Resolve Adverse Effects

IHS consults with the SHPO/THPO, ACHP (if participating), involved Indian tribes, and other consulting parties to develop a NHPA Memorandum of Agreement (NHPA-MOA). Note that this NHPA-MOA is not to be confused with a P.L. 86-121 MOA, the SFC project obligating document.

Note that NHPA-MOA must have concurrence in writing (signature) by the Indian tribe that has jurisdiction over the lands in question (e.g., Tribal lands for the purposes of NHPA means all lands regardless of ownership within the exterior boundaries of an Indian reservation).

A NHPA **Memorandum of Agreement** (NHPA-MOA) sets forth the measures agreed up by IHS and the consulting parties to avoid, minimize, or mitigate adverse effects of an undertaking on historic properties.

The NHPA-MOA is signed by IHS, ACHP (if participating), SHPO/THPO, and the Indian tribe with Tribal land affected by the undertaking. Other consulting parties may sign the MOA, but are not required to do so.

Once filed with the ACHP and implemented, the NHPA-MOA evidences IHS's compliance with Section 106. The NHPA-MOA addresses all of an undertaking's parts. If IHS fails to carry out the MOA, it must re-comply with Section 106.

A NHPA-MOA cannot go forward without the written concurrence (or signature) of an Indian tribe with Tribal lands affected by the undertaking.

Prior to consulting to resolve adverse effects, IHS notifies the ACHP of its determination of adverse effect and submits supporting documentation. If no response is received from the ACHP within 15 days of its receipt of adequate documentation, IHS can consult with SHPO, THPO, Indians tribes, and other consulting parties and assume that the ACHP does not wish to participate. However, the ACHP can elect to enter consultation at any time, and any of the parties may request ACHP's participation. If a National Historic Landmark may be adversely affected, IHS must invite both the ACHP and NPS to participate in the consultation.

Possible approaches to avoid, minimize, or mitigate adverse effects may include cost-effective redesign, design and construction of a an addition to a historic building to avoid its demolition and replacement with a new building, reduction of the direct impact on a historic property, archeological data recovery prior to construction, or HABS/HAER recordation of a historic property.

Stipulations in a NHPA-MOA may include:

- Measures to avoid, minimize, or mitigate adverse effects on historic properties
- Duration of the agreement
- Post-review discoveries (discovery without prior planning)
- Monitoring and reporting
- Dispute resolution
- Amendments and non-compliance
- Termination

A fully executed NHPA-MOA is signed by IHS, the SHPO/THPO, Indian tribe whose Tribal lands are affected or the undertaking occurs on, and the

ACHP (if ACHP chose to participate in the consultation). Other parties may sign the NHPA-MOA as well, or indicate their knowledge or concurrence of it by being concurring parties. A signatory to the NHPA-MOA may terminate the NHPA-MOA. A fully-executed NHPA-MOA, implementation of its terms, and filing with the ACHP evidence that IHS complied with Section 106 for undertakings adversely affecting historic properties.

Failure to Resolve Adverse Effects (36 CFR §800.7)

If IHS and the consulting parties cannot reach agreement on means to avoid, minimize, or mitigate adverse effects to historic properties, IHS or another party may request the ACHP to join the consultation, if it is not already participating. ACHP, the Tribe, and IHS may conclude the Section 106 process with a NHPA-MOA if the SHPO terminates consultation.

If no agreement is forthcoming, IHS or another party may declare a failure to agree. However, only an IHS official with agency-wide authority can declare a failure to agree. In such case, the ACHP renders advisory comments to the head of IHS, who must consider the comments in making IHS's final decision on the undertaking and document that decision to the ACHP.

If a THPO terminates consultation on an undertaking on or affecting Tribal lands of that tribe, there can be no agreement (NHPA-MOA) on the undertaking. In such cases, ACHP would issue formal comments to IHS. This provision respects the Tribe's unique sovereignty on its lands.

Programmatic Agreements

(36 CFR §800.14(b))

36 CFR 800.14(b) outlines alternative approaches to complying with Section 106. One such alternative approach includes Programmatic Agreements.

Programmatic agreements (PAs) are executed among IHS, ACHP, SHPO/THPO, tribes, and other parties in a process for considering specific historic properties. A PA may provide for a tailored review process to address a given class or type of undertakings which would otherwise require many individual requests for SHPO/THPO review. Under such circumstances, IHS may propose a PA to the ACHP or SHPO/THPO. Thus, a PA promotes efficient and effective program management. [36 CFR 800.14(b)]

Other situations where a PA may be used include:

- When effects on historic properties are similar and repetitive, or are multi-state or regional in scope;
- When effects on historic properties cannot be fully determined prior to approval of an undertaking;
- When nonFederal parties are delegated major decision-making responsibilities;
- Where routine management activities are undertaken at Federal installations, facilities, or other land management units; or
- Where other circumstances warrant a departure from the normal section 106 process.

The development of a PA involves consultation with SHPO/THPOs and Indian tribes and, as appropriate, the National Conference of State Historic Preservation Officers (NCSHPO), other Federal agencies, and members of the public.

The PA takes effect when executed by the ACHP (if participating), IHS, the Tribe or a designated representative of the Tribe, and the appropriate SHPOs/THPOs.

1.3 NAGPRA, NHPA, and Inadvertent Discoveries

IHS is responsible for complying with the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. 3001), and 43 CFR 10 for projects that may advertently discover American Indian human remains, funerary objects, sacred objects, or objects of cultural patrimony on Federal or Indian lands. Additionally, IHS must comply with NAGPRA for the inadvertent discovery of American Indian human remains or objects on Indian or Federal lands. IHS should be aware that there are different notification and

consultation processes for each set of circumstances that are described in detail on the National Park Service website. Links to these procedures follow:

Inadvertent Discoveries on Tribal Lands (www.cr.nps.gov/nagpra/TRAINING/Discovery_Tribal_Lands.pdf)

Inadvertent Discoveries on Federal Lands (www.cr.nps.gov/nagpra/TRAINING/Discovery_Fed__Lands.pdf)

Intentional Excavations on Tribal and Federal Lands (www.cr.nps.gov/nagpra/TRAINING/Intentional_Excavations.pdf)

Priority of Ownership [25 U.S.C. 3002(a)]

Priority of Custody [43 CFR 10.6]

Additionally, under the provisions of NHPA, IHS should plan for possible post-review discoveries of historic properties in its consultations for no adverse effect determinations, NHPA-MOA, or PA.

IHS may inadvertently discover unknown historic properties or unexpected effects to known historic properties, after appropriately complying with Section 106.

In a case of a discovery, IHS should do the following:

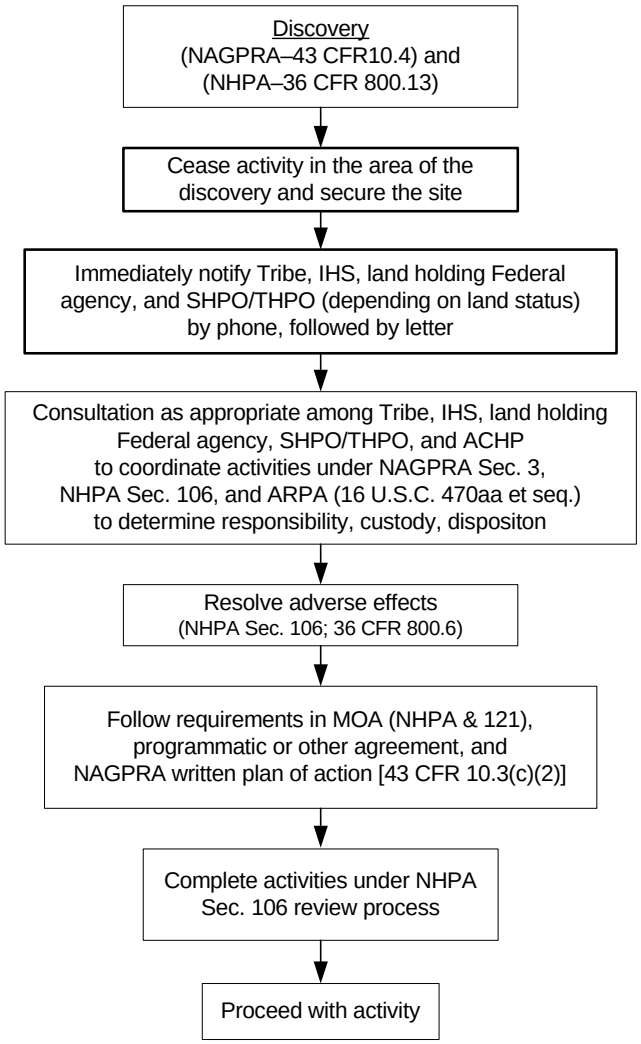
- Immediately cease activity. Protect the area.
- Immediately contact the responsible Tribal official (on Tribal lands) and Indian tribes that may attach religious and cultural significance to the historic property.
- If the discovery involves Native American human remains, funerary objects, sacred objects, objects of cultural patrimony, IHS also should notify Tribal police, BIA police, state troopers and the State Medical Examiner, as appropriate.
- If undertaking has not commenced, consult to resolve adverse effect. If undertaking has commenced, within 48 hours of discovery determine course of action to resolve adverse effects to historic properties in consultation with Indian tribe and provide it to the tribe, SHPO/THPO, and ACHP for 48 hour review. Take into account their recommendations.
- If a NHPA MOA is established, follow the terms of the MOA to complete the project.

During project proposal discussions and prior to construction, IHS should consult with and execute an agreement with the Tribe regarding excavations that may result in inadvertent discovery of human remains in accordance with the NAGPRA and 43 CFR 10.

The project execution document should include a reference to the prepared NHPA-MOA, PA, or other guidance.

If the Tribe is administering construction of the sanitation facilities, through a Tribal contract or force account, it shall assume full responsibility for compliance with 43 CFR Part 10. The IHS remains responsible for complying with the regulations implementing Section 106 of the NHPA regarding post-review discoveries at 36 CFR 800.13.

Figure 1-2. NAGPRA procedures



NOTE:
All Federally funded activities must comply with the discovery procedures in the NHPA wherever the discovery occurs. NAGPRA only applies to Federally funded activities on Tribal or Federal land, unless the Federal agency takes possession or control of the remains or objects.

1.4 Legal Considerations

Historic properties are regulated by many Federal laws and regulations. Some of the major ones are briefly discussed below. It is also important to check with the local SHPO/THPO to see if any state/Tribal laws apply to your specific project.

Federal Laws and Regulations

ACHP—Regulations for the Protection of Historic and Cultural Properties (36 CFR 800)

The ACHP's regulations establish procedures for the implementation of Section 106 of the NHPA (16 USC 470(f)).

American Indian Religious Freedom Act of 1978 (AIRFA) (42 USC 1996, P.L. 95-341 Section 2)

This Act makes it a policy of the government to protect and preserve for American Indians, Eskimos, Aleuts, and Native Hawaiians their freedom to believe, express, and exercise their traditional religions. This Act allows them access to sites, use and possession of sacred objects, and the freedom to worship through ceremonial and traditional right. This Act requires Federal agencies to evaluate its policies and procedures with the aim of protecting the religious freedom of Native Americans. Special provisions were included in the 1992 revisions to the NHPA regulations to ensure that Indian Tribes and Native Hawaiian organizations were provided full opportunity to participate in the review of Federal undertakings under Section 106.

Antiquities Act of 1906 (P.L. 59-209, 16 USC 431-433)

The Act was the first law providing general protection for archaeological resources and authorizing the President to designate as National Monuments historic and natural resources of national significance located on Federally-owned or controlled lands. The Act further provides for the protection of all historic and prehistoric ruins and objects of antiquity located on Federal lands by providing criminal sanctions against excavation, injury, or destruction of such resources. The Secretaries of Interior, Agriculture, and Defense are further authorized to issue permits for archaeological investigation on lands under their control to recognized educational and scientific institutions for the purpose of systematically and professionally gathering data of scientific value. Uniform regulations for implementing the Antiquities Act can be found at 43 CFR Part 3.

Archeological and Historic Preservation Act of 1974 (AHPA) (16 USC 469 et seq., P.L. 93-291)

The AHPA amends the Reservoir Salvage Act of 1960 to extend its provisions beyond the construction of dams to any alteration of the terrain caused as a result of any Federal construction project or Federally-licensed activity or program. This Act requires Federal agencies to notify the Secretary of the Interior whenever their activities may damage or destroy an archeological site. It also requires agencies either to take actions necessary to preserve or recover information from such sites, or to assist the Secretary of the Interior to report annually to Congress on archeological protection and data recovery in the Federal government. The Department of the Interior collects information from other Federal agencies in preparing this report. AHPA is often used as an authority to excavate archeological sites unexpectedly found during construction after Section 106 of NHPA has been complied with. In such cases AHPA authorized the responsible agency to transfer up to one percent of the construction project funding to the Department of the Interior to cover the cost of data recovery.

Archaeological Resource Protection Act of 1979 (ARPA) (16 USC 470aa et seq., P.L. 96-95)

The purpose of the ARPA is to provide protection for archaeological resources found on public lands and Indian lands of the United States. This Act supplements the provisions of the 1906 Antiquities Act. The law makes it illegal to excavate or remove from Federal or Native American lands any archeological resources without a permit from the land manager. Permits may be issued only to educational or scientific institutions, and only if the resulting activities will increase knowledge about archeological resources. Major penalties for violating the law are included to provide for civil and criminal penalties for those who remove or damage archaeological resources in violation of the ARPA. Regulations (43 CFR 7) for the ultimate disposition of materials recovered as a result of permitted activities state that archeological resources excavated on public lands remain the property of the United States. (But under the Native American Graves Protection and Repatriation Act, materials are the property of the culturally affiliated Indian Tribe.) Those excavated from Indian lands remain the property of the Indian or Indian Tribe having rights of ownership over such resources.

Department of the Interior (DOI)—Criteria for Inclusion in the National Register of Historic Places (36 CFR 60.4)

These criteria are used to evaluate whether historic properties will be eligible for inclusion on the NRHP. The evaluation is based on the quality of significance in American history, architecture, archaeology, engineering, and culture that is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, association, and:

- that are associated with events that have made a significant contribution to the broad patterns of our history; or
- that are associated with the lives of persons significant in our past; or
- that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- that have yielded, or may be likely to yield, information important in prehistory or history.

E.O. 13006, Locating Federal Facilities on Historic Properties in our Nation's Central Cities

This Executive Order requires the Federal government to utilize and maintain, wherever operationally appropriate and economically prudent, historic properties and districts, especially those located in our central business areas. When implementing these policies, the Federal government shall institute practices and procedures that are sensible, understandable, and compatible with current authority and that impose the least burden on, and provide the maximum benefit to, society.

E.O. 13007, Indian Sacred Sites

This order addresses the actions Federal agencies must take to (1) accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners, and (2) avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies shall maintain the confidentiality of sacred sites.

Historic Sites Act of 1935 (16 USC 461-467)

This Act establishes as national policy the preservation for public use of historic resources by giving the Secretary of Interior the power to make historic surveys and to document, evaluate, acquire, and preserve archaeological and historic sites across the country. HSA authorizes the establishment of National Historic Sites and otherwise authorizes the preservation of

properties of national historical or archaeological significance. The Act led to the eventual establishment within the National Park Service of the Historic Sites Survey, the Historic American Buildings Survey , and the Historic American Engineering Record, as well as the National Historic Landmarks program. Implementing regulations for the National Historic Landmarks program can be found at 36 CFR 65. HSA also provided for criminal sanctions for violation of regulations pursuant to the HSA.

Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (25 USC 3001, P.L. 101-601)

This Act sets forth rules for intentional excavation and removal of Native American cultural items, including human remains and funerary objects, and for inadvertent discovery of such items on Federal and Tribal lands. The Act requires Federal agencies to inventory collections of human remains and funerary objects in their possession and to provide the culturally affiliated Tribes with an inventory of the collection; requires repatriation on request to the culturally affiliated Tribe; and makes illegal the sale or purchase of Native American human remains found on Federal or Indian lands.

Under NAGPRA, Section 3(d), an agency must stop construction for a mandatory 30-day period in the area surrounding an unanticipated discovery of human remains or other cultural items located on Federal or Tribal lands, and contact the tribe and SHPO/THPO immediately, even if the items found are minor or insignificant.

Native American Graves Protection and Repatriation Act Regulations; Final Rule (43 CFR Part 10)

This final rule establishes definitions and procedures for lineal descendants, Indian Tribes, Native Hawaiian organizations, museums, and Federal agencies to carry out the Native American Graves Protection and Repatriation Act of 1990. These regulations develop a systematic process for determining the rights of lineal descendants, Indian Tribes, and Native Hawaiian organizations to certain Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony with which they are affiliated.

National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, P.L. 95-515)

The NHPA establishes a positive national policy for the preservation of the cultural environment, and sets forth a system of cooperation with other nations and with state and local governments regarding historic properties. It establishes a program of grants-in-aid to state governments for historic preservation activities. Subsequent amendments designated the SHPO or the THPO as the party responsible for administering programs in the states or reservation lands where approved by the Secretary of the Interior to assume the SHPO's functions.

Section 101 prescribes how state, local, and Indian Tribal governments participate in the national historic preservation program, establishes how the National Register of Historic Places is maintained and expanded, and directs the Department of the Interior to promulgate various standards and guidelines, including regulations requiring Federal agencies to place recovered artifacts and their records in institutions that have adequate long-term curatorial capabilities.

Section 106 requires Federal agencies to identify historic properties their actions could affect; determine whether there could be a harmful or adverse effect, and if so, to avoid, minimize, or mitigate the adverse effect. Regulations implementing Section 106, 36 CFR Part 800, requires that Federal agency officials identify and evaluate historic properties, determine the effects of their undertakings, and consult to resolve adverse effects, in consultation with the SHPO/THPO, Indian tribes that may attach religious and cultural significance to affected historic properties, and other consulting parties. Agreed-upon measures to avoid, minimize, or mitigate adverse effects on historic properties are memorialized in a written agreement (NHPA-MOA).

Section 110 (www2.cr.nps.gov/pad/sec110.htm)

Every agency of the Federal government is responsible for pursuing its own mission and mandates in a manner that is also in accordance with NHPA. In particular, Section 110 calls on all Federal agencies to establish—in conjunction with the Secretary of the Interior—their own historic preservation programs for the identification, evaluation, and protection of historic properties. These individual agency programs vary greatly in scope, depending in large measure on the degree to which the agency owns, controls, or affects historic properties.

Section 110(C) of NHPA requires that each Federal agency designate a qualified official to coordinate the agency's preservation activities under NHPA.

The HHS responsible official is:

Deputy Assistant Secretary for Facilities Management and Policy
Office of the Assistant Secretary for Administration and Management
Office of the Secretary
Department of Health and Human Services

The HHS contact is:

Historic Preservation Officer
Department of Health and Human Services
Washington, DC

Specific requirements occur for IHS Health Facilities Construction and Operations Divisions with regard to Section 110. Existing facilities must be evaluated for eligibility for the NHRP.

Section 111 requires Federal agencies to "establish and implement alternatives for historic properties, including adaptive use" before leasing or exchanging historic property. The intent of this section is to "insure the preservation of the historic property."

Section 112 requires a Federal agency's employees or contractors who are responsible for historic resources to meet professional qualification standards developed by the Secretary of the Interior. In addition, records and other data including that produced by research, surveys, and excavations, shall be maintained in permanent databases and made available to authorized users.

Section 304 allows Federal agencies, in consultation with the Secretary of the Interior, to withhold from disclosure to the public information relating to the location or character of historic resources when it is determined that such information would result in a significant violation of privacy, endanger the ability of religious practitioners to exercise their religion, or create a substantial risk of harm, theft, or destruction.

Another regulation of broad applicability is 36 CFR 79, Curation of Federally Owned and Administered Archeological Collections, which sets legally mandated standards for the maintenance of such collections.

Other applicable historic and cultural preservation regulations are 36 CFR 60, National Register of Historic Places; 36 CFR 65, National Historic Landmarks; the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation; and Section 110 Guidelines: Annotated Guidelines for Federal Agency Responsibilities (53 FR 4727-46, Feb. 17, 1988).

Penalties

Many of the laws and regulations listed in the section above provide for criminal/civil penalties should a person or entity adversely affect a historic property. When in doubt, always contact your supervisor and consult with the SHPO and the ACHP.

Case Law

In the 30 years since the passage of the NHPA, court decisions have focused on the application of NHPA to Federal agency projects, programs, and activities. Courts will examine the degree and nature of Federal involvement in a project in order to determine whether an undertaking exists as defined by NHPA. The Federal involvement must be such that the Federal agency has enough control over the project to influence its outcome. Courts increasingly focus on whether the Federal agency approval was a prerequisite to the project or merely a nonbinding recommendation, in

establishing the applicability of NHPA. There is still a difference among the courts as to how to interpret the definition of an "undertaking" in NHPA and the exact nature of the license, approval, permit, or assistance to which it refers. Generally, though, the courts' inquiry focuses on the ability of the Federal agency to influence the project.

When courts find that Federal agencies have a duty to comply with NHPA, they have recognized the value of Section 106 of NHPA as a "stop, look, and listen" procedural provision. Courts often compare NHPA to NEPA and apply the same analysis when rendering opinions on compliance with both statutes, although many courts acknowledge that the threshold for triggering NEPA is higher than NHPA. Courts have required adherence to Section 106 and the Advisory Council on Historic Preservation's implementing regulations in varying degrees. Some courts require strict adherence to the procedures, while others look beyond the Federal agency's procedural flaws and examine the efforts made by the agency to mitigate the effects of the project on the historic property, ruling in favor of Federal agencies if they substantially comply with Section 106 and its implementing regulations. Unless agencies have been arbitrary or capricious, abused their discretion, or otherwise failed to act in accordance with the law, courts tend to uphold the agencies' procedural compliance.

The principles of Section 106 that have evolved over 30 years will continue to guide both the administrative process and judicial interpretation of NHPA. Courts will continue to define the "edges" of the application of Section 106, but it remains to be seen whether the tendency to draw the boundaries conservatively will continue in light of any new regulations.

For additional information on historic properties case law see the ACHP report *Federal Historic Preservation Case Law, 1966-2000* at www.achp.gov/pubs-caselaw.html or contact the local SHPO/THPO.

State, Tribal, and Local Requirements

Federal agencies generally must comply with all Federal environmental statutes and regulations plus all applicable state, Tribal, and local requirements.

1.5 Responsibilities and Requirements

All IHS program, facility, and project managers should:

- Understand that all construction projects require a cultural resource survey (CRS) unless the area of the project has adequate information relevant to the present undertaking based on previous projects.
- Be aware of historic, prehistoric, and Native American sites where you work.
- Ensure you have a list of known historic structures and sites within your area so that you can avoid impacting them.
- Review the proposed undertaking and evaluate the impacts that it might have on historic properties.
- Determine if there is a site nearby that is listed, or eligible for listing on the NRHP.
- If an impact must occur, consult to determine measures to avoid, minimize, or mitigate adverse effects and ensure that the decision makers for the proposal are aware of any measures that need to be taken.
- Participate in consultation, as requested by IHS supervisors.
- If uncertain about the presence of historic properties in the project area, take digital photographs of the site/object, note location, and discuss the sites with the appropriate IHS program, facility, or project manager and the Area NEPA Coordinator.

1.6 Where to Go for Help

When a question arises, the first step is to contact the IHS supervisor and the Area NEPA Coordinator. They can help you initiate a more formal process if needed.

State

For information regarding state historic preservation offices:

www.ncshpo.org/stateinfolist

Tribal

For information regarding Tribal historic preservation offices

www2.cr.nps.gov/Tribal/thpo.htm

www.nathpo.org/map.html

National Association of Tribal Historic Preservation Officers

nathpo.org/

Federal

National Register Information System

For information about whether a site in your area is listed in the *National Register of Historic Places*

www.nr.nps.gov/

Advisory Council on Historic Properties

www.achp.gov

36 CFR 800—Advisory Council on Historic Preservation

www.achp.gov/regs-rev04.pdf

ACHP Policy Statement Regarding ACHP's Relationships with Indian Tribes

www.achp.gov/policystatement-tribes.html

Working with Section 106

www.achp.gov/work106.html

1.7 Definitions/Acronyms

ACHP: Advisory Council on Historic Preservation. The Advisory Council on Historic Preservation (ACHP) is an independent Federal agency that promotes the preservation, enhancement, and productive use of our Nation's historic resources, and advises the President and Congress on national historic preservation policy. The ACHP provides comments pursuant to Section 106 of the NHPA, and its regulations, 36 CFR Part 800, govern the Section 106 process.

AHPA: Archeological and Historic Preservation Act of 1974

AIRFA: American Indian Religious Freedom Act of 1978

APE: Area of Potential Effects. The Area of Potential Effects is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

ARPA: Archeological Resource Protection Act of 1979

CBD: Central Business District. A central business district is an area of very high land valuation characterized by a high concentration of retail businesses, service businesses, offices, theaters, and hotels, and by a very high traffic flow.

Consultation: The process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the section 106 process. The Secretary's "Standards and Guidelines for Federal Agency Preservation Programs pursuant to the National Historic Preservation Act" provide further guidance on consultation.

CRMP: Cultural Resources Management Plan. A management plan, usually written for a specific park or reservation, that seek outlines the management steps that the area will take towards preserving and protecting the onsite historic properties

Effect: Alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register.

Eligible for inclusion in the National Register: This term includes both properties formally determined as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the National Register criteria.

FHPO: Federal Historic Preservation Officer

Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER): Part of the National Park Service, the HABHAER programs documents important architectural, engineering and industrial sites throughout the United States and its territories and provide technical assistance to Federal agencies in preparing this documentation that becomes part of the collections of the Library of Congress.

Historic property: Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian Tribe or Native Hawaiian organization and that meet the National Register criteria.

Indian Tribe: An Indian Tribe, band, nation, or other organized group or community, including a native village, regional corporation, or village corporation, as those terms are defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

Local government: A city, county, parish, township, municipality, borough, or other general-purpose political subdivision of a state.

Memorandum of Agreement (NHPA-MOA): The NHPA document that records the terms and conditions agreed upon to resolve the adverse effects of an undertaking upon historic properties.

NAGPRA: Native American Graves Protection and Repatriation Act of 1990

National Archeological Data Base (NADB): A repository of archeological information.

National Historic Landmark: A historic property that the Secretary of the Interior has designated a National Historic Landmark.

National Register criteria: The criteria established by the Secretary of the Interior for use in evaluating the eligibility of properties for the National Register (36 CFR part 60).

Native Hawaiian: Any individual who is a descendant of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the State of Hawaii.

Native Hawaiian organization: Any organization that serves and represents the interests of Native Hawaiians; has as a primary and stated purpose the provision of services to Native Hawaiians; and has demonstrated expertise in aspects of historic preservation that are significant to Native Hawaiians.

NHPA: National Historic Preservation Act of 1966 (16 USC 470).

NRHP: National Register of Historic Places. Our Nation's official list of historic properties worthy of preservation. Authorized under the NHPA of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The National Park Service administers the National Register.

Programmatic agreement (PA): PAs are executed between IHS, the ACHP, SHPO/THPO, tribes, and other parties usually because the IHS finds that its actions with respect to a given class of undertakings will require many individual requests for SHPO/THPO comment. Under such circumstances IHS suggests to the ACHP, or to a SHPO/THPO, that a PA be developed prescribing a Section 106 review process tailored to a given class of undertakings. [36 CFR 800.14(b)]

SHPO: State Historic Preservation Office. The State Historic Preservation Officer (SHPO) means the official appointed or designated to administer the state historic preservation program or a representative designated to act for the state historic preservation officer.

TCP: Traditional Cultural Property. A tangible historic property with traditional cultural significance that is derived from the role the

property plays in a living community's historically rooted beliefs, customs, and practices. These beliefs, customs, and practices of the community of people have been passed down through the generations, usually orally or through practice. Critical issues related to TCPs include continuity over time, community identity, and traditional use.

THPO: For a tribe that has assumed the responsibilities of the SHPO for section 106 on Tribal lands under section 101(d)(2) of the act, the Tribal Historic Preservation Officer (THPO) appointed or designated in accordance with the act is the official representative for the purposes of section 106. The agency official shall consult with the THPO in lieu of the SHPO regarding undertakings occurring on or affecting historic properties on Tribal lands.

Tribal lands: All lands within the exterior boundaries of any Indian reservation and all dependent Indian communities. Tribal lands include Tribal trust lands, allotted lands, and non-Indian lands. Check the appropriate statute for the exact definition.

Undertaking: A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license or approval; and those subject to state or local regulation administered pursuant to a delegation or approval by a Federal agency.

2.0 Threatened and Endangered Species

2.1 Overview/Introduction

The purpose of the Endangered Species Act (ESA) of 1973 is to protect and recover imperiled species and the ecosystems upon which they depend. The ESA is administered by the Department of the Interior, U.S. Fish and Wildlife Service (USFWS), and the Department of Commerce (DOC), National Marine Fisheries Service (NMFS). The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine species such as salmon and whales. NMFS is part of the DOC's National Oceanic and Atmospheric Administration (NOAA) and is also known as the NOAA Fisheries Service.

All species of plants and animals, except pest insects and non-native species, are eligible for listing as endangered or threatened. For the purposes of the ESA, Congress defined species to include subspecies, varieties, and, for vertebrates, distinct population segments.

The ESA is specifically referenced in NEPA regulations, and IHS's compliance with ESA requirements must be integrated "to the fullest extent possible" with the NEPA process.

Endangered means a species is in danger of extinction throughout all or a significant portion of its range.

Threatened means a species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range

Proposed for listing means any species proposed in the Federal Register to be listed, and for which a comment period for public input into the decision-making process has been established.

Before IHS initiates an action with the potential to impact any species or designated critical habitat, the IHS must obtain all available information regarding the resident threatened and endangered species in or adjacent to the program or project site or action area.

The action area is defined broadly to include all areas directly or indirectly affected by the action, not merely those "in the immediate area involved in the action" (50 CFR §402.02). This information can be obtained through Tribal and applicable state/Federal regulatory agencies. Note that there are some threatened and endangered listings from Tribal agencies that differ from the Federal list - they all must be taken into consideration. If the preliminary information identifies a potential for impact, the IHS must initiate contact with the appropriate regulatory agency.

This means that all IHS activities (including grants and construction projects) must be evaluated for impacts to plant and animal species and their habitats. This evaluation may require consultation with USFWS or NMFS.

Consultation with USFWS/NMFS may be *formal* or *informal*, but the desired end result is that the IHS action either does not adversely impact threatened or endangered (T&E) species, or it includes mitigation. This mitigation must be acceptable to USFWS/NMFS and documented in a Biological Assessment (BA) or Biological Evaluation (BE) that is answered by USFWS/NMFS through a Biological Opinion (BO), for potential impacts to the resources.

If the program activity or project does not affect species or critical habitat, consultation may be brief (e.g., a phone call and a letter). If the program activity or project may adversely impact species and/or critical habitat, consultation may take 6 months or longer, thus possibly impacting the timeline of the program activity or project. Impacts that are not disclosed prior to program activity or project initiation can result in fines and imprisonment of those who knowingly or purposely adversely impact T&E species.

Your responsibilities in preserving T&E species are:

- Comply with the reasonable and prudent measures, terms, and conditions outlined in a biological opinion issued in your area.

- Be aware of threatened and endangered species that might be in the potential project area.
- Participate, as necessary, in the consultation and coordination process for impacts to T&E species to protect your interests.

2.2 Compliance Process

Section 7 of ESA mandates that IHS interact with USFWS/NMFS to ensure that actions it funds, authorizes, permits, or otherwise carries out will not damage the well-being of listed species or their habitats. This interaction occurs through two types of consultation under the Section 7 process: informal and formal. Typically, informal consultation takes place first, unless the impact is known to require formal consultation.

The process follows six steps:

1. Determine presence of listed or proposed species or critical habitats.
2. Receive response from USFWS/NMFS.
3. Determine potential to adversely affect.
4. Request formal consultation, as needed.
5. USFWSW/NMFS completes biological opinion and incidental take statement.
6. IHS reviews and accepts biological opinion.

IHS may participate in the informal and formal consultation process in an information-gathering role. The rest of this section discusses the steps that may happen in consultation with the USFWS or NMFS.

Informal consultation is any discussion, correspondence, phone call, or meeting that occurs prior to either project concurrence by USFWS or NMFS, the initiation of the formal consultation process, or project modification.

Formal consultation is conducted when IHS determines that an action "may affect and is likely to adversely affect" a listed species, its habitat, or designated critical habitat. IHS submits a written request to initiate formal consultation.

Formal consultation accomplishes several things:

- Identifies the nature and extent of the effects of the action.
- Identifies reasonable and prudent alternatives (only mandatory if there is a jeopardy or adverse modification determination).
- Determines if an action is likely to jeopardize a listed species or adversely modify critical habitat.
- Provides an exception for specified levels of "incidental take".
- Provides mandatory reasonable and prudent terms, conditions, and measures to minimize the impacts of incidental take.
- Identifies ways in which IHS can conserve listed species/habitat.
- Provides an administrative record of effects for baseline information.

Any Section 7 project consultation usually starts with informal consultation (see Figure 2-1). If a proposed activity "may affect" a Federally-listed species, IHS may conduct informal consultation with USFWS or NMFS. Informal consultation with USFWS or NMFS may result in an early determination that the proposed activity is not likely to adversely affect the listed species or its habitat; with this determination, no further consultation is needed.

Step #1: Determine Presence of Listed or Proposed Species or Critical Habitats

For every proposed program activity or project, IHS must determine whether the action "may affect" a listed species or its habitat. Where doubt exists, IHS should prepare a written request to the appropriate office of the USFWS or NMFS requesting a determination of whether there are listed or proposed species or critical habitats present in the area. The location and type of activity and a map of the planning area

for each program or project should be included with the letters to the USFWS or NMFS, as appropriate. A sample species list is shown Appendix A of this section.

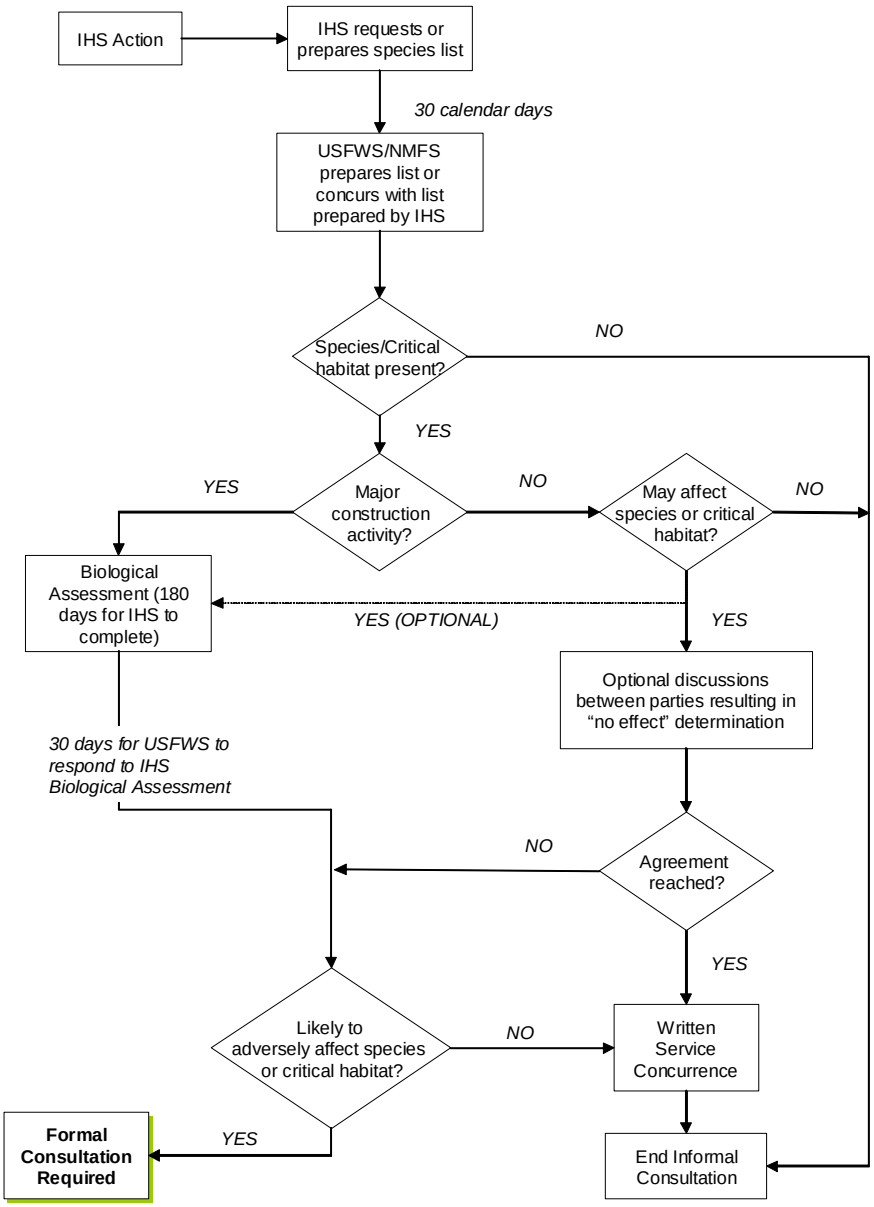


Figure 2-1. Informal Consultation Steps for Threatened and Endangered Species

Informal consultation ends when the Federal agency determines that the action would have no effect on listed species or critical habitat.

Maintaining familiarity with potentially affected species may be useful to help expedite the consultation process.

IHS staff should become familiar with the species recovery plans that are applicable to the proposed area. This will help IHS staff working on Section 7 actions to ensure that alternatives or measures developed through the consultation process are consistent with recovery plan goals. USFWS/NMFS often uses the typical rules set forth in the recovery plans as the Terms and Conditions in their Biological Opinions.

Step #2: Receive Response from USFWS/NMFS

The USFWS or NMFS usually responds within 30 days of receipt of such a request. If the USFWS or NMFS determines that no listed or proposed species are present in the action area, no further consultation with these agencies is required and the review is complete.

If listed or proposed species or critical habitats are present, a determination on whether the IHS action "may effect" the species or habitats is required. A determination of "no effect" completes the review process. A determination of "may effect" requires continued informal consultation with USFWS or NMFS.

Step #3: Determine Potential to Adversely Affect

Following a determination of "may affect", the IHS must then make a determination on "likely to adversely affect." If there are listed species or critical habitats are present in the action area, and the action is a ground-disturbing activity, including placement of temporary buildings, the IHS program, facility, or project manager is then responsible for summarizing existing information or gathering new data in order to produce a biological assessment (BA). The purpose of the BA is to determine whether the action is, or is not, likely to adversely affect listed species or critical habitat. The BA should address potential impacts to all listed and proposed species and habitats found in the area, not just those that might be directly affected.

For assistance in determining whether a BA is necessary, consult with the appropriate agency personnel (IHS Area NEPA Coordinator or USFWS or NMFS personnel).

IHS must complete the BA within 180 days after receipt of the species list, because the list expires in 180 days. Under law, the IHS must use the "best scientific and commercial data available" in completing the BA. Most likely, the IHS program will have to contract with a consultant to write the BA, since that expertise does not exist within the agency. The cost for a BA should be a consideration during the planning or grant review phase for the activity, action, or undertaking.

The USFWS and NMFS have developed a document, "Endangered Species Consultation Handbook, Procedures for Conducting Consultation and Conference Activities under Section 7 of the Endangered Species Act" to guide agencies in preparing a BA.

Although no specific contents are prescribed for a BA, they usually contain at least the following:

- A complete list of the Federal and Tribal threatened and endangered species in the area that may be impacted by the program activity or project. This includes proposed species, candidate species, and species of concern.
- Results of field studies and/or on-site surveys of the area affected by the action.
- The views of biologists and other recognized experts on the species at issue.
- A review of the literature, including results of any related studies.
- Analysis of the effects of the action on the species and the habitat, including cumulative effects.
- Analysis of alternate actions considered by the IHS for the proposed action.

If IHS determines (and USFWS/NMFS agrees) that the project is not “likely to adversely affect” any listed species, then the consultation is concluded and IHS puts the decision in writing. If IHS determines that the action is "likely to adversely affect" or if USFWS/NMFS does not concur in writing with a “not likely to adversely effect" determination; initiation of Section 7 formal consultation with the USFWS/NMFS is required.

USFWS/ NMFS have 30 days after receipt of the BA to determine if data are missing. Then they have 90 days after accepting complete data to comment on the BA.

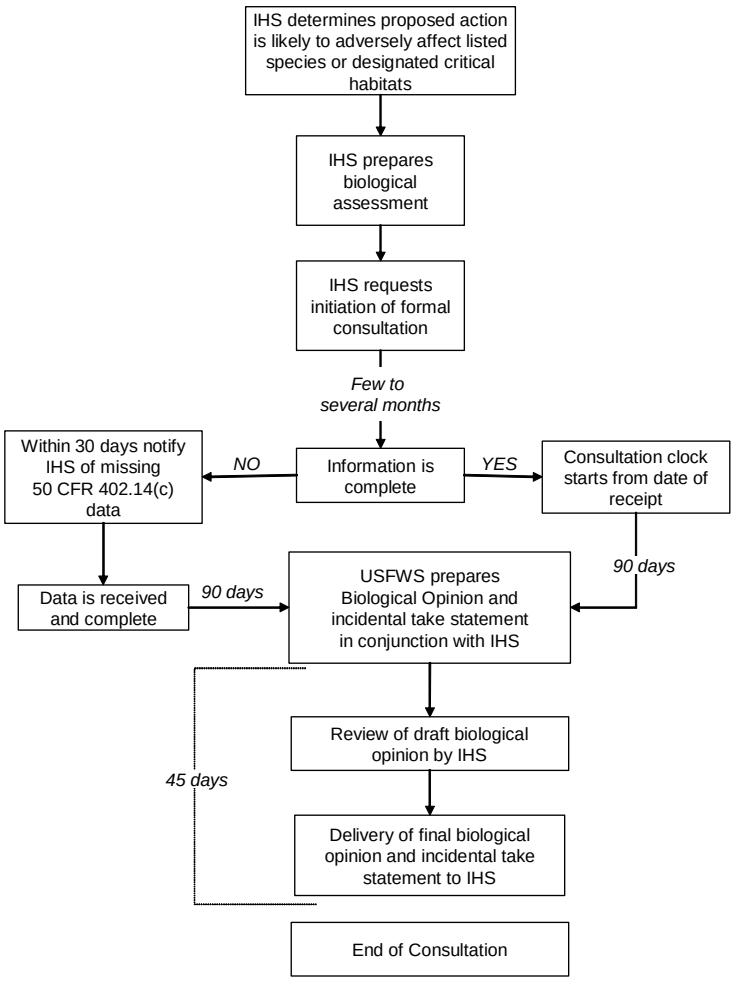


Figure 2-2. Flowchart of the Formal Consultation Process.

Step #4: Request Formal Consultation

IHS initiates formal consultation by requesting a biological opinion (BO) from the appropriate agency. The request must include a copy of the EA (if completed), previous BA, and any additional information on the proposed program activity or project and alternatives. The full process for formal consultation is included in Figure 2-2.

Step #5: USFWS/NMFS Completes Biological Opinion and Incidental Take Statement

USFWS/NMFS will use the information in the BA to create a BO. When all information is complete, USFWS/NMFS has 90 days to formulate the BO and incidental take statement. The BO is a document that states whether the program activity or project is likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of critical habitat. If a "jeopardy" or "adverse modification" determination is made, the USFWS/NMFS must identify any reasonable and prudent alternatives that could allow the project to move forward.

Section 7 regulations (50 CFR §402.02) limit reasonable and prudent alternatives to:

- Alternatives that USFWS/NMFS believes will avoid the likelihood of jeopardy or adverse modification.
- Alternatives that can be implemented in a manner consistent with the intended purpose of the action.
- Alternatives that can be implemented consistent with the scope of IHS's legal authority and jurisdiction.
- Alternatives that are economically and technologically feasible.

The USFWS or NMFS can issue an ***incidental take permit*** when IHS activities result in a take of a protected species. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity".

The incidental take statement provides an exemption from the take prohibitions of Section 9 only when IHS demonstrates clear compliance with the implementing terms and conditions. It is issued when the action may result in some take of individual members of a species without causing jeopardy or adverse modification of critical habitat. These terms and conditions implement reasonable and prudent measures designed to minimize the impact of incidental take on the species as described in the incidental take statement, and are binding on IHS.

In issuing an incidental take statement, the USFWS/NMFS provides a statement of anticipated incidental take with reasonable and prudent measures to minimize such take. To be considered in an incidental take statement, any taking associated with the IHS action must meet the following three criteria. The taking must:

- Not be likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat.
- Result from an otherwise lawful activity.
- Be incidental to the purpose of the action.

When the consultation involves listed plants, IHS is advised that ESA does not prohibit incidental take of these species. However, cautions may be provided.

Step #6: IHS Reviews and Accepts the Biological Opinion

Once the biological opinion or draft biological opinion is delivered, IHS has 45 days to review the draft opinion and then accept the opinion or amend the project in a manner acceptable to both IHS and USFWS/NMFS. This ends the formal consultation process.

If a jeopardy opinion is given, IHS may apply for an exemption from the ESA. If an exemption is granted, IHS will be required to finance mitigation and enhancement measures. However, exemptions from the ESA are rarely granted. Failure to resolve the jeopardy opinion may prohibit implementation of the action.

Re-initiation of Consultation

Because ESA contains continuing obligations for the IHS—and, in some cases, the Tribe—the formal consultation process may be re-initiated. Either USFWS/NMFS or IHS begins re-initiation when IHS actions trigger one of the four general conditions for re-initiation:

- The amount or extent of incidental take is exceeded.
- New information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered.
- The action is modified in a manner causing effects to listed species or critical habitat not previously considered.
- A new species is listed or critical habitat designated that may be affected by the action.

Consultation Timelines

Informal consultation does not have set time limits.

Formal consultation, however, must be concluded within 90 calendar days of initiation, and the biological opinion must be delivered to the IHS within 45 days after the conclusion of formal consultation (for a possible total of 135 days). USFWS/NMFS strives to issue all biological opinions within the 90-day period; however, the Services may use the additional 45 days when circumstances warrant.

Formal consultation is "initiated" on the date the request is received, if IHS provides all the relevant data required by 50 CFR §402.14(c).

Within 30 working days of receipt of an initiation package, the USFWS/NMFS acknowledges, in writing, the consultation request, advises the IHS of any data deficiencies, and requests either the missing data or a written statement that the data are not available. This acknowledgement process is optional, but it is highly recommended that either a letter or phone conversation record be placed in the administrative record to document the actual initiation date, particularly if the need to acquire additional data extends the consultation time beyond 90 days from the initial request.

During the initial 90-day formal consultation period, the USFWS/NMFS should meet or communicate with IHS to gather any additional information necessary to conduct the consultation. The 90-day period will be used by the USFWS/NMFS to:

- Assess the status of the species and/or critical habitat involved.
- Verify the scope of the proposed action, which includes identifying the area likely to be affected directly and indirectly by the proposed action, and cumulative effects.
- Identify adverse effects likely to result in jeopardy to the species and/or adverse modification of critical habitat.
- Develop reasonable and prudent alternatives to an action likely to result in jeopardy or adverse modification.
- Identify adverse effects not likely to jeopardize listed species, but which constitute a "take" pursuant to Section 9 of ESA.
- Develop reasonable and prudent measures, and terms and conditions for the incidental take statement as appropriate.
- Identify conservation recommendations, as appropriate.

USFWS/NMFS ensures the BO, including an incidental take statement, is prepared and delivered within 135 days of initiation of formal consultation. The consultation timeframe cannot be "suspended." If the USFWS/NMFS need more time to analyze the data or prepare the final opinion, or IHS needs time to provide data or review a draft opinion, an extension may be requested by either party. Both USFWS/NMFS and IHS must agree to the extension. Extensions should not be indefinite, and should specify a schedule for completing the consultation.

No final BO will be issued before the 135th day if IHS is still reviewing the draft. Once USFWS/NMFS receive comments on the draft, the BO is finalized and delivered to IHS. If comments on the draft opinion result in major changes or clarifications, an extension may be sought.

If the USFWS/NMFS has not received IHS' comments by the 125th day, the Services will check with IHS (by telephone or in writing) to negotiate an extension. If the Services receive IHS comments less than 10 calendar days before the end of the established deadline of 135 days

or as otherwise established by an agreed upon extension, then the Services are automatically entitled to a 10 calendar day extension of that deadline to deliver the opinion (50 CFR §402.14 (g)(5)).

2.3 Legal Considerations

Endangered Species Act of 1973 (P.L. 93-205)

Congress enacted the Endangered Species Act of 1973 (ESA) to protect endangered and threatened species and to provide a means to conserve their ecosystems.

Specifically, all Federal agencies must utilize their authorities to conserve plant and animal species listed as threatened or endangered by U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), and ensure their actions do not jeopardize the continued existence of listed species. All species of plants and animals, except pest insects, are eligible for listing as endangered and threatened.

The main sections of ESA are sections 4, 6, 7, 9, and 10, as follows:

Section 7 Interagency Cooperation outlines the procedures for interagency cooperation to ensure that IHS's actions are not likely to jeopardize the continued existence of listed species or result in destruction or adverse modification of critical habitats.

Section 9 Prohibited Acts prohibits any person subject to the jurisdiction of the U.S. from importing, exporting, selling, transporting, possessing, or taking endangered species within the U.S. or the territorial seas of the U.S. where "take" is defined as: *harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct*.

Section 10 Exceptions provides for designation of experimental populations of listed species that could be subject to different treatment under Section 4, for critical habitat, and Section 7.

USFWS and NMFS are the "gatekeepers" of ESA, ensuring that Federal agencies plan or modify projects to have minimal impact on listed species and their habitat.

Penalties

ESA is a substantive environmental law and carries with it both civil and criminal penalties for non-compliance:

Civil Penalties: Any person who knowingly violates, and any person engaged in business as an importer or exporter of fish, wildlife, or plants who violates, any provision of ESA may be assessed a civil penalty by the USFWS of not more than $25,000 for each violation.

Criminal Violations: Any person who knowingly violates any provision of ESA shall, upon conviction, be fined not more than $50,000 or imprisoned for not more than one year, or both. Any person who knowingly violates any provision of any other regulation issued under ESA shall, upon conviction, be fined not more than $25,000 or imprisoned for not more than six months, or both.

The ESA is not the only law to protect species. Other laws include:

- The Marine Mammal Protection Act
- The Migratory Bird Treaty Act
- The Anadromous Fish Conservation Act
- The Lacey Act

Magnuson-Stevens Act (16 U.S.C. 1855(b))

Each Federal agency shall consult with the Secretary with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any essential fish habitat (EFH) identified under the Act.

The consultation requirements of §305(b) of the Magnuson-Stevens Act (16 USC §1855(b)) provide that:

- Federal agencies must consult with the Secretary on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH;

- The Secretary shall provide recommendations to Federal or state agencies to conserve EFH for activities that would adversely affect EFH.
- The Federal action agency must provide a detailed response in writing to NMFS and the appropriate Regional Fishery Management Council within 30 days after receiving an EFH conservation recommendation (or at least 10 days prior to final approval of the action, if a decision by the Federal agency is required in less than 30 days). The response must include a description of measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on EFH. In the case of a response that is inconsistent with the recommendations of NMFS, the Federal agency must explain its reasons for not following the recommendations, including the scientific justification for any disagreements with NMFS over the anticipated effects of the proposed action and the measures needed to avoid, minimize, mitigate, or offset such effects. State agencies are not required to respond to EFH conservation recommendations.

EFH Regulations

In 1976, the Magnuson Fishery Conservation and Management Act established a management system to more effectively utilize the marine fishery resources of the U.S. It established eight Regional Fishery Management Councils (Councils), consisting of representatives with expertise in marine or anadromous fisheries from the constituent states.

Regulations for implementing the EFH coordination and consultation provisions of the MSFCMA are at 50 CFR 600.905–930, beginning at 50 CFR 600.920, Federal agency consultation with the Secretary. Pursuant to section 305(b)(2) of the Magnuson-Stevens Act, Federal agencies must consult with NMFS regarding any of their actions authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken that may adversely affect EFH. These regulations provide definitions, procedures for using existing consultation processes, procedures for conducting individual EFH consultation when an existing process is not available, and alternatives to individual EFH consultation. The EFH regulations also address coordination with the Fishery Management Councils, NMFS EFH conservation recommendations to Federal and state agencies, and Council comments and recommendations to Federal and state agencies.

2.4 Responsibilities and Requirements

IHS personnel have the following responsibilities with respect to T&E species:

- Support the IHS' affirmative obligation to conserve species.
- Communicate with management and environmental staff early in the project or program proposal and design phases.
- Be aware of threatened and endangered species that might be in the potential project area.
- Participate, as necessary, in the consultation and coordination process for impacts to T&E species.
- Comply with the reasonable and prudent measures outlined in a biological opinion issued in your area.
- Abide by permit requirements.

2.5 Where to Go for Help

Current understanding of ESA

endangered.fws.gov/policies/index.html

National Marine Fisheries Services – NOAA Fisheries – Endangered Species

Sustainable Fisheries Act:

www.nmfs.noaa.gov/sfa/

The Endangered Species Program: endangered.fws.gov/

Endangered Species Listing: endangered.fws.gov/wildlife.html#Species

Consultations with Federal Agencies: endangered.fws.gov/consultations/index.html

The ESA Consultation Handbook: endangered.fws.gov/consultations/s7hndbk/s7hndbk.htm

2.6 Definitions

BA: Biological Assessment

Biodiversity: The variety of life and its processes, including the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur.

Biological assessment: A document prepared for the Section 7 process to determine whether a proposed major construction activity under the authority of a Federal action agency is likely to adversely affect listed species, proposed species, or designated critical habitat.

Biological opinion: A document that is the product of formal consultation, stating the opinion of the Service on whether or not a Federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

BO: Biological Opinion

Candidate species: Plants and animals that have been studied and the Service has concluded that they should be proposed for addition to the Federal endangered and threatened species list. These species have formerly been referred to as category 1 candidate species. From the February 28, 1996 Federal Register, page 7597: "those species for which the Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposed rule to list but issuance of the proposed rule is precluded."

CITES: Convention on International Trade in Endangered Species. The 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora, restricting international commerce between participating nations for plant and animal species believed to be harmed by trade.

Conservation: From section 3(3) of the Federal Endangered Species Act: "The terms "conserve," "conserving," and "conservation" mean to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided under this Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transportation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking."

Conserve: Carrying out actions to improve the health of a species so it no longer needs to be listed as threatened or endangered.

Consultation: All Federal agencies must consult with the U.S. Fish and Wildlife Service (or National Marine Fisheries Service) when any activity permitted, funded, or conducted by that agency may affect a listed species or designated critical habitat, or is likely to jeopardize proposed species or adversely modify proposed critical habitat. There are two stages of consultation: informal and formal.

Critical habitat: Specific geographic areas, whether occupied by listed species or not, that are determined to be essential for the conservation and management of listed species, and that have been formally described in the Federal Register.

Ecosystem: Dynamic and interrelating complex of plant and animal communities and their associated nonliving (e.g. physical and chemical) environment.

Ecosystem Approach: Protecting or restoring the function, structure, and species composition of an ecosystem, recognizing that all components are interrelated.

Endangered: The classification provided to an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.

ESA: Endangered Species Act of 1973, as amended: Federal legislation intended to provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, and provide programs for the conservation of those species, thus preventing extinction of native plants and animals.

Endangered species permit: A document issued by the Service under authority of Section 10 allowing an action otherwise prohibited under Section 9 of the Endangered Species Act.

Federal action agency: Any department or agency of the United States proposing to authorize, fund, or carry out an action under existing authorities.

Formal consultation: The consultation process conducted when a Federal agency determines its action may affect a listed species or its critical habitat, and is used to determine whether the proposed action may jeopardize the continued existence of listed species or adversely modify critical habitat. This determination is stated in the Service's biological opinion.

Habitat: The location where a particular taxon of plant or animal lives and its surroundings (both living and nonliving) and includes the presence of a group of particular environmental conditions surrounding an organism including air, water, soil, mineral elements, moisture, temperature, and topography.

Habitat Conservation Plan (HCP): A plan that outlines ways of maintaining, enhancing, and protecting a given habitat type needed to protect species. The plan usually includes measures to minimize impacts, and might include provisions for permanently protecting land, restoring habitat, and relocating plants or animals to another area. An HCP is required before an incidental take permit may be issued.

Harm: An act which actually kills or injures wildlife. Such acts may include significant habitat modification or degradation when it actually kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering.

Incidental take: Take that results from, but is not the purpose of, carrying out an otherwise lawful activity.

Incidental take permit: A permit issued under Section 10 of the Federal Endangered Species Act to private parties undertaking otherwise lawful projects that might result in the take of an endangered or threatened species. Application for an incidental take permit is subject to certain requirements, including preparation by the permit applicant of a conservation plan, generally known as a "Habitat Conservation Plan" or "HCP."

Incidental take statement: A term referring to that part of a biological opinion that exempts incidental take of a listed species from the Section 9 prohibitions.

Informal consultation: Informal consultation precedes formal consultation and includes any form of communication between the Federal action agency, applicant, or designated non-Federal representative and the Service to determine if listed species may occur in the action area and what the effects of the action may be to such species. This phase is often used to develop project modifications or alternatives to avoid adverse effects to listed species, which would then preclude the need for formal consultation.

Jeopardy biological opinion: A Service Section 7 biological opinion that determines that a Federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

Lead region: The Fish and Wildlife Service Region that is responsible for coordinating all actions taken to study, propose, list, conserve, and delist a species.

Listed species: A species, subspecies, or distinct vertebrate population segment that has been added to the Federal lists of Endangered and Threatened Wildlife and Plants as they appear in sections 17.11 and 17.12 of Title 50 of the Code of Federal Regulations (50 CFR 17.11 and 17.12).

Listing: The formal process through which the Service adds species to the Federal List of Endangered and Threatened Wildlife and Plants.

Major construction activity: A construction project (or other undertaking having similar physical effects) which is a major Federal action significantly affecting the quality of the human environment as referred to in NEPA. [50 CFR §402.02] Major construction activities include dams, buildings, pipelines, roads, water resource developments, channel improvements, and other such projects that modify the physical environment and that constitute major Federal actions.

May affect: Any possible affect whether beneficial, adverse, or of an undetermined character.

NMFS: National Marine Fisheries Service

No jeopardy biological opinion: A Service Section 7 biological opinion that determines that a Federal action is not likely to jeopardize the existence of a listed species or result in the destruction or adverse modification of critical habitat.

NOAA: National Oceanic and Atmospheric Administration

Proposed species: Any species of fish, wildlife, or plant that is proposed in the Federal Register to be listed under Section 4 of the Endangered Species Act.

Range - The geographic area a species is known or believed to occupy.

Recovery: The process by which the decline of an endangered or threatened species is arrested or reversed, or threats to its survival neutralized so that its long-term survival in nature can be ensured.

Recovery outline: The first Service recovery document provided for a listed species. While very brief, the document serves to direct recovery efforts pending the completion of the species' recovery plan.

Recovery permit: Permits issued under Section 10(a)(1)(A) of the Federal Endangered Species Act for scientific research and other activities benefiting the recovery of Federally-listed species.

Recovery plan: A document drafted by the Service or other knowledgeable individual or group, that serves as a guide for activities to be undertaken by Federal, state, or private entities in helping to recover and conserve endangered or threatened species.

Scientific take permit: A type of recovery permit authorized under Section 10 allowing for research pertaining to species recovery such as taking blood samples from a peregrine falcon for genetic analysis, or conducting surveys of freshwater mussel beds to determine species status and distribution.

Service: Refers to USFWS or NMFS depending on the agency with jurisdiction of the ESA related activities for an action, program, or project.

Species: From Section 3(15) of the Federal Endangered Species Act: "The term 'species' includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." A population of individuals that are more or less alike, and that are able to breed and produce fertile offspring under natural conditions.

Take: From Section 3(18) of the Federal Endangered Species Act: "The term 'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

Threatened: The classification given to an animal or plant likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

USFWS: US Fish and Wildlife Service

Appendix A: Sample of a Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
C/o CCSU, Campus Box 338
6300 Ocean Drive
Corpus Christi, Texas 78412

(date)

Consultation No: x-xx-xx-x-xxx

Dear _____:

This responds to your letter dated _____, regarding the effects of the proposed replacement of sections of pipe on species Federally listed, proposed for Federal listing, and candidate species occurring in Goliad County, Texas. In addition, your project was evaluated with respect to wetlands and other important fish and wildlife habitat.

It is our understanding that the proposed project would involve the replacement of five (5) sections of 6" pipe totaling 119 feet. Associated construction activities would be within the existing right-of-way located in the Cabeza Creek Field. This project is intended to maintain efficient operations of United's pipeline system.

Our data indicates that the following species and critical habitat may occur in the project area.

(1) Listed species
Attwater's prairie chicken (*Tympanuchus cupido attwateri*)—E
bald eagle (*Haliaeetus leucocephalus*)—E

(2) Proposed species
(give common name, scientific name, and status - PE or PT)

(3) Candidate species
(give common name and scientific name of species)

(4) Designated critical habitat for
(give common name and scientific name of species)

(5) Proposed critical habitat for
(give common name and scientific name of species)

Our data indicate that Federally listed species, proposed species, candidate species, and designated and proposed critical habitat are not likely to be impacted by the proposed project action. With respect to wetlands and other important fish and wildlife habitat, it appears that the proposed action will not significantly impact these resources. If project plans change or portions of the proposed project were not evaluated, it is our recommendation that the changes be submitted for our review. If you require additional information, please contact____(name)_____ of this office at _____(phone)_____.

Sincerely yours,

Field Supervisor

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3.0 Water Resources

This section discusses the following:

Clean Water Act:

- Wetlands
- Wastewater discharges
- Storm water discharges

Rivers and Harbors Act

- Section 9 and Section 10 Permits

Safe Drinking Water Act:

- Sole Source Aquifers

3.1 Overview/Introduction

The Clean Water Act (CWA), enacted in 1972, amended in 1977, and last updated in 1987, is the primary Federal legislation that protects the water resources of the United States (U.S.), such as lakes, rivers, coastal areas, wetlands, and playa lakes.

Specifically, CWA regulates the “waters of the U.S.” which includes (40 CFR 122.2):

(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) All interstate waters, including interstate "wetlands;"

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) Which are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as waters of the United States under this definition;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) The territorial sea; and

(g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

The term "navigable water" is defined in the CWA as "all waters of the United States."

The Federal courts including the Supreme Court have further refined the definition of navigable water and waters of the U.S. to include:

Arroyos, or creek beds that carry water on an extremely infrequent intermittent basis may be jurisdictional if they support wildlife or are hydrologically connected to an interstate watercourse or waters affecting commerce. [Quivira Mining Co. v. United States Envtl. Prot. Agency, 765 F.2d 126 (10th Cir. 1985), cert. denied, 474 U.S. 1055 (1986)]

The CWA seeks to restore and maintain the chemical, physical, and biological integrity of the nation's waters and provide for the protection and propagation of fish, shellfish, and wildlife, and for recreation in and on the water. The CWA contains four important principles:

- The discharge of pollutants to navigable waters is not a right.
- A discharge permit is required to use public resources for waste disposal and limits the amount of pollutants from any individual discharge.
- Wastewater must be treated with the best available technology economically achievable-regardless of the condition of the receiving water.
- Water pollution limits must be based on treatment technology performance, but more stringent limits may be imposed if the technology-based limits do not prevent

violations of water quality standards in the receiving water.

The Environmental Protection Agency (EPA), the U.S. Army Corps of Engineers (USACE) and the states administer the various sections of the CWA. On Indian reservations, the EPA administers Federal environmental laws and works with the USACE to administer and enforce applicable sections of the CWA. Court decisions, differences in state laws and in interpretation of regulations by Federal agency regional offices and other factors, impact how regulatory agencies implement the permit programs from state to state.

Close and early coordination with state and Federal regulatory agencies throughout the planning process can prevent significant delays in processing the permit application. For those environmental laws that authorize it, the EPA can and has delegated part of the CWA program administration to some Indian tribes.

The water resource requirements that IHS is most likely to encounter are summarized below:

CWA Section 401 Certification: The Section 401 certification signifies that the EPA regional office and the Tribe have reviewed and approved, conditioned, or denied all Federal permits or licenses that might result in a discharge to state or Tribal waters.

CWA Section 402 (NPDES) Permit: This section manages the National Pollutant Discharge Elimination System (NPDES) program and the Storm Water Program. If a facility will potentially discharge to a regulated body of water, the IHS will assist the Tribe in obtaining the necessary permits. The permits limit the amount of pollutants that can enter waters of the United States.

Storm Water: The CWA requires **operators** of construction sites to obtain permit coverage to discharge storm water to a water body or to a municipal storm sewer. The EPA has issued a general permit for storm water discharges from construction sites**,** which includes sites on Tribal lands. Activities that may require coverage under a Storm Water Permit include:

- Clearing and grubbing
- Grading
- Excavating and filling
- Road and bridge building
- Installing infrastructure

CWA Section 404 Permit: For any project that affects a wetland or that may deposit dredged or fill material into (including excavating in or near) the waters of the United States, a 404 permit application to the USACE is required.

Rivers and Harbors Act, Section 9 Permit: A Section 9 permit is required for construction of bridges, dikes, and dams. Permits for bridge construction are handled by the U.S. Coast Guard and permits for dikes and dams are handled by the USACE.

Rivers and Harbors Act, Section 10 Permit: A Section 10 permit regulates the obstruction of navigable waters. Section 10 permits are handled by the USACE.

Impacts to wetlands: In addition to Section 404, Executive Order 11990 helps to protect wetlands by requiring Federal agencies to consider how their activities may affect wetlands. Wetlands regulation are under the jurisdiction of the USACE. Most projects involving impacts to wetlands require coordination with USACE.

Drinking water protection (Safe Drinking Water Act): Special care must be taken to protect aquifers that the EPA has designated as sole-source aquifers (SSA). EPA defines a designated sole or principal source aquifer as one which supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas can have no alternative drinking water source(s) which could physically, legally, and economically supply all those who depend upon the aquifer for drinking water. For convenience, all designated sole or principal source aquifers are referred to as "sole source aquifers" (SSA).

Once a sole source aquifer is designated, no commitments of Federal financial assistance may be made to projects which the Administrator determines may contaminate the aquifer so as to create a significant hazard to public health. If a project has the potential to contaminate a designated SSA, consult with the EPA.

The SDWA includes a wellhead protection program. If a project may impact a wellhead protection area, consult with the EPA.

Floodplains (EO11988 Floodplain Management): Directs Federal agencies to consider how their activities will affect floodplains. Floodplains and wetlands are often addressed together in a NEPA document. Floodplains are discussed in Section 4.0 of this manual.

3.2 The Water Resources Compliance Process

Compliance responsibilities for water resources are summarized in five steps (Figure 3-1). The HHS GAM 30 states that the Secretary, HHS, must approve any new construction in wetlands.

1. Will the project discharge dredged or fill materials into waters of the U.S., including wetlands?
2. Will the project discharge wastewater or storm water into waters of the U.S.?
3. Does the project include a bridge or obstruction of the waters of the U.S.?
4. Does the project include wells in a sole source aquifer?
5. Add appropriate information to the NEPA document.

Step #1: Will the Project Discharge Dredged or Fill Materials into Waters of the U.S., Including Wetlands?

Any project that affects either wetlands or seeks to place or dump dredged or fill materials into waters of the U.S. must receive a Section 401 certification from the state, Tribe, or EPA and a Section 404 permit from the USACE. For activities affecting wetlands, actions must be taken to avoid or minimize potential impacts.

Projects that could affect waters of the U.S. may include the following:

- Fills for development
- Water resource projects
- Infrastructure development
- Conversion or modification of wetlands
- Mechanized land clearing and leveling
- Stream and ditch work (bank stabilization, stream realignment)
- Road and bridge construction

Section 401 Description

Under Section 401 of the CWA, the EPA (and where appropriate, states and Tribes) can review and approve, condition, or deny all Federal permits or licenses that might result in a discharge to regulated waters. The EPA must certify that the activity generating the discharge to state or Tribal waters will comply with water quality standards that must be equal to or more stringent than those established in Section 303 of CWA.

If the project:

- Requires a Federal permit (most likely a nationwide or individual Section 404 permit), and
- Has the potential to affect state or Tribe water, where a state or Tribe has jurisdiction.

then you will need to receive Section 401 certification.

No license or permit will be granted and the program activity or project cannot be started until the Section 401 certification has been obtained or has been waived by the regulatory agency.

Section 401 Compliance Process

The Section 401 compliance process is initiated with a call to the local water regulatory agency, whether it is a state, Tribe, or EPA region. The agency will ask for project information, usually presented in a letter asking for a consistency review along with appropriate draft environmental document(s).

The agency will make a determination based on this information and consistency may be granted, or the agency may require mitigation measure to be implemented in order to decrease the impacts to water resources.

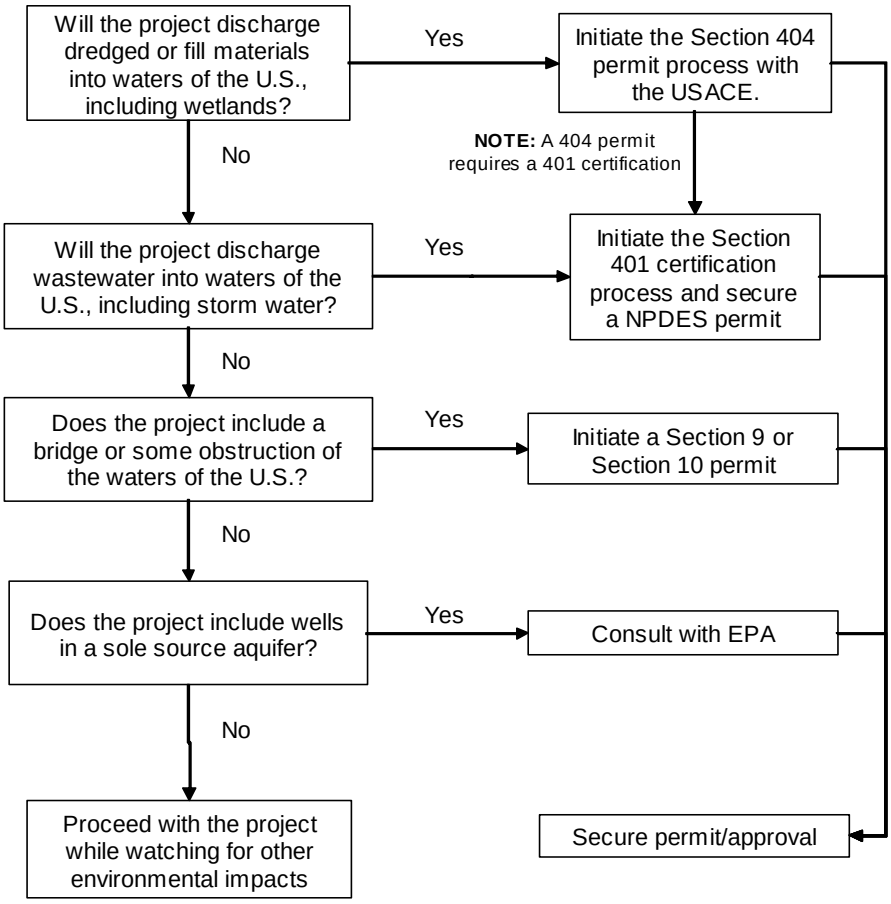

Figure 3-1. Water Resources Compliance Flowchart.

Section 404 Description

There are two main groups of Section 404 permits.

- General Permits
- Individual Permits

Most activities conducted by IHS would fall under the General Permit category.

General Permits are issued on a nationwide or regional basis for a category of activities that are similar in nature and cause only minor individual or cumulative effects.

Nationwide Permits (NWPs) are the most common General Permit issued by USACE Headquarters and can be used nationally if the parameters of the project fall within the NWP definition. These activities are typically minor in scope and result in no more than minimal adverse impacts both individually and cumulatively (usually affecting less than 0.5 acre). If the conditions cannot be met, a regional general permit or individual permit will be required.

NWPs typically require prior compliance with other environmental laws such as ESA, NHPA, and the Wild and Scenic Rivers Act. When NWPs are concurrent with NEPA, the NEPA analysis will cover the requirements of the NWP General Conditions.

NWPs typically take only a few months for processing, and are the most common permits applied for and issued.

Regional General Permits are issued by the USACE District Engineer for a general category of activities when the regional permit can reduce duplication of regulatory control by state and Federal agencies.

Programmatic General Permits are based on an existing state, local, or other Federal agency program. These permits are designed to avoid duplication.

Individual Permits

An individual permit is issued following an individual evaluation of the proposed activity and a determination that the activity is not contrary to the public interest. A Section 401 certification may also be required. This permit may take up to one year to process.

Standard Permits are the most complex to obtain because they cover projects that will result in potentially significant impacts. An individual permit may take 6–9 months or longer to process. For the most complex or controversial projects, special conditions of the permit may include mitigation activities that need to be monitored for 2–3 years.

Letters of Permission are issued through an abbreviated procedure that involves coordination with Federal and state agencies and a public interest evaluation. A public notice for comments is required for letters of permission.

Section 404 Compliance Process

The Section 404 compliance process may be included as part of the NEPA process. The Section 404 process involves six steps:

Pre-Application: Discuss the project with the USACE in order to identify opportunities to minimize and mitigate project impacts.

Application: Fill out a standard form.

Public Input: The USACE will issue a public notice of the proposed permit and solicit public comments for 15-30 days, depending on the proposed activity. Certain permits require a public hearing and/or coordination with other Federal agencies (such as EPA, NMFS, and USFWS).

Permit Evaluation: USACE evaluates the permit application based on the comments received, as well as its own evaluation criteria.

The environmental guidelines generally prohibit discharge of dredged or fill material into U.S. waters unless the following conditions apply:

- There is no available, practicable alternative with fewer adverse effects on the aquatic ecosystem.
- Dischargers will neither violate other applicable regulations or laws, nor significantly degrade the waters into which they discharge.
- All appropriate and practicable steps have been taken to avoid, minimize, and

otherwise mitigate impacts on the aquatic ecosystem.

- The activity is water-dependent.

USACE Permit Decision: USACE employs a public interest balancing process in the determination of permits. The public costs and benefits of all factors relevant to each case are carefully evaluated and balanced. No permit is granted if the proposal is found to be contrary to the public interest.

Before a Section 404 permit can be issued for an activity, the EPA region (or authorized Tribe or state) in which the activity will occur must certify that the activity will not violate water quality standards. EPA guidelines under section 404(c) require that the project represent the least environmentally damaging practicable alternative (LEDPA).

Other Federal, state, and local statutes may also require permits, licenses, variances, or similar authorization. Contact the local USACE office for further details.

Permit is Issued: After the USACE and applicant successfully complete the preceding steps, a permit will be issued. The Statement of Finding, which explains how the permit decision was made, is available to the public. The term of a permit varies in length, but ranges from a few months up to five years.

Wetlands Description

Wetlands are legally defined as those areas that are "inundated or saturated by surface or ground water 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. Generally, wetlands include swamps, marshes, bogs or similar areas."

In 2002, the Supreme Court, in the SWANCC decision, stated that the USACE cannot legally assert jurisdiction over isolated wetlands. In 2006, the Court decided that USACE had to consider "whether the specific wetlands at issue possess a significant nexus with navigable waters" in considering if it was a regulated wetland. This has resulted in the need to discuss both jurisdictional wetlands and isolated wetlands within the project's environmental documentation, because both types of wetlands must be considered as a result of EO 11990.

Both wetland types are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Jurisdictional wetlands differ from isolated wetlands in that they are also "waters of the United States." If a wetland is an intrastate, non-navigable isolated water whose only tie to interstate commerce is the use of the waters by migratory birds, it is classified as an "isolated wetland."

It is IHS policy not to differentiate the types of wetlands; IHS project staff will confer with the USACE on all activities that affect any wetland.

Wetlands Compliance Process

If the IHS program activity or project is covered by one or more USACE Nationwide Permits (NWPs), follow the compliance requirements that are included in the applicable NWPs.

If IHS has determined that the project will not be located in a wetland or will not have the potential to adversely affect a wetland located near the project area, then complete the other environmental review requirements and make a determination for the entire program activity or project.

IHS must evaluate the potential effects of a proposed action in wetlands in accordance with the procedures for NEPA review in GAM Chapter 30–50. If an environmental assessment or environmental impact statement is required to be prepared for the proposed action, a wetlands assessment, described in GAM 30–40–70E, shall be included in the EA or EIS.

The HHS GAM 30–40–70E states that a wetlands assessment should include the following discussion:

1. Proposed Action. The wetlands assessment shall describe the nature and purpose of the proposed action and the reasons for locating the action in the wetlands.

2. Wetlands Map. A map of the affected wetlands indicating the location of the proposed action shall be included in the assessment.
3. Wetlands Effects. The effects of the proposed action on the wetlands shall be discussed in the assessment. The discussion shall include an evaluation of the long- and short-term effects of the proposed action on the survival, quality, and natural and beneficial values of the wetlands, and any other relevant direct or indirect effects.
4. Alternatives and Mitigation Measures. The wetlands assessment shall discuss alternatives to the proposed action that may avoid adverse effects and incompatible development in the wetlands, including the alternatives of no action or location at an alternate site. The assessment shall also discuss measures that mitigate the adverse effects of the proposed action. No further action shall take place until the Secretary makes a decision that the proposed action includes all reasonable measures to minimize harm to the wetlands as a result of the proposed action.
5. Conformity to Applicable State or Local Standards. The wetlands assessment shall include a statement indicating whether the proposed action conforms to applicable state or local wetlands protection standards.

Sections 401 and 404 Timelines

The approximate timelines for Section 401 certification and Section 404 permits are listed below:

- The permit process starts as soon as potential impacts are identified.
- Public notice—usually 30 days.
- Processing time—usually 60 to 120 days, unless a public hearing is required or an EIS must be prepared.
- Obtaining an individual permit—usually 6–9 months.
- For the most complex or controversial projects—special conditions of the permit may include mitigation activities that need to be monitored for 2–3 years.

Step #2: Will the Project Discharge Wastewater or Storm Water into Waters of the U.S.?

Any project that will discharge wastewater or storm water into waters of the U.S. must receive both a Section 401 certification and an NPDES permit (Section 402) from the USACE.

IHS activities that may potentially discharge waters or have storm water events include

- Water treatment facilities
- Health facilities
- Sanitary landfills

Section 402 Description: National Pollutant Discharge Elimination System (NPDES)

Section 402 of the CWA established the National Pollutant Discharge Elimination System (NPDES). The CWA prohibits anyone from discharging or having the potential to discharge "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit. A permit is typically a license for a facility to discharge a specified amount of a pollutant into a receiving water under certain conditions; however, permits may also authorize facilities to process, incinerate, landfill, or beneficially use sewage sludge. If the Tribe has a Water Quality Plan, the state must involve the Tribe in the permit preparation, and must comply with the Water Quality Plan.

NPDES permits will contain:

- Limits on all pollutants that are allowed to be discharged from the site;
- Monitoring and reporting requirements; and
- Provisions to ensure that the discharge does not hurt water quality or people's health.

If the activity qualifies, the permits may contain requirements from:

- The National Pretreatment Program, which covers facilities that discharge to publicly owned treatment works [POTWs]; and/or

- The Storm Water Program, which covers storm water discharges from construction and industrial activities. The size and scope of many IHS construction activities will qualify for coverage under this program.

NPDES Compliance Process

For a facility that will directly discharge to a body of water or even a drainage ditch, NPDES compliance starts with a call to the local water regulatory agency, whether it is a state, Tribe, or EPA Region (see Figure 3-2).

The regulatory agency will ask for project information, which can be presented in the form of draft environmental documents, in order to understand the implications of the project on the NPDES program in the area. The regulatory agency will make a determination based on this information, and/or other information that you are asked to provide, and either ask that a NPDES permit process be started, or the agency will allow the project to continue.

Storm Water Permit Requirements

A storm water permit is required by the CWA. Any activity that will disturb 1.0 or more acres of land will require coverage under either a CWA National Pollutant Discharge Elimination System (NPDES) individual permit, or the applicable NPDES Construction General Permit. Most activities will be regulated under a Construction General Permit.

On July 1, 2003, EPA reissued the Construction General Permit (CGP) to extend coverage to construction sites that disturb 1.0 or more acres, including smaller sites that are part of a larger plan of development. For example, if you are putting a modular building on a half-acre lot in a 10-acre parcel that is under development, you need permit coverage. Site operators need to submit an application called a Notice of Intent (NOI) to be covered under EPA's CGP. Failure to obtain the required permit may result in a fine and/or jail time. EPA Regions may have issued separate CGPs that address storm water in their specific Region; check with the Region that covers your activity.

All IHS funded or approved activities disturbing 1.0 or more acres need storm water permit coverage. Critical questions to consider are:

- Will your proposed activity or project disturb 1.0 or more acres of land through clearing, grading, excavating, or stockpiling of fill material? Remember to count the acreage of the entire activity or project, even if you are responsible for only a small portion.
- Is there any possibility that storm water could run off of your site? (In almost every case, the answer to this question is "yes". However, if the topography of your site is such that there is no possibility that rainfall or snow melt could leave the site or enter a waterway under any condition, you would not need permit coverage.)

If you answered "yes" to both of these questions, YOU NEED PERMIT COVERAGE! If you don't have permit coverage, you could be fined up to $32,500 per day.

Operator

The term "Operator" is defined in 40 CFR part 122 as the entity (generally company, corporation, tribe, tribal construction authority, IHS program manager, etc.) that has "operational control" over the site plans or day-to-day activities that are necessary to implement the Storm water Pollution Prevention Plan (SWPPP). The "operator" submits the Notice of Intent (NOI) form. On some sites, several entities may meet the definition of operator and all must file NOIs. Operators may include owners, general contractors, and subcontractors.

It is the responsibility of the operator(s) to develop and implement a SWPPP and maintain all best management practices (BMPs) during each stage of the project. Best management practices are the techniques (buffers, silt fences, detention ponds, swales, etc.), schedules of activities, prohibitions of practices, and maintenance procedures to prevent or reduce the discharge of pollutants.

Each operator must file a NOI for coverage under the NPDES Construction General Permit, even if the supporting documents are the same.

Permit coverage is required for any activity that may disturb land including moving modular buildings, grading activities, installation of a building foundation, installation of a water tank, and installation of a well site.

Depending on the situation, the Tribe must file for a Storm Water NPDES Permit or NOI as an "operator." If IHS meets one of the definitions for "operator," then IHS must also file for a Storm Water NPDES Permit or NOI. If the grantee meets the definition of "operator," then the grantee must also file for a Storm Water NPDES Permit or NOI.

The grant, contract, or other funding agreement should contain clauses regarding compliance with environmental laws and regulations and the obtaining of necessary permits and clearances. The NPDES Storm Water permit requirements are enforced by the Clean Water Act, ultimately with fines and/or incarceration.

The Storm Water permit requirements also include compliance with the Endangered Species Act and National Historic Preservation Act.

Storm Water Permitting Authority

Most states are authorized to implement the NPDES storm water program. Authorized states have similar requirements for construction sites. If your proposed activity or project is not in one of the areas listed below, you will need to obtain permit coverage from the appropriate state authority. A list of state permitting authorities can be found at www.epa.gov/npdes/stormwater.

EPA's Storm Water Construction General Permit applies to the following areas:

- Alaska
- District of Columbia
- Idaho
- Massachusetts
- New Hampshire
- New Mexico
- Puerto Rico
- Most Indian Country lands
- Federal facilities in Vermont, Colorado, Delaware, and Washington
- Oil and gas operations and other activities in Texas and Oklahoma.
- U.S. Territories (e.g., Guam, American Samoa), except the Virgin Islands

Visit www.epa.gov/npdes/pubs/cgp_appendixb.pdf for a detailed list of the areas under EPA's jurisdiction.

I need permit coverage. Where do I start?

1. Read EPA's Construction General Permit (CGP). You can download a copy of EPA's permit at www.epa.gov/npdes/stormwater/cgp.

   Read EPA's permit carefully, and remember that operators are legally responsible for complying with all its provisions.

   The "operator" submits the Notice of Intent (NOI) form as discussed above.

2. Develop a storm water pollution prevention plan (SWPPP).

   The SWPPP is a plan for how you will control storm water runoff from your construction site. It is broader and more complicated than a typical erosion and sediment control plan, so operators might want to enlist the assistance of a professional to save time. The SWPPP must be completed before you file an NOI to apply for coverage under EPA's permit. You don't have to submit the SWPPP with your NOI to obtain permit coverage, but the plan must be available on-site for review during inspection. Because every site is unique, every SWPPP is unique. The SWPPP needs to be updated as your work progresses. See www.epa.gov/npdes/stormwater/cgp for more information on how to develop your SWPPP.

Basic SWPPP principles

- Divert storm water away from disturbed or exposed areas of the site.

- Install BMPs (best management practices) to control erosion and sediment and manage storm water.
- Inspect the site regularly and properly maintain BMPs, especially after rainstorms.
- Revise the SWPPP as site conditions change during construction, and improve the SWPPP if BMPs are not effectively controlling erosion and sediment.
- Minimize exposure of bare soils to precipitation to the extent practicable.
- Keep the site clean by using trash cans, keeping storage bins covered, and sweeping up excess sediment on roads and other impervious surfaces.

3. Complete an endangered species determination for the project site.

   The operator must assess the potential effects of storm water runoff on Federally-listed endangered and threatened species and any designated critical habitat on or near the site. In making this determination, the operator needs to consider areas beyond the immediate footprint of the construction activity and beyond the property line—areas that could be affected directly or indirectly by storm water discharges.

   The local offices of U.S. Fish and Wildlife Service, National Marine Fisheries Service, and state or Tribal Heritage Centers often maintain lists of Federally listed endangered or threatened species on their Web sites. Visit www.epa.gov/npdes/stormwater/esa for more information.

4. File a Notice of Intent (NOI).

   The Notice of Intent (NOI) form lets EPA know that you are filing for permit coverage. It is also your certification that you have read, understood, and implemented the requirements of EPA's permit. The fastest and easiest way to obtain permit coverage is through EPA's new online permit application system (www.epa.gov/npdes/enoi). EPA's permit requires a 7-day waiting period after an NOI is filed and posted on EPA's Web site: (www.epa.gov/npdes/noisearch) Using EPA's eNOI system is the fastest way to begin this process. Mailing a paper NOI to EPA can add 2 or more weeks to your processing time. During the waiting period, NOIs are reviewed for endangered species impacts and other concerns. Permit coverage begins at the conclusion of the 7-day period unless you are notified otherwise. Your completed NOI should be posted at the construction site in a place accessible to the public.

5. Implement all BMPs outlined in your SWPPP.

   Remember to follow your SWPPP. All BMPs must be inspected and maintained regularly. Inspections are required either (1) at least once every 7 days, or (2) at least once every 14 days and within 24 hours of the end of a rain event of 0.5-inch or more. The plan must also be updated as site conditions and BMPs change. Remember to keep records of your maintenance activities and any SWPPP modifications for review during inspection.

6. File an electronic Notice of Termination.

   IHS should terminate permit coverage when its project is completed (generally, when 70% of the density of the original vegetation is reestablished on unpaved areas), when the property has been stabilized and ownership has been transferred to the homeowner (residential projects only), or when another operator has assumed control over the site (new operators will need to file an NOI and meet the requirements of EPA's permit). The electronic Notice of Termination form informs EPA that your construction project is complete and ends your responsibilities under the permit. The form can be completed and filed using the eNOI system at www.epa.gov/npdes/enoi., thus saving two weeks or more.

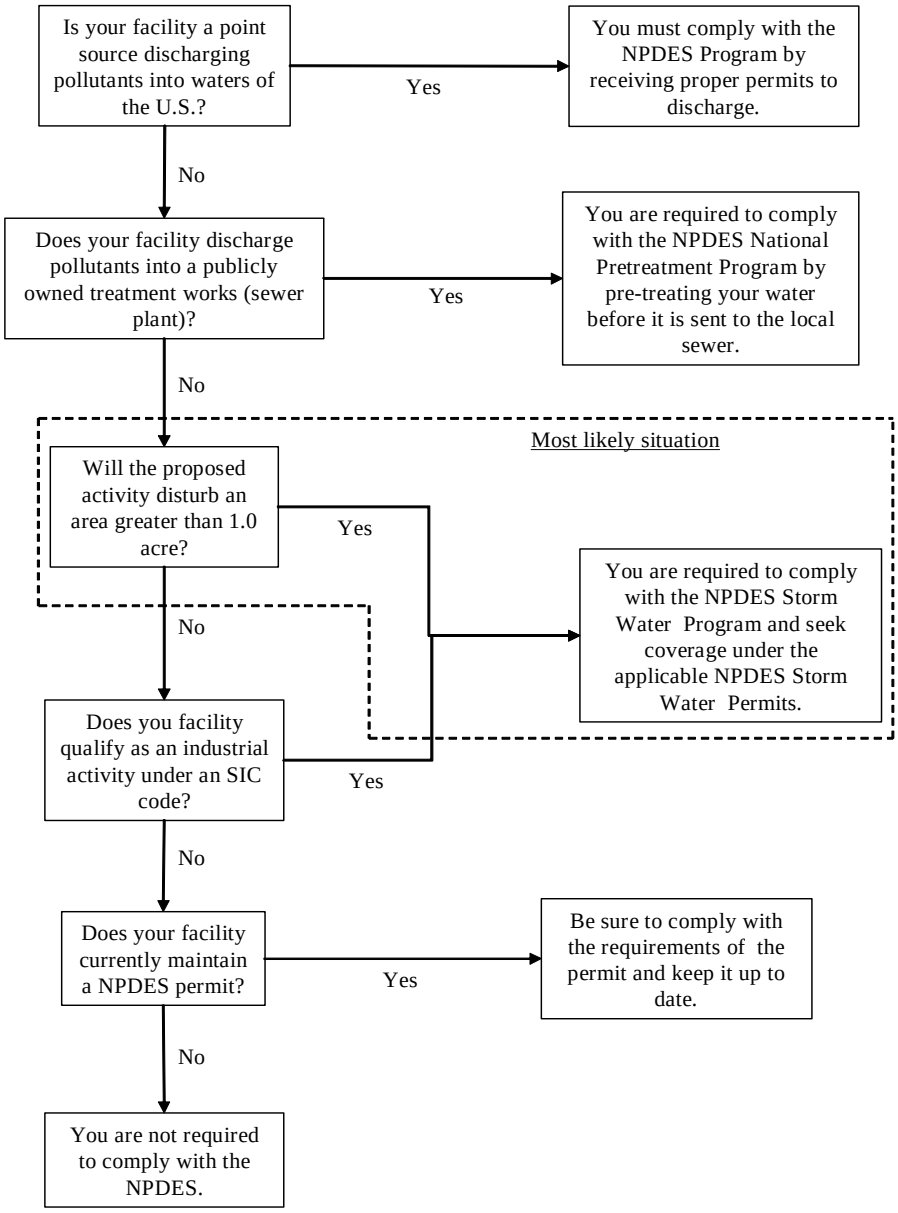

Figure 3-2. Flowchart for NPDES Compliance.

Individual NPDES Permit Timelines

If your activity is not covered by the CGP, then you must apply for an individual NPDES permit.

The EPA has listed the following timelines to apply to the individual NPDES permit application process. These requirements may be different in the state in which you are operating.

- Any person proposing a new discharge shall submit an application at least 180 days before the date on which the discharge is to commence, unless permission for a later date has been granted by the Director (means the Regional Administrator or the State Director, or an authorized representative).
- Facilities proposing a new discharge of storm water associated with industrial activity shall submit an application 180 days before that facility commences industrial activity which may result in a discharge of storm water associated with that industrial activity.
- Facilities regulated under the storm water program shall submit applications at least 90 days before the date on which construction is to commence.

Different submittal dates may be required under the terms of applicable general permits.

Persons proposing a new discharge are encouraged to submit their applications well in advance of the 90 or 180-day requirements to avoid delay.

Step #3: Does the Project Include a Bridge or Obstruction of the Waters of the U.S.?

While rare, a project may require a bridge or a diversion device for discharging into navigable waters. For a bridge, a Section 9 permit is required. Permits for bridge construction are handled by the U.S. Coast Guard.

For any type of obstruction in navigable waters, a Section 10 permit is required and would be handled by the USACE.

For both permits, a Section 401 certification would also be required. The process described above for Section 401 certification would be the same.

Step #4: Does the Project Include Wells in a Sole Source Aquifer?

If the project involves drilling drinking water supply wells, the Safe Drinking Water Act requires proper setup and monitoring. Once a well is drilled and found to be suitable, a permit is required to operate it. Also, drinking water standards must be met for its use as potable water. If the IHS is drilling the well, it should consult with the Tribe as appropriate and obtain the necessary easements and permits for the activity.

If the proposed activity or project has the potential to contaminate a designated sole source aquifer (SSA), an EPA review of the proposed activity or project is required. The EPA defines SSA as one that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer.

If none of the alternatives affect the aquifer, the requirements of the Safe Drinking Water Act are satisfied. If an alternative is selected that affects the aquifer, a design must be developed to assure, to the satisfaction of the EPA, that it will not contaminate the aquifer. The EPA should be consulted to determine which level of analysis should be prepared.

When a proposed activity or project encroaches on a wellhead protection area, the document should identify the delineated wellhead protection area (WHPA). Potential impacts of each alternative and proposed mitigation measures should be evaluated. Coordination with the state will aid in identifying the areas, impacts, and mitigation. If the preferred alternative impacts these areas, the document should detail compliance with management

requirements of the local wellhead protection program developed by the community Public Water System.

3.3 Legal Considerations

Federal Laws

Clean Water Act

The CWA established the basic structure for regulating discharges of pollutants into the waters of the United States. The CWA authorizes the EPA to implement pollution control programs such as setting wastewater standards for industry.

The CWA is the primary Federal legislation that protects surface waters, such as lakes, rivers, coastal areas, wetlands, and playa lakes. The CWA began as the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972 (Pub. L. 92- 500), amended by the Clean Water Act of 1977 (Pub. L. 95-217), 33 U.S.C. 1251 et seq.; and as further amended by the Clean Water Act Amendments of 1978 (Pub. L. 95-676).

The CWA places restrictions on pollutant discharges into waters of the U.S. and by prohibiting discharge of dredged or fill material into U.S. waters without a permit. The courts have expanded the interpretation of "waters of the U.S." to include essentially all waterbodies, including wetlands.

The CWA also authorized the EPA to set water quality standards for all contaminants in surface waters. The Act made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Subsequent amendments modified some of the earlier CWA provisions including creation of the State Water Pollution Control Revolving Fund; a portion of that appropriation is a set aside for construction of Indian systems (CWA Indian Set-Aside).

The Clean Water Act:

- Established the National Pollution Discharge Elimination System (NPDES).
- Provided for state and tribal water quality programs.
- Established significant penalties for permit violations.
- Clarified that Federal facilities are subject to state programs.
- Added storm water discharges to NPDES.

Relevant sections of the Act are briefly discussed below:

Section 401 - State Water Quality Certification Program: This section states that the EPA (and where applicable, states and Tribes) can review and approve, condition, or deny all Federal permits or licenses that might result in a discharge to regulated waters.

Section 402 - National Pollutant Discharge Elimination System (NPDES): This section establishes the National Pollutant Discharge Elimination System permit program under which the EPA Administrator (or an authorized state) may issue a permit to a point source for the discharge of any pollutant, or combination of pollutants. The program also includes storm water controls.

Section 404 - Permits for dredged or fill material: This section authorizes a special permit program to control dredge and fill operations. The Secretary of Army and the EPA Administrator are jointly responsible for setting the guidelines by which permits are to be judged. In addition, Section 10 of the Rivers and Harbors Act requires a permit from the USACE for obstructions in navigable waters.

Section 405 - Disposal or use of sewage sludge: This section authorizes the issuance of permits for the disposal of sewage sludge generated at a publicly owned treatment works.

Section 505 - Citizen suits: This section generally allows for citizens to initiate a civil suit against any person, including the United States and other government agencies, for violating the Clean Water Act.

Criminal Penalties

The law states that the regulatory agency may fine and imprison those who are convicted of criminally violating the law as follows:

- Any person who knowingly or negligently violates requirements of the law or permits, or knowingly or negligently introduces to the sewer system any hazardous substance that they know is hazardous and that it causes the sewer treatment plant to violate its permit (fines between $2,500 and $50,000 per day per violation and/or up to 1 to 3 years imprisonment).
- Any person who makes false statements or falsifies or tampers with monitoring equipment (a fine up to $10,000 and/or imprisonment up to 2 years).
- Any person who knowingly violates requirements of the law or permits, and knowingly puts another person in imminent danger of death or serious bodily injury (up to 15 years imprisonment and up to $250,000).

Civil Penalties

The regulatory agency may assess civil penalties of any person who violates the requirements of the law or permit. The penalties may be up to $25,000 per day per violation. The regulatory agency will review the following items to determine the size of the penalty:

- The seriousness and duration of the violation(s);
- The economic benefit of the non-compliance;
- The violator's full compliance history and good faith efforts to comply; and
- The economic impact of the penalty to the business.

Administrative Penalties

Administrative penalties come under two classes, Class I and Class II. Class I penalties may be up to $10,000 per violation, but not exceed $25,000. Class II penalties may be up to $10,000 per day during which the violation continues, and not to exceed $125,000.

40 CFR Sections Relating to Water Resources

40 CFR 112	Oil Pollution Prevention
40 CFR 122	EPA Administered Permit Programs
40 CFR 123	NPDES State Program Requirements
40 CFR 125	Criteria and Standards for NPDES Permits
40 CFR 122	Storm water Discharges
40 CFR 129	Toxic Pollutant Effluent Standards
40 CFR 130	Water Quality Management Plans
40 CFR 131	Establishment of Water Quality Standards; Federally Promulgated
40 CFR 140	Marine Sanitation Device Standard
40 CFR 149	Sole Source Aquifers
40 CFR 132	Great Lakes Requirements
40 CFR 230	Dredge or Fill Permits
40 CFR 231	Section 404 Procedures
40 CFR 133	Secondary Treatment Regulation
40 CFR 401	General Provisions for Effluent Guidelines and Standards
40 CFR 403	EPA General Pretreatment Standards
40 CFR 405-471	Effluent Limits for Point Source Categories
40 CFR 501	State Sludge Management Program Regulations
40 CFR 503	Standards for the Use or Disposal of Sewage Sludge

Definitions of Significant Noncompliance

CLEAN WATER ACT

For the national pollutant discharge elimination system (NPDES), significant noncompliance is defined by the following occurrences:

- Violation of any monthly effluent limit at a given pipe by *any* amount for any 4 or more months during two consecutive quarter review periods;
- Violations of conditions in enforcement orders;
- Violations of compliance schedule milestones for starting construction, completing construction, and attaining final compliance by 90 days or more from the date of the milestone specified in an enforcement order or permit;
- Violations of all pretreatment schedule milestones by 90 days or more;
- Violation of permit effluent limits that exceed the Appendix A *Criteria for Noncompliance Reporting in the NPDES Program*;
- Failure to provide either Discharge Monitoring Reports, Publicly-Owned Treatment Works (POTW) Pretreatment Performance Reports, or Compliance Schedule Final Report of Progress, or providing above reports 30 or more days late;
- Violation of a permit limit at a given discharge point for any 2 or more months during the two consecutive quarter review periods; or
- An unauthorized bypass, an unpermitted discharge, or a pass-through of pollutants that causes, or has the potential to cause, a water quality problem or health problems.

Executive Order 11990, "Protection of Wetlands" 1977

Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." (33 CFR §328.3(b); 40 CFR §230.3(t))

Executive Order (EO) 11990 sought to "minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands". To meet these objectives, the EO requires IHS, in planning their actions, to:

- Avoid and minimize direct or indirect loss of wetlands whenever there is a practicable alternative.
- Achieve no net loss of wetland quantity and quality through wetland replacement.
- Preserve and enhance the natural and beneficial values of wetlands.

Applicable IHS activities include:

- Acquisition, management, and disposition of Federal lands, and facilities construction and improvement projects that are undertaken, financed, or assisted by Federal agencies;
- Federal activities and programs affecting land use, including water and related land

resources planning, regulation, and licensing.

Federal Water Pollution Control Act

see Clean Water Act.

Marine Protection, Research, and Sanctuaries Act of 1972

In 1972, Congress enacted the Marine Protection, Research and Sanctuaries Act (MPRSA), declaring that it is the policy of the U.S. to regulate the dumping of all types of materials into ocean waters and to prevent or strictly limit the dumping into ocean waters of any material that would adversely affect human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities.

Oil Pollution Act of 1970

This Act streamlined and strengthened EPA's ability to prevent and respond to catastrophic oil spills. A trust fund financed by a tax on oil is available to clean up spills when the responsible party is incapable or unwilling to do so.

Rivers and Harbors Act of 1899

This Act establishes a program to regulate activities affecting navigable U.S. waters, including wetlands. It is unlawful to dump any refuse into or obstruct navigable waters unless granted a permit by the USACE.

Safe Drinking Water Act of 1974

The Safe Drinking Water Act (SDWA) was enacted to ensure public health protection through compliance by public water systems with all health-based standards, including all monitoring and reporting requirements. Amendments to the SDWA in 1986 and 1996 directed the EPA to establish regulations to protect drinking water and drinking water sources including MCLs, groundwater, monitoring, stronger enforcement, consumer reports, and to regulate underground injection wells. The 1996 amendments established a state revolving fund and Indian Set-Aside, similar to the CWA.

The Sole Source Aquifer regulations are at 40 CFR 149 and specific information on SSAs can be found at, www.epa.gov/safewater/ssanp.html.

State/Tribe Requirements

States implement many of the water quality and resource protection programs. Some Tribes may have similar authority.

Activities that impact wetlands and “other waters of the U.S.” often require a consistency determination from the local coastal zone management agency (when located in a state with a coastal zone management program) prior to beginning work.

Be sure to consult the state environmental office and district USACE office in the state to ask them if there are any state-specific laws that require compliance. EPA has authorized 44 states as well as the Virgin Islands to administer the NPDES permit program under the CWA (see Table 4-1). Check with EPA for an updated list.

Table 3-1. States and Territories Authorized for Federal CWA Permit Programs.

State	Approved State NPDES Permit Program	Approved to Regulate Federal Facilities	Approved State Pretreatment Program	Approved General Permits Program
Alabama	X	X	X	X
Alaska				
American Samoa				
Arizona				
Arkansas	X	X	X	X
California	X	X	X	X
Colorado	X			X
Connecticut	X	X	X	X
Delaware	X			X
District of Columbia				
Florida	X		X	X
Georgia	X	X	X	X
Guam				
Hawaii	X	X	X	X
Idaho				
Illinois	X	X		X
Indiana	X	X		X
Iowa	X	X	X	X
Kansas	X	X		X
Kentucky	X	X	X	X
Louisiana	X	X	X	X
Maine	X	X	X	X
Maryland	X	X	X	X
Massachusetts				
Michigan	X	X	X	X
Minnesota	X	X	X	X
Mississippi	X	X	X	X
Missouri	X	X	X	X
Montana	X	X		X
Nebraska	X	X	X	X
Nevada	X	X		X
New Hampshire				
New Jersey	X	X	X	X
New Mexico				

State	Approved State NPDES Permit Program	Approved to Regulate Federal Facilities	Approved State Pretreatment Program	Approved General Permits Program
New York	X	X		X
North Carolina	X	X	X	X
North Dakota	X	X		X
Northern Mariana Islands				
Ohio	X	X	X	X
Oklahoma	X	X	X	X
Oregon	X	X	X	X
Pennsylvania	X	X		X
Puerto Rico				
Rhode Island	X	X	X	X
South Carolina	X	X	X	X
South Dakota	X	X	X	X
Tennessee	X	X	X	X
Texas	X	X	X	X
Trust Territories				
Utah	X	X	X	X
Vermont	X		X	X
Virgin Islands	X			
Virginia	X	X	X	X
Washington	X		X	X
West Virginia	X	X	X	X
Wisconsin	X	X	X	X
Wyoming	X	X		X

3.4 Responsibilities and Requirements

All IHS program, facility, and project managers should:

- Determine if water resources will be impacted by the proposed activity or project.
- Obtain applicable coverage under a NPDES permit.
- Coordinate appropriate permits for the proposed program or project activity.
- Participate in public involvement as needed.
- Determine if there are any wetlands in the project area.
- Coordinate with public and agencies regarding proposed program or project activities.
- Identify practicable alternatives, practicable minimization, mitigation, and/or avoidance measures.

- Check with regulatory agencies to ensure compliance with requirements.

3.5 Where to go for Help

Clean Water Act

www.epa.gov/region5/water/cwa.htm

The Safe Drinking Water Act

www.epa.gov/safewater/sdwa/sdwa.html

Tribal PWSS and UIC programs

www.epa.gov/safewater/tribal/contacts.html

Environmental Protection Agency

www.epa.gov

Office of Ground Water and Drinking Water Tribal Program Information

www.epa.gov/safewater/tribal.html

Water Criteria and Standards Plan

www.epa.gov/OST/standards/planfs.html

Federal Water Quality Standards for Indian Country

www.epa.gov/ost/standards/tribal/

Office of Water Tribal Strategy

www.epa.gov/indian/pdfs/owstrat.pdf

Office of Wetlands, Oceans, and Watersheds

www.epa.gov/OWOW/

Surf Your Watershed

www.epa.gov/surf/

Watershed Protection

www.epa.gov/OWOW/watershed/index.html

Tribal Wetland Program Highlights

http://www.epa.gov/owow/wetlands/initiative/tribalpro.html

Office of Wetlands Tribal Initiatives

www.epa.gov/owow/wetlands/initiative/

Non-Point Source Office

www.epa.gov/OWOW/NPS/tribal.html

Office of Wastewater Management Indian Programs

www.epa.gov/owm/mab/indian/index.htm

U.S. Fish and Wildlife Service

www.fws.gov/

National Wetland Inventory Maps

www.nwi.fws.gov

Classification of Wetlands and Deepwater Habitat of the United States

.http://www.charttiff.com/pub/WetlandsMaps/cowardin.pdf

National Marine Fisheries Service

www.nmfs.noaa.gov/

U.S. Army Corps of Engineers Regulatory Offices

www.usace.army.mil/inet/functions/cw/cecwo/reg/bound.htm

Recognizing Wetlands

http://www.poa.usace.army.mil/regdis/alaskaweb/reg/rw-bro.htm

1987 Corps Wetlands Delineation Manual

Institute for Water Resources

www.iwr.usace.army.mil/

USACE Waterways Permitting

www.usace.army.mil/public.html

3.6 Samples

Samples of the following forms are provided on the following pages:

- U.S. Army Corps of Engineers Form 4345 (Standard individual permit application for activities that may impact a water of the U.S.; e.g., construction in wetlands, rivers, or harbors)
- U.S. EPA Consolidated Permits Form for NPDES Discharges
- U.S. EPA Notification of Intent Form for Storm water Associated with Construction Activity

USACE Permit Application

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
(33 CFR 325)

OMB APPROVAL NO. 0710-0003
Expires December 31, 2004

The Public burden for this collection of information is sestimated to average 10 hours per response, although the majority of applications should require 5 hours or less. This includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection , Research and Sanctuaries Act, 33 USC 1413, Section 103. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE *(an agent is not required)*
6. APPLICANT'S ADDRESS	9. AGENT'S ADDRESS
7. APPLICANT'S PHONE NOS. W/AREA CODE	10. AGENT'S PHONE NOS. W/AREA CODE
a. Residence	a. Residence
b. Business	b. Business

11. **STATEMENT OF AUTHORIZATION**

I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

APPLICANT'S SIGNATURE DATE

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE *(see instructions)*

13. NAME OF WATERBODY, IF KNOWN *(if applicable)*	14. PROJECT STREET ADDRESS *(if applicable)*
15. LOCATION OF PROJECT COUNTY STATE	

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN, *(see instructions)*

17. DIRECTIONS TO THE SITE

ENG FORM 4345, Jul 97 EDITION OF FEB 94 IS OBSOLETE. (Proponent: CECW-OR)

18. **Nature of Activity** *(Description of project, include all features)*

19. **Project Purpose** *(Describe the reason or purpose of the project, see instructions)*

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. **Reason(s) for Discharge**

21. **Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards**

22. **Surface Area in Acres of Wetlands or Other Waters Filled** *(see instructions)*

23. **Is Any Portion of the Work Already Complete?** Yes No IF YES, DESCRIBE THE COMPLETED WORK

24. **Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).**

25. **List of Other Certifications or Approvals/Denials Received from other Federal, State or Local Agencies for Work Described in This Application.**

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

*Would include but is not restricted to zoning, building and flood plain permits

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT DATE SIGNATURE OF AGENT DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

EPA Form 1

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

For Approved. OMB No. 2040-0086. Approval expires 5-31-92

FORM **1** GENERAL

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

S		TA	C
F			D
1	2 13	14	15

LABEL ITEMS

- I. EPA I.D. NUMBER
- III. FACILITY NAME
- V. FACILITY MAILING LIST
- VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI*(except VI-B which must be completed regardless)*. Complete all items if no label has been proved. Refer to the instructions for detailed item descriptions and for the legal authorization under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental from listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK "X" YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	MARK "X" YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)	☐ 16	☐ 17	☐ 18	B. Does or will this facility *(either existing or proposed)* include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)	☐ 19	☐ 20	☐ 21
C. Is this facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	☐ 22	☐ 23	☐ 24	D. Is this proposal facility *(other than those described in A or B above)* which will result in a discharge to waters of the U.S.? (FORM 2D)	☐ 25	☐ 26	☐ 27
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	☐ 28	☐ 29	☐ 30	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)	☐ 31	☐ 32	☐ 33
G. Do you or will you inject at this facility any produced water other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)	☐ 34	☐ 35	☐ 36	H. Do you or will you inject at this facility fluids for special processes such as mining of sulfer by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)	☐ 37	☐ 38	☐ 39
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	☐ 40	☐ 41	☐ 42	J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	☐ 43	☐ 44	☐ 45

III. NAME OF FACILITY

C 1 SKIP (15, 16-29, 30 … 69)

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*	
C 2 (15, 16 … 45)	(46 … 48)	(49 … 51) (52 … 55)

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

C 3 (15, 16 … 45)

B. CITY OR TOWN	C. STATE	D. ZIP CODE
C 4 (15, 16 … 40)	(41 … 42)	(47 … 51)

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

C 5 (15, 16 … 45)

B. COUNTY NAME (46 … 70)

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE
C 6 (15, 16 … 40)	(41 … 42)	(47 … 51)	(52 … 54)

EPA FORM 3510-1 (8-90)

CONTINUED ON REVERSE

CONTINUED FROM THE FRONT

VII. SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND
C 7 7 (specify)	7 7 (specify)
15 16 17	15 16 19

C. THIRD	D. FOURTH
C 7 7 (specify)	7 7 (specify)
15 16 17	15 16 19

VIII. OPERATOR INFORMATION

A. NAME: C 8 — 18 19 … 55

B. Is the name listed in Item VIII-A also the owner? ☐ YES ☐ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box; if "Other," specify.)*

F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC *(other than federal or state)*
O = OTHER *(specify)*

56 *(specify)*

D. PHONE *(area code & no.)*: C A — 15 16 18 19 21 22 25

E. STREET OR PO BOX: 26 … 55

F. CITY OR TOWN: C B — 15 16 … 40

G. STATE: 42 42

H. ZIP CODE: 47 51

IX. INDIAN LAND

Is the facility located on Indian lands? ☐ YES ☐ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES *(Discharges to Surface Water)*	C T I 9 N	15 16 17 18 … 30	
D. PSD *(Air Emissions from Proposed Sources)*	C T I 9 P	15 16 17 18 … 30	
B. UIC *(Underground Injection of Fluids*	C T I 9 U	15 16 17 18 … 30	
E. OTHER *(specify)*	C T I 9	15 16 17 18 … 30	*(Specify)*
C. RCRA *(Hazardous Wastes)*	C T I 9 R	15 16 17 18 … 30	
E. OTHER *(specify)*	C T I 9	15 16 17 18 … 30	*(Specify)*

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS *(provide a brief description)*

XIII. CERTIFICATION *(see instructions)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE *(type or print)*	B. SIGNATURE	C. DATE SIGNED

COMMENTS FOR OFFICIAL USE ONLY

C C — 15 16 … 55

EPA FORM 3510-1 (8-90)

EPA Form 3510-9

This Form Replaces Form 3510-9 (8-98)
Refer to the Following Pages for Instructions

Form Approved OMB Nos. 2040-0188 and 2040-0211

NPDES Form

EPA

United States Environmental Protection Agency
Washington, DC 20460

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit

Submission of this Notice of Intent (NOI) constitutes notice that the party identified in Section II of this form requests authorization to discharge pursuant to the NPDES Construction General Permit (CGP) permit number identified in Section I of this form. Submission of this NOI also constitutes notice that the party identified in Section II of this form meets the eligibility requirements of the CGP for the project identified in Section III of this form. Permit coverage is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Refer to the instructions at the end of this form.

I. Permit Number

II. Operator Information

Name:

IRS Employer Identification Number (EIN): -

Mailing Address:

Street:

City: State: Zip Code: -

Phone: - - Fax (optional): - -

E-mail (optional):

III. Project/Site Information

Project/Site Name:

Project Street/Location:

City: State: Zip Code: -

County or similar government subdivision:

Latitude/Longitude (Use one of three possible formats, and specify method)

Latitude 1. __° __′ __′′ N (degrees, minutes, seconds)
2. __° __ . __′ N (degrees, minutes, decimal)
3. __ . ____° N (decimal)

Longitude 1. ___° __′ __′′ W (degrees, minutes, seconds)
2. ___° __ . __′ W (degrees, minutes, decimal)
3. ___. ____° W (decimal)

Method: ☐ U.S.G.S. topographic map ☐ EPA web site ☐ GPS ☐ Other:
• If you used a U.S.G.S. topographic map, what was the scale: _____

Project Located in Indian country? ☐ Yes ☐ No
If so, name of Reservation or if not part of a Reservation, put "Not Applicable": _____

Estimated Project Start Date: / / (Month Date Year) Estimated Project Completion Date: / / (Month Date Year)

Estimated Area to be Disturbed (to the nearest quarter acre): .

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IV. SWPPP Information

Has the SWPPP been prepared in advance of filing this NOI? ☐ Yes ☐ No

Location of SWPPP for viewing: ☐ Address in Section II ☐ Address in Section III ☐ Other

If Other:

SWPPP Street: _____

City: _____

State: ____ Zip Code: _____ - _____

SWPPP Contact Information (if different than that in Section II):

Name: _____

Phone: ___ - ___ - ____ Fax (optional): ___ - ___ - ____

E-mail (optional): _____

V. Discharge Information

Identify the name(s) of waterbodies to which you discharge. _____

_____

Is this discharge consistent with the assumptions and requirements of applicable EPA approved or established TMDL(s)?

☐ Yes ☐ No

VI. Endangered Species Information

Under which criterion of the permit have you satisfied your ESA eligibility obligations?

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F

- If you select criterion F, provide permit tracking number of operator under which you are certifying eligibility:

_____

VII. Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: _____

Print Title: _____

Signature: _____

Date: _____

EPA Form 3510-9 (Rev. 6/03)

Instructions for Completing EPA Form 3510-9

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit

NPDES Form This Form Replaces Form 3510-9 (8/98) Form Approved OMB Nos. 2040-0188 and 2040-0211

Who Must File an NOI Form
Under the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et.seq.; the Act), federal law prohibits storm water discharges from certain construction activities to waters of the U.S. unless that discharge is covered under a National Pollutant Discharge Elimination System (NPDES) Permit. Operator(s) of construction sites where one or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least one acre, or any other site specifically designated by the Director, must submit an NOI to obtain coverage under an NPDES general permit. Each person, firm, public organization, or any other entity that meets either of the following criteria must file this form: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have day-to-day operational control of those activities at the project necessary to ensure compliance with SWPPP requirements or other permit conditions. If you have questions about whether you need an NPDES storm water permit, or if you need information to determine whether EPA or your state agency is the permitting authority, refer to *www.epa.gov/npdes/stormwater/cgp* or telephone the Storm Water Notice Processing Center at (866) 352-7755.

Where to File NOI Form
See the applicable CGP for information on where to send your completed NOI form.

Completing the Form
Obtain and read a copy of the appropriate EPA Storm Water Construction General Permit for your area. To complete this form, type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, refer to *www.epa.gov/npdes/stormwater/cgp* or telephone the Storm Water Notice Processing Center at (866) 352-7755. Please submit original document with signature in ink - do not send a photocopied signature.

Section I. Permit Number
Provide the number of the permit under which you are applying for coverage (see Appendix B of the general permit for the list of eligible permit numbers).

Section II. Operator Information
Provide the legal name of the person, firm, public organization, or any other entity that operates the project described in this application. An operator of a project is a legal entity that controls at least a portion of site operations and is not necessarily the site manager. Provide the employer identification number (EIN from the Internal Revenue Service; IRS), also commonly referred to as your taxpayer ID. If the applicant does not have an EIN enter "NA" in the space provided. Also provide the operator's mailing address, telephone number, fax number (optional) and e-mail address (if you would like to be notified via e-mail of NOI approval when available). Correspondence for the NOI will be sent to this address.

Section III. Project/Site Information
Enter the official or legal name and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit coverage to be granted.

The applicant must also provide the latitude and longitude of the facility either in degrees, minutes, seconds; degrees, minutes, decimal; or decimal format. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (U.S.G.S.) topographic or quadrangle maps, and EPA's web-based siting tools, among others. Refer to *www.epa.gov/npdes/stormwater/cgp* for further guidance on the use of these methodologies. For consistency, EPA requests that measurements be taken from the approximate center of the construction site. Applicants must specify which method they used to determine latitude and longitude. If a U.S.G.S. topographic map is used, applicants are required to specify the scale of the map used.

Indicate whether the project is in Indian country, and if so, provide the name of the Reservation. If the project is in Indian Country Lands that are not part of a Reservation, indicate "not applicable" in the space provided.

Enter the estimated construction start and completion dates using four digits for the year (i.e., 05/27/1998). Enter the estimated area to be disturbed including but not limited to: grubbing, excavation, grading, and utilities and infrastructure installation. Indicate to the nearest quarter acre. Note: 1 acre = 43,560 sq. ft.

Section IV. SWPPP Information
Indicate whether or not the SWPPP was prepared in advance of filing the NOI form. Check the appropriate box for the location where the SWPPP may be viewed. Provide the name,

EPA Form 3510-9 (Rev. 6/03)

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Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit

NPDES Form This Form Replaces Form 3510-9 (8/98) Form Approved OMB Nos. 2040-0188 and 2040-0211

fax number (optional), and e-mail address (optional) of the contact person if different than that listed in Section II of the NOI form.

Section V. Discharge Information

Enter the name(s) of receiving waterbodies to which the project's storm water will discharge. These should be the first bodies of water that the discharge will reach. (Note: If you discharge to more than one waterbody, please indicate all such waters in the space provided and attach a separate sheet if necessary.) For example, if the discharge leaves your site and travels through a roadside swale or a storm sewer and then enters a stream that flows to a river, the stream would be the receiving waterbody. Waters of the U.S. include lakes, streams, creeks, rivers, wetlands, impoundments, estuaries, bays, oceans, and other surface bodies of water within the confines of the U.S. and U.S. coastal waters. Waters of the U.S. do not include man-made structures created solely for the purpose of wastewater treatment. U.S. Geological Survey topographical maps may be used to make this determination. If the map does not provide a name, use a format such as "unnamed tributary to Cross Creek". If you discharge into a municipal separate storm sewer system (MS4), you must identify the waterbody into which that portion of the storm sewer discharges. That information should be readily available from the operator of the MS4.

Indicate whether your storm water discharges from construction activities will be consistent with the assumptions and requirements of applicable EPA approved or established TMDL(s). To answer this question, refer to *www.epa.gov/npdes/stormwater/cgp* for state- and regional-specific TMDL information related to the construction general permit. You may also have to contact your EPA regional office or state agency. If there are no applicable TMDLs or no related requirements, please check the "yes" box in the NOI form.

Section VI. Endangered Species Information

Indicate for which criterion (i.e., A, B, C, D, E, or F) of the permit the applicant is eligible with regard to protection of federally listed endangered and threatened species, and designated critical habitat. See Part 1.3.C.6 and Appendix C of the permit. If you select criterion F, provide the permit tracking number of the operator under which you are certifying eligibility. The permit tracking number is the number assigned to the operator by the Storm Water Notice Processing Center after EPA acceptance of a complete NOI.

Section VII. Certification Information

All applications, including NOIs, must be signed as follows:

For a corporation: By a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

Include the name and title of the person signing the form and the date of signing. An unsigned or undated NOI form will not be considered eligible for permit coverage.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 3.7 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch 2136, U.S. Environmental Protection, Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Include the OMB control number on any correspondence. Do not send the completed form to this address. **Visit this website for mailing instructions:**

http://cfpub.epa.gov/npdes/stormwater/application_coverage.cfm#mail

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3.7 Definitions

Applicable standards and limitations: All state, interstate, and Federal standards and limitations to which a "discharge," a "sewage sludge use or disposal practice," or a related activity is subject under the CWA, including "effluent limitations," water quality standards, standards of performance, toxic effluent standards or prohibitions, "best management practices," pretreatment standards, and "standards for sewage sludge use or disposal" under sections 301, 302, 303, 304, 306, 307, 308, 403 and 405 of CWA.

Approved program or approved state: A state or interstate program that has been approved or authorized by EPA.

Best management practices (BMPs): Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Biological monitoring: The determination of the effects of the discharge of pollutants on aquatic life using certain techniques and procedures at appropriate frequencies and locations.

CWA: The Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483 and Public Law 97-117, 33 U.S.C. 1251 et seq.

Delineate: (1) To draw or trace the outline of; sketch; identify, (2) To draw boundaries (e.g., to delineate wetlands), (3) To represent pictorially; depict.

Discharge of dredged material: Any addition of dredged material into the waters of the U.S. The term includes, without limitation, the addition of dredged material to a specified discharge site located in waters of the U.S. and the runoff or overflow from a contained land or water disposal area. Discharges of pollutants into waters of the U.S. resulting from the onshore subsequent processing of dredged material that is extracted for any commercial use (other than fill) are not included within this term and are subject to section 402 of the CWA even though the extraction and deposit of such material may require a permit from the Corps of Engineers. The term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber, and forest products (See 33 CFR §323.4 for the definition of these terms).

Discharge of fill material: The addition of fill material into waters of the U.S. The term generally includes, without limitation, the following activities: placement of fill that is necessary for the construction of any structure in a water of the U.S.; the building of any structure or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; dams and dikes; artificial islands; property protection and/or reclamation devices such as riprap, groins, seawalls, breakwaters, and revetments; beach nourishment; levees; fill for structures such as sewage treatment facilities, intake and outfall pipes associated with power plants and subaqueous utility lines; and artificial reefs. The term does not include plowing, cultivating, seeding and harvesting for the production of food, fiber, and forest products (See 33 CFR §323.4 for the definition of these terms). 33 CFR §323.2(f).

Dredged material: Material that is excavated or dredged from waters of the U.S. 33 CFR §323.2(c).

DMR: Discharge Monitoring Report

Effluent limitation: Any restriction imposed by a state or EPA on quantities, rates and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including schedules of compliance.

EPA: The United States Environmental Protection Agency.

ESA: Endangered Species Act

Facility or activity: Any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

Fill material: Any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body. The term does not include any pollutant discharged into the water primarily to dispose of waste, as that activity is regulated under section 402 of the CWA. 33 CFR §323.2(e).

FWPCA: Federal Water Pollution Control Act

Hazardous substance: Any substance designated under 40 CFR 116 pursuant to section 311 of CWA.

Individual permit: A USACE authorization that is issued following a case-by-case evaluation of a specific project involving the proposed discharge(s) in accordance with the procedures of 33 CFR 323 and 325 and a determination that the proposed discharge is in the public interest pursuant to 33 CFR 320. 33 CFR §323.2(g).

General permit: A USACE authorization that is issued on a nationwide or regional basis for a category or categories of activities when: (1) those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts; or (2) the general permit would result in avoiding unnecessary duplication of regulatory control exercised by another Federal, state, or local agency provided it has been determined that the environmental consequences of the action are individually and cumulatively minimal. (See 33 CFR §325.2(e) and 33 CFR 330.) 33 CFR §§ 322.2(f) and 323.2(h).

Isolated waters: Those non-tidal waters of the U.S. that are: (1) not part of a surface tributary system to interstate or navigable waters of the U.S.; and (2) not adjacent to such tributary waterbodies. 33 CFR §330.2(e).

LEDPA: Least Environmentally Damaging Practicable Alternative

Mitigation: Mitigation includes: (a) Avoiding the impact altogether by not taking a certain action or parts of an action. (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation. (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment. (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action. (e) Compensating for the impact by replacing or providing substitute resources or environments. 40 CFR §1508.20.

MPRSA: Marine Protection, Research, and Sanctuaries Act

MS4: Municipal Separate Storm Sewer System

Municipality: Includes a city, town, county, district, or other public body created by or under state law and having jurisdiction over disposal of sewage or other wastes. Also includes an Indian tribe or authorized Indian tribal organization. [CWA Sec. 502(4)]

National Pollutant Discharge Elimination System (NPDES): The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of CWA. The term includes an "approved program."

Nationwide permit: Nationwide permits are a type of general permit and represent USACE authorizations that have been issued by the regulation (33 CFR 330) for certain specified activities nationwide. If certain conditions are met, the specified activities can take place without the need for an individual or regional permit. 33 CFR §325.5(c)(2).

Navigable waters of the U.S.: Navigable waters of the United States are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not

extinguished by later actions or events which impede or destroy navigable capacity. 33 CFR §329.4.

NMFS: National Marine Fisheries Service

NPDES: National Pollutant Discharge Elimination System

NWPs: Nationwide Permits

OPA: Oil Pollution Act

Point source: Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Pollutant: Dredged soil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water, but the term does not include sewage from vessels or a discharge incidental to the normal operation of a vessel of the Armed Forces with the meaning of §1322, or, in some cases, water or oil injected into wells for oil or gas production purposes.

Pollution: The man-made or man-induced alteration of the chemical, physical, biological and radiological integrity of water.

POTWs: Publicly Owned Treatment Works

Practicable-The term *practicable* means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. 40 CFR §230.3(q).

Privately owned treatment works: Any device or system which is (a) used to treat wastes from any facility whose operator is not the operator of the treatment works and (b) not a "POTW."

Publicly owned treatment works (POTW): A treatment works as defined by section 212 of the Act, which is owned by a state or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

Regional permit: USACE Regional permits are a type of general permit. They may be issued by a division or district engineer after compliance with the other procedures of the section 404 permit regulations. If the public interest so requires, the issuing authority may condition the regional permit to require a case-by-case reporting and acknowledgement system. However, no separate applications or other authorization documents will be required. 33 CFR §§325.2(e)(2) and 325.5(c)(1).

Regulatory agency: An agency that has jurisdiction by law.

Resource agency: An agency that has special expertise with respect to any environmental issue.

RGL: USACE Regulatory Guidance Letters

RHA: Rivers and Harbors Act of 1899

SDWA: Safe Drinking Water Act

Section 404 Permit: A U.S. Corps of Engineers permit to authorize the discharge of dredged or fill material into waters of the U.S., including wetland areas, pursuant to section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344).

Sewage Sludge: Any solid, semi-solid, or liquid residue removed during the treatment of municipal waste water or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced waste water treatment, scum, septage, portable toilet pumpings, type III marine sanitation device pumpings (33 CFR 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.

SIC: Standard Industrial Classification

SNC: Significant Noncompliance

Special aquatic sites: Those sites identified in 40 CFR 230 Subpart E (i.e., sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes). They are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region. 40 CFR §230.3(q-1).

SPCC: Spill Prevention Countermeasures and Control

Storm water: Storm water runoff, snow melt runoff, and surface runoff and drainage.

SWANCC Decision: Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, 531 U.S. 159 (2001)

Tidal waters: Those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects. 33 CFR §328.3(f).

TMDL: Total Maximum Daily Loads

Toxic pollutant: Those pollutants which, after discharge and upon exposure, ingestion, inhalation or assimilation into an organism will, on the basis of information available to EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions or deformations in the organism or its offspring.

Treatment works treating domestic sewage: A POTW or any other sewage sludge or waste water treatment devices or systems, regardless of ownership (including Federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices. For purposes of this definition, “domestic sewage" includes waste and waste water from humans or household operations that are discharged to or otherwise enter a treatment works. In states where there is no approved state sludge management program under section 405(f) of the CWA, the Regional Administrator may designate any person subject to the standards for sewage sludge use and disposal in 40 CFR §503 as a “treatment works treating domestic sewage," where he or she finds that there is a potential for adverse effects on public health and the environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure that such person is in compliance with 40 CFR §503.

USACE: U.S. Army Corps of Engineers

USFWS: U.S. Fish and Wildlife Service

Waters of the United States: (see discussion in 3.1 Overview/Introduction)

Wetlands: Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. 33 CFR §328.3(b); 40 CFR §230.3(t).

WPCA: Water Pollution Control Act of 1948, became Federal Water Pollution Control Act, then the Clean Water Act.

4.0 Floodplains

4.1 Overview/Introduction

Floodplains have been defined as "lowland and relatively flat areas adjoining inland and coastal waters, including, at a minimum, those areas subject to floods which have a one percent or greater chance of being exceeded in any given year (also known as 100-year floods)." The "base" floodplain is set equal to the "100-year" floodplain. The "critical action" floodplain is defined as the 500-year floodplain. Critical actions such as schools, hospitals, nursing homes, utility plants, or any facility producing or storing, volatile, toxic, or water-reactive materials, are restricted in the 500-year floodplain.

Floodplains provide many benefits including:

- Water resource values (natural moderation of floods, water quality maintenance, groundwater recharge);
- Living resource values (fish, wildlife, plant resources, and habitats);
- Cultural resource values (open space, natural beauty, scientific study, outdoor education, archeological and historic sites, recreation); and
- Cultivated resource values (agriculture, aquaculture, forestry).

Through proper planning, floodplains can be managed in ways that are environmentally sensitive and reduce the threat to human life, health and property.

Executive Order (EO) 11988 sought to reinforce the need to (1) strengthen Federal policies to reduce the risk of flood losses; (2) minimize the effect of floods on human safety, health, and welfare; and (3) restore and preserve natural floodplain values. To meet these objectives, the EO requires IHS to:

- Recognize that floodplains have unique and significant public values.
- Consider the natural and beneficial values of floodplains and the public benefits to be derived from floodplain restoration or preservation.
- Avoid, to the extent possible, the long- and short-term adverse effects associated with occupancy and modification of floodplains.
- Avoid direct and indirect support of floodplain development where there is a practical alternative.

The EO applies to all floodplains and is not restricted to those identified on floodplain maps.

IHS activities potentially subject to flood plain consideration include:

- Acquiring, managing, and disposing of Federal lands and facilities.
- Financing or assisting construction and improvements.
- Conducting Federal activities and programs affecting land use, including but not limited to, water and related land resources planning, regulation, and licensing activities.

Most projects involving floodplains require coordination. The type and timing of coordination depends on the magnitude of the floodplain impact and agency interest. Many IHS projects qualify for a streamlined compliance process using a review by class of action.

In addition to EO 11988 compliance, activities that affect floodplains and "other waters of the U.S." often require a Section 404 permit from the U.S. Army Corps of Engineers (USACE) and/or a consistency determination from the local coastal zone management agency prior to beginning work.

Floodplains and wetlands may physically overlap and losses associated with both may result from the same general causes (refer to Section 3.0, Water Resources for detailed guidance on wetland issues).

4.1 Compliance Process

Development/activities within floodplains can lead to serious consequences to both nature and

mankind. As a result of these consequences, floodplain activities are closely monitored. The HHS GAM 30 states that the Secretary, HHS must approve any new construction in floodplains, similar to the requirements for wetlands. An overall compliance flowchart for project development is shown in Figure 4-1. The floodplains compliance process follows these eight steps:

1. Identify floodplains in project area.
2. Conduct early public involvement and inter-agency coordination.
3. Identify practicable alternatives.
4. Assess effects.
5. Minimize effects.
6. Re-evaluate alternatives.
7. Document effects and notify public.
8. Ensure post-implementation compliance.

Step #1: Identify Floodplains in Project Area

The IHS program or project manager must determine if the proposed project is located in a 100-year floodplain (or 500-year floodplain for critical actions), or if it may affect or be affected by a floodplain. The project site should be inspected both upstream and downstream of any nearby streams to gain an understanding of the existing conditions in the project area.

Many Indian reservations and Indian communities have not been surveyed by the USACE and Federal Emergency Management Agency (FEMA); therefore, Flood Insurance Rate Maps (FIRMs) and other resources available to non-reservation communities may not exist for the location of IHS activities. During the proposal and planning phases of a project or program in which the IHS is a participant, the IHS project manager must include the floodplain evaluation as an additional activity and cost. Consult with the USACE or FEMA to determine if floodplain identification resources are available for the project location.

Streamlined Process/Class Review

A streamlined compliance process may be used for certain IHS actions based on a "Class Review" of these actions. A class review is limited to actions for which IHS has reviewed similar actions on an individual basis and determined that the action does not have an adverse impact on floodplain values, does not place persons or property at risk, and for which little or no contrary public comments have been received (see Further Advice in EO 11988, Section 4.J). Many IHS activities impacting floodplains meet the criteria outlined for a class review. A class review will satisfy the compliance requirements of Executive Order 11988, but compliance with other applicable Federal, state, or local code or regulation pertaining to floodplains may be necessary.

Actions that Qualify for Class Review

Proposed actions of the following types of facilities in floodplains can normally qualify for class review:

- Water and sewer mains and appurtenances constructed for transmission of water and sewage that do not serve areas located in floodplains or impact floodplain development.
- Sewage lift stations and sewage force mains that do not serve areas located in floodplains or impact floodplain development.
- Utility lines and appurtenances that are necessary for the operation and maintenances of water supply and waste disposal facilities located in floodplains.
- Wells and appurtenances used for domestic water supply systems.
- Water intakes, sewage outfalls, and appurtenances for domestic water supply and sewage disposal facilities.
- Modifications to existing sewage treatment facilities that do not increase or minimally increase the physical size of the sewage treatment facility, and that do not

provide additional plant capacity that impacts floodplain development.

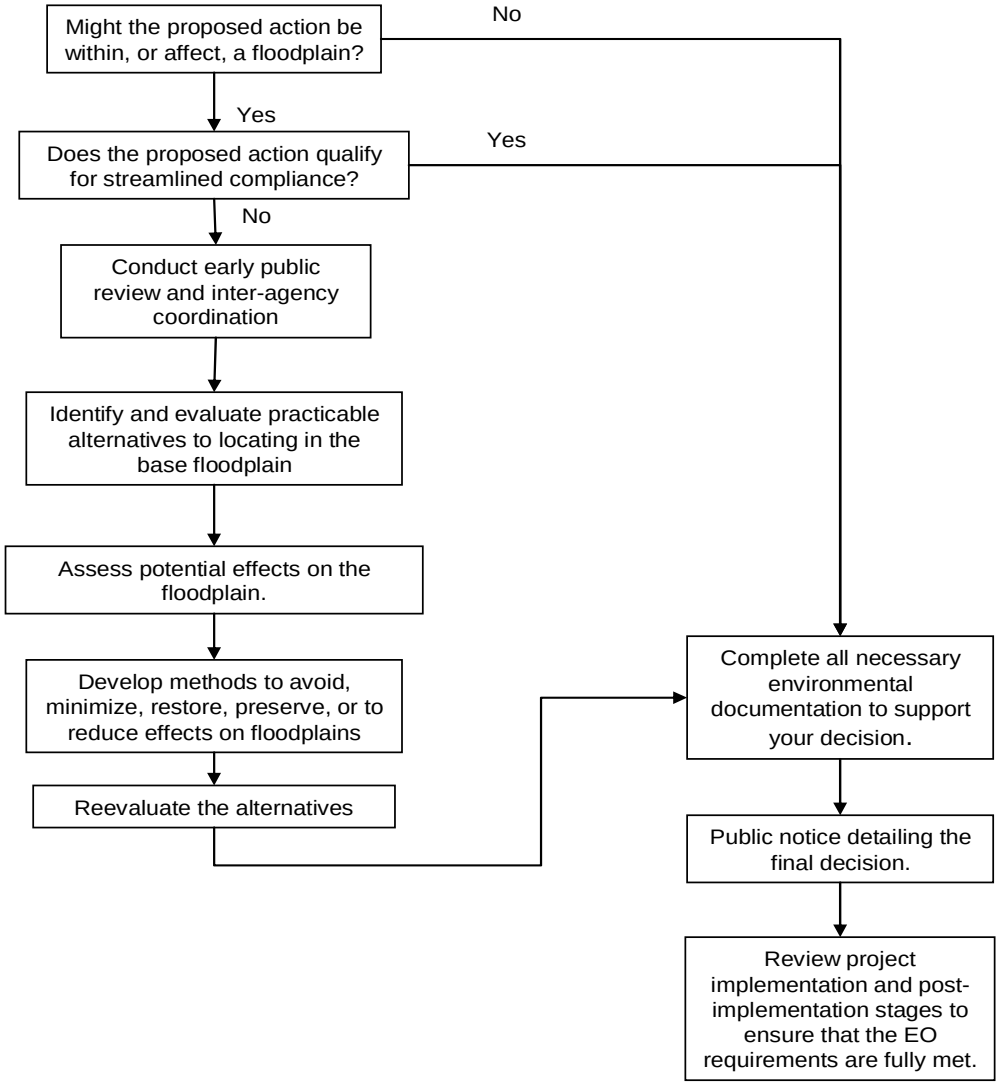

Figure 4-1. Compliance Flowchart for Floodplains.

- Small water pumping stations that require above-grade structures of 50 square feet or less.
- Modifications and improvements to existing water supply and wastewater collection and disposal facilities that serve existing homes and communities located in floodplains that do not provide increased system capacity that would support additional floodplain development.
- Fences.
- Public access structures (e.g., picnic tables, benches, grills etc.).

There may be circumstances where an action subject to a class review will still require the standard eight-step process. These will be situations where the action would result in an increased risk to people or property. Program and project staff, with assistance from OEHE, are expected to determine when exceptions apply based on the information found in this and other documents. Any action that supports additional floodplain development requires the standard eight-step process.

If IHS has determined that the proposed action will be located in a floodplain or will have the potential to affect a floodplain, IHS must continue on to Step #2.

If IHS has determined that the proposed action will not be located in a floodplain or will not have the potential to affect a floodplain, IHS can proceed to Step #7.

Step #2: Begin Public Involvement and Early Inter-Agency Coordination

IHS should notify the public, at the earliest possible time, of the intent to approve or fund a project in a floodplain. IHS must seek to involve all affected and interested individuals, agencies (e.g., tribes, FEMA, and appropriate state and local government agencies), and groups in the decision-making process. Early public involvement may ensure that alternatives to the proposed action are not precluded.

If the project qualifies as a class action, then no public notice is needed.

The notice must provide for an initial public comment period of at least 10 days. The type, placement, and length of comment period will depend upon:

- The project scale;
- Potential for controversy;
- Degree of public need;
- Number of affected agencies and individuals; and
- Potential floodplain impacts.

At a minimum, for activities on trust land, the tribe, Bureau of Indian Affairs (BIA), and the local FEMA offices should be advised of the proposed action. Notify these agencies by letter.

IHS determines the information that will be provided for public review based on an evaluation of the magnitude and potential impact of the action, and potential for controversy. The initial notice should include:

- Description of the project and its purpose, and a statement of the intent to undertake a project within or affecting a floodplain.
- A project area map with appropriate scale, or instructions on where to obtain or inspect a map.
- Identification of the official or organization that is responsible for the project and that can provide further information.
- A notice of explanation of why an action must be located in a floodplain (as required by EO 11988).

Once IHS has begun the initial public involvement process, move to Step #3.

NOTE: An EIS Notice of Intent (NOI) can serve this purpose (see the NEPA Overview section for further information on NOIs).

Step #3: Identify Practicable Alternatives

IHS policy is to not locate facilities in floodplains if there is a practicable alternative.

IHS must identify these practicable alternative(s) in the NEPA compliance process. These same alternatives can be used as part of the floodplains compliance process, so long as they are practicable.

Alternatives outside the floodplain are favorable, but there may be other sites that have less risk associated with them inside the same floodplain. These less risky sites should be considered as alternatives if no others outside the floodplain exist. When the need to site a project in a floodplain is clearly demonstrated, the selected location must be practicable.

If IHS determines that a practicable alternative exists that will not affect the floodplain and decides to implement the alternative, then it may proceed to Step #7. If IHS determines that practicable alternatives do not exist, IHS must proceed to Step #4.

Step #4: Assess Effects

IHS must identify potential direct, indirect, or cumulative effects that project alternatives will have on the affected floodplain(s). The floodplain analysis should look at potential positive or negative, concentrated or dispersed, and short or long-term impacts. The effects of the action on the floodplain and surrounding area need to be identified.

For example, a direct effect may be increased erosion around the site as a result of increased runoff from impervious surfaces. This could indirectly decrease the recreational and economic value of downstream water as it becomes polluted with sediment from surface runoff.

The siting of a single building may seem like a small change in a floodplain. However, when its effect is combined with the effects caused when other services and buildings begin to locate in the floodplain in support of the proposed action, the cumulative effects can decrease the natural floodplain value and increase risks to humans.

Analysis may include consideration of the following items, commensurate with the level of risk or environmental effects for each alternative that encroaches on floodplains:

- Flooding risks;
- Impacts on natural and beneficial floodplain values;
- Support of probable incompatible floodplain development (i.e., any development that is not consistent with a community's floodplain development plan);
- Measures to minimize effects on the floodplain; and
- Measures to restore and preserve the natural and beneficial floodplain values.

Step #5: Minimize Effects

EO 11988 directs Federal agencies to avoid approving Federal activities for locations within base floodplains unless measures are taken to minimize the long and short-term adverse impacts associated with occupancy and modification of the floodplain. IHS must develop ways to minimize the potential adverse effects of each alternative on life and property and natural and beneficial floodplain values. Agencies responsible for providing Federal assistance for construction and improvements and for conducting programs affecting land use should take actions to reduce risk of flood loss; to minimize the impacts of floods on human safety, health, and welfare; and to restore and preserve the natural and beneficial values served by floodplains.

All practical measures available should be analyzed. Mitigation of adverse effects may include:

- Developing flood-proof designs.
- Building structures that are not dependent on the floodplain in other locations outside the floodplain.
- Designing projects that minimize the adverse effects and flood damage within the floodplain.
- Identifying all practicable mitigating measures in an Environmental Impact Statement (EIS) or Environmental Assessment (EA).

Step #6: Re-Evaluate Alternatives

IHS must reevaluate the project to determine if:

1) the project should continue given exposure to flood hazards, increased hazards to others, and damage to floodplain and/or floodplain values; and
2) if alternatives rejected in step #3 can now be considered practicable, given the information gained in steps #4 and #5. IHS cannot undertake actions in, or affecting, a floodplain unless there is no practicable alternative. If the project will continue, and no practicable alternative is available, IHS must move on to Step #7.

Step #7: Document Effects and Notify Public

IHS must prepare appropriate documentation and provide an opportunity for public review of any final decision. This includes any of the determinations reached at an earlier stage, all the way up to the determination that the proposed action is the only practicable alternative and must be taken regardless of the effects on floodplains.

The environmental document written to support a decision that may or may not affect floodplains should include sufficient information to describe potential effects to the floodplains and to allow evaluation of alternatives that would avoid and/or mitigate these effects.

NOTE: The Secretary HHS must approve new construction in floodplains.
(GAM 30-20-20D; 30-40-40H)

Specific discussion of each of the three possible determinations regarding floodplains follows.

Projects with No Floodplains Nearby and/or No Effect on Floodplains

For projects with no floodplains nearby and/or no effect on floodplains, the environmental document should contain the following information:

- A reference to Executive Order 11988 and its influence on the floodplains assessment process.
- Description of the final determination and why/how that determination was reached.

For example:

As required by EO 11988, a floodplains assessment was undertaken to assess the impacts that the proposed action may have on floodplain values. Following (describe the assessment–e.g. looking at NWI maps, contacting USFWS/USACE, etc.), it was determined that the project does not lie within a floodplain and does not have the potential to affect any floodplains adjacent to the project, so further consideration of floodplain values has been deemed outside the scope of this document.

OR

As required by EO 11988, a floodplains assessment was undertaken to assess the impacts that the proposed action may have on floodplain values. While the assessment revealed that the project is within a floodplain, a determination was reached that the proposed action would have no effect on floodplain values whether directly, indirectly, or cumulatively. The project will not have any significant adverse effects on natural and beneficial floodplain values and will not result in a significant change in flood risks. This determination was reached (describe how the determination was reached–e.g. looking at NWI maps, contacting USFWS/USACE, etc.). As a result of this determination, further consideration of floodplain values has been deemed outside the scope of this document.

For Projects with Affected Floodplains but also Practicable Alternatives that Avoid/Minimize Effects

IHS should conduct follow-up inter-agency coordination to ensure that no new effects and/or issues regarding floodplains have come up.

Next, IHS must document its findings in an environmental document. The document should contain:

- A reference to EO 11988 and its influence on the floodplains assessment process.
- Description of the final determination and why/how that determination was reached.
- Detailed map(s) of the project area showing floodplain areas and the proximity of the project alternatives to the floodplains.
- Studies and reports documenting the project scope as related to nearby floodplains.
- Documentation of compliance and consistency with Federal, state, tribal, county, and local floodplain programs, requirements, and plans.
- Documentation of any Public Notices or public meetings.
- Documentation of coordination with other agencies (e.g., USACE, local agencies, etc.) including studies and reports and recommendations.
- Identify the practicable measures taken to minimize harm to the floodplain values, alternatives considered, and mitigation measures. Indicate the steps taken to ensure that alternatives that would eliminate or minimize effects to floodplain values have been considered and adequately studied (i.e., discussion of avoidance, minimization, and replacement).
- Describe the effects each alternative is anticipated to have on the floodplain values. Specify how much of the floodplain will be affected by each project alternative.

For the no action alternative, specify if (and how much of) the floodplain is expected to be developed/affected by other uses even if this project is not implemented.

For the proposed action, include secondary/cumulative effects resulting from the project (i.e., effects on fish and wildlife).

For Projects with Affected Floodplains but No Practicable Alternatives that Avoid/Minimize Effects

IHS should conduct follow-up inter-agency coordination to ensure that no new effects and/or issues regarding floodplains have come up.

Next, IHS must document its findings in an environmental document. The document should, to the fullest extent possible, contain the finding required by EO 11988 that there are no practicable alternatives to impacting the relevant floodplain values:

- A reference to EO 11988 and its influence on the floodplains assessment process.
- Description of the final determination and why/how that determination was reached (i.e. why there are no practicable alternatives to the proposed action).
- Detailed map(s) of the project area showing floodplain areas and the proximity of the project alternatives to the floodplains (e.g., FEMA, USACE, etc.).
- Studies and reports (e.g., floodplain survey maps and reports, etc.) documenting the project scope as related to nearby floodplains.
- Documentation of compliance and consistency with Federal, state, tribal, county and local floodplains programs, requirements, and plans.
- Documentation of any Public Notices or public meetings.
- Documentation of coordination with other agencies (e.g., USACE, Local Agencies, etc.) including studies and reports and recommendations.
- An explanation of how the proposed action includes all practicable measures to minimize harm to floodplains. For each

impacts to floodplain values by each of the alternatives, specify what mitigation measures are proposed to minimize or eliminate the impact. Indicate the steps taken to insure that any alternatives that would eliminate or minimize impacts to floodplain values have been considered and adequately studied (i.e., discussion of avoidance, minimization, and replacement).

- Describe the impacts each alternative is anticipated to have on the floodplain values. Specify how much of the floodplain will be affected by each project alternative.
- For the no action alternative, specify if (and how much of) the floodplain is expected to be developed/affected to other uses even if this project is not implemented.
- For the proposed action, include secondary/cumulative impacts resulting from the project (i.e., impacts to fish and wildlife).
- Specify how the unavoidable and unmitigable impacts to floodplains can be justified as part of implementing the proposed project.

The discussion of the only practicable alternative should say something like:

> *"Based upon the above considerations, and in conformance with the requirements of EO 11988, it has been determined that there is no practicable alternative to the proposed new construction in the floodplain, and that the proposed action includes all practicable measures to minimize harm to floodplain values which may result from the project."*

This section should then discuss the following points:

1. The reasons why the proposed action must be located in the floodplain;
2. The alternatives considered and why they were not practicable; and
3. A statement indicating whether the action conforms to applicable state or local floodplain protection standards.

Additionally, IHS program, facility or project managers must provide public notice to explain why affecting a floodplain is the only practicable alternative. A public review period of 30 days after the issuance of notice of finding shall be allotted before any action is taken. The program, facility, or project manager must wait until the end of the comment period before taking any action on the project. The final notice should include:

- A statement of why the proposed action must be located in an area where it can affect floodplain values.
- Description of all significant facts considered in making the determination.
- A list of the alternatives considered.
- A statement of whether the action complies with applicable State and local floodplain protection standards.
- Description of how the project will affect or be affected by the floodplain, and how impact mitigation is to be achieved.
- A project area map with appropriate scale, or instructions on where to obtain or inspect a map.
- Identification of the official or organization that is responsible for project implementation and monitoring, and that can provide further information.

IHS EAs and EISs written for projects within/affecting floodplains, with initial and final public notices (Steps #2 and #7), will meet most of the EO's 8-Step Process document requirements. It is important that the EA or EIS contain both a statement saying that the action will comply with state and local flood protection standards, and a map or information about the availability of a map showing the location of the action. Full public disclosure must be implemented to enable the public to adequately influence the outcome of decisions for projects affecting floodplains.

Step #8: Ensure Post-Implementation Compliance

IHS must review both the project implementation and post-implementation stages to ensure that the EO requirements are fully met. Oversight responsibility should be integrated into existing processes. Approval for the project and compliance with the EO will depend on a thorough review of both the project implementation and post-implementation stages of the project.

Compliance Criteria for Class Actions

All actions that are described above must be implemented in accordance with the following criteria. Actions which do not comply with these criteria must be analyzed in accordance with the usual eight-step process described above.

1. Determine if the action occurs in the floodplain and document the determination that the action is covered by the class action.
2. Determine that there is no practicable alternative to siting in the floodplain.
3. Take all practical measures during implementation to minimize any adverse impacts to natural and beneficial floodplain values.
4. New facilities need to be designed and constructed to withstand flooding with minimum damage.
5. All activities must adhere to the minimum standards of the National Flood Insurance Program (44 CFR 60.3), and any applicable amendments, and comply with local floodplain management regulations. The NFIP standards under paragraph (a,b,or c) at 44 CFR 60.3 are most likely to be applicable to sanitation facilities construction projects. In accordance with these standards, proposed actions need to be evaluated to ensure that they:
    a. Will not significantly increase 100-year flood elevations.
    b. Will not involve placement of fill or other flow obstructions in the floodway portion of the floodplain unless compensatory adjustments are also included.
6. Existing vegetation (ground cover and canopy) must be left in place and undisturbed to the maximum extent practicable.
7. Best management practices must be used as a minimum to control surface water runoff and erosion. These practices are described in Construction Site Stormwater Runoff Control and Post-Construction Stormwater Management (http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm) and local authorities can offer further guidance. Disturbed areas should be reseeded as soon as possible with species adapted to existing conditions.
8. Dredge spoils must be properly disposed of in accordance with local, state and Federal regulations at an inland site outside identified floodways.
9. Riprap, as opposed to soil, must be utilized as fill material below the maximum normal pool elevation, the level at which a controlled body of water is generally maintained.
10. Prior to crossing areas harboring threatened or endangered species, or areas specifically identified as “sensitive”, biologists must be contacted to assist in the determination of appropriate mitigation measures necessary to negate or minimize impacts to these areas.
11. In areas where overhead structures were constructed, stream banks must not be disturbed and equipment must not be driven in streams; selective cutting must be used to remove intruding vegetation; stumps must be left at a height which will encourage resprouting; soil retained, and overland waterflow reduced; and no area can be stripped of

vegetation.

4.3 Legal Considerations

Clean Water Act, 33 U.S.C. 1344, (Section 404)

This section established a Dredge or Fill Discharge Permit Program, administered by the ACOE, for regulating the placement of dredge or fill material into waters of the United States, including floodplains.

Coastal Zone Management Act, 1972

The Coastal Zone Management Act authorizes a state-Federal program to encourage coastal states and territories to develop comprehensive coastal management programs. The CZMA requires that, to the maximum extent practicable, any Federal action that affects any land/water use or coastal zone natural resource must be consistent with the enforceable policies of an approved state coastal management program.

Executive Order 11988, Floodplain Management, 1977

Executive Order 11988 directs Federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities" for the following actions:

- Acquiring, managing, and disposing of Federal lands and facilities.
- Providing Federally-undertaken, financed, or assisted construction and improvements.
- Conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities.

Each Federal agency is responsible for preparing implementation procedures for carrying out the provisions of the Order. Federal agencies consult with FEMA concerning implementation of this EO.

Federal Emergency Management Agency

National Flood Insurance Program
(44 CFR 59-62, 64-68, 70-71, 75-77)

4.4 Responsibilities and Requirements

All IHS program, facility, and project managers should:

- Determine if there are any floodplains in the project area.
- Consult with local agencies.
- Conduct early public review and inter-agency coordination involving affected and interested individuals, agencies, and groups in the decision-making process.
- Provide an initial public notice.
- Identify practicable alternatives.
- Identify practicable minimization, mitigation, and/or avoidance measures.
- Identify all potential direct, indirect, or cumulative impacts that the alternatives will have on floodplain values.
- Reevaluate the project.
- Document findings and explanation of any final decision.
- Provide for a second public notice.
- Review both the project implementation and post-implementation stages to ensure that the EO requirements are fully met.

4.5 Where to Go for Help

EO 11988, "Floodplain Management," May 24, 1977

Water Resources Council

Floodplain Management Guidelines (40 FR 6030)

Federal Emergency Management Agency

"Further Advice on EO 11988 Floodplain Management."

"Mandatory Purchase of Flood Insurance Guidelines "

Online Hazard Mapping

http://www.esri.com/hazards/makemap.html

Flood Hazard Mapping

"How to Use a Flood Map To Determine Flood Risk For a Property," FEMA 258, May 1995.

http://www.fema.gov/fhm/ot_main.shtm

National Flood Insurance Program

http://www.fema.gov/nfip/

Community Status Book

http://www.fema.gov/fema/csb.shtm

Flood Map Store

http://store.msc.fema.gov/

Floodplain Management

http://www.fema.gov/fima/floodplain.shtm

Flood Preparation and Prevention Information

http://www.fema.gov/library/prepandprev.shtm

A Unified National Program for Floodplain Management

http://www.fema.gov/pdf/hazards/floods/fema100.pdf

"Protecting Floodplain Resources—A Guidebook for Communities," Federal Interagency Floodplain Management Task Force, June 1996.

U.S. Army Corps of Engineers

http://www.usace.army.mil/inet/functions/cw/cecwo/reg/bound.htm

United States Coast Guard

Natural Resources Conservation Service

4.6 Definitions

Actions Affecting or Affected by Floodplains or Wetlands: Actions which have the potential to result in the long- or short-term impacts associated with (a) the occupancy or modification of floodplains, and the direct or indirect support of floodplain development, or (b) the destruction and modification of wetlands and the direct or indirect support of new construction in wetlands.

Base Flood: The flood that has a one percent chance of being equaled or exceeded in any given year (also known as a 100-year flood). This term is used in the National Flood Insurance Program (NFIP) to indicate the minimum level of flooding to be used by a community in its floodplain management regulations.

Base Floodplain: The 100-year floodplain (one percent chance floodplain).

Coastal High Hazard Area: Areas subject to high velocity waters including but not limited to hurricane wave wash or tsunamis. On a Flood Insurance Rate Map (FIRM), this appears as zone V1–30, VE or V.

Critical Action: An action for which even a slight chance of flooding is too great. The minimum floodplain of concern for critical actions is the 500-year floodplain, i.e., critical action floodplain. Critical actions include, but are not limited to, those which create or extend the useful life of structures or facilities: (a) Such as those which produce, use or store highly volatile, flammable, explosive, toxic or water-reactive materials; (b) Such as hospitals and nursing homes, and housing for the elderly, which are likely to contain occupants who may not be sufficiently mobile to avoid the loss of life or injury during flood and storm events; (c) Such as emergency operation centers, or data storage centers which contain records or services that may become lost or inoperative during flood and storm events; and (d) Such as generating plants, and other principal points of utility lines.

Delineate -(1) To draw or trace the outline of; sketch; identify, (2) To draw boundaries (e.g., to

delineate floodplains), (3) To represent pictorially; depict.

Direct Impacts: Changes in floodplain or wetland values and functions and changes in the risk to lives and property caused or induced by an action or related activity. Impacts are caused whenever these natural values and functions are affected as a direct result of an action. An action which would result in the discharge of polluted storm waters into a floodplain or wetland, for example, would directly affect their natural values and functions. Construction-related activities, such as dredging and filling operations within the floodplain or a wetland would be another example of impacts caused by an action.

Emergency Actions: Emergency work essential to save lives and protect property and public health and safety performed under sections 305 and 306 of the Disaster Relief Act of 1974 (42 U.S.C. 5145 and 5146). See 44 CFR §205, subpart E.

Enhance: To increase, heighten, or improve the natural and beneficial values associated with wetlands.

FEMA: Federal Emergency Management Agency.

FIA: Federal Insurance Administration.

Five Hundred Year Floodplain (the 500- year floodplain or 0.2 percent change floodplain): That area, including the base floodplain, which is subject to inundation from a flood having a 0.2 percent chance of being equaled or exceeded in any given year.

Flood Fringe: That portion of the floodplain outside of the floodway (often referred to as ‘‘floodway fringe’’).

Flood Hazard Boundary Map (FHBM): An official map of a community, issued by FEMA, where the boundaries of the flood, mudslide (i.e., mudflow) and related erosion areas having special hazards have been designated as Zone A, M, or E.

Flood Insurance Rate Map (FIRM): An official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community.

Flood Insurance Study (FIS): An examination, evaluation, and determination of flood hazards and, if appropriate, corresponding water surface elevations or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

Flood or flooding: A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland and/ or tidal waters, and/or the unusual and rapid accumulation or runoff of surface waters from any source.

Floodplain: The lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year.

Floodplain Finding (Only Practicable Alternative Finding): A statement needed for the final environmental document when a proposed project is likely to result in a significant encroachment to a floodplain and there is no practicable way to avoid the encroachment. The finding includes:

- The reasons why the proposed action must be located in the floodplain
- The alternatives considered and why they were not practicable
- A statement indicating whether the action conforms to applicable State or local flood protection standards.

Floodproofing: The modification of individual structures and facilities, their sites, and their contents to protect against structural failure, to keep water out, or to reduce effects of water entry.

Floodway: That portion of the floodplain which is effective in carrying flow, within which this carrying capacity must be preserved and where the flood hazard is generally highest, i.e., where water depths and velocities are the greatest. It is that area which provides for the discharge of the base flood so the cumulative increase in water surface elevation is no more than one foot.

National Flood Insurance Program: The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods.

Regional Flood: Same as base flood or 100-year flood.

Regulatory Floodway: The area regulated by Federal, State or local requirements to provide for the discharge of the base flood so the cumulative increase in water surface elevation is no more than a designated amount (not to exceed one foot as set by the National Flood Insurance Program).

Restore: To reestablish a setting or environment in which the natural functions of the floodplain can again operate.

Risk: The consequences associated with the probability of flooding attributable to an encroachment. It shall include the potential for property loss and hazard to life.

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5.0 Real Property

5.1 Overview/Introduction

The management of Federal real property (including space management) involves many regulations and a high degree of accountability. However, even the strictest adherence to all requirements and guidance cannot shield the real property manager and IHS from potential liability under the various environmental statutes. Examples of real property activities that have environmental consequences include:

- leasing or purchasing additional office or laboratory space;
- leasing or purchasing modular buildings and mobile homes or offices;
- disturbing existing asbestos-containing material or lead-based paint;
- local utility requests for easements or rights-of-way; and
- installing energy-efficient window blinds and film in a historic building.

Environmental considerations and management must be an integral part of real property management, from acquisition through operation and maintenance to disposal.

Acquisition

Agencies acquire property in many ways, including purchase, lease, construction, donation, easements, rights-of way, etc. Real property acquisition is always subject to environmental review, regardless of the mechanism used or the size of the property. Even if the acquisition is determined to be categorically excluded from NEPA, the acquisition must still be reviewed so as to ensure that there are no special circumstances (e.g., the presence of toxic contaminants) that would preclude the exclusion.

In acquiring property, the responsible Federal official and the facility manager must make all appropriate inquiries and exercise due diligence to ensure that IHS and, in certain situations, the Tribe, is not acquiring unknown liabilities. This may include examining the history of adjacent and near-by land uses closely to determine whether the property under consideration might be subject to contamination from neighbors, or whether IHS or tribal operations on-site might affect a near-by historic property. Also, previous uses of the property that might have left residual contamination should be investigated.

An additional concern for the facility manager arises when IHS or the Tribe proposes to change the mission or function of a piece of property. If the change is merely from one kind of office to another, there are rarely environmental concerns. If, however, the change is from office to laboratory use, or from clinical to residential use, significant environmental issues may be involved. For environmental review purposes, such changes should be treated as if they were new property acquisitions.

Operation and Maintenance

During the operation of a facility, environmental issues are on-going, and are normally integrated into the overall management program. They tend to be media-specific, such as air emissions, waste disposal, sewage, PCB management, etc. If historic properties are involved, even routine operations such as basic cleaning and up-keep may be subject to certain constraints that are defined in consultation with the State or Tribal Historic Preservation Officer (SHPO/THPO).

A useful tool for ensuring on-going compliance with environmental requirements is the periodic facility environmental audit. A well designed and implemented environmental audit program can help the facility manager to identify and address potential environmental issues before they become serious compliance problems.

Disposal by Transfer

Disposal of real property (e.g., by transfer) should be well planned with consideration given to documentation regarding environmental issues including Section 120(h) of the Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA '120(h)] disclosure of hazardous materials activities. These disclosure requirements have implications for record-keeping during ownership of the building. Also, by regulatory

definition, the transfer of a historic property constitutes an adverse effect on the property and requires additional review and comment by the SHPO/THPO and the Advisory Council on Historic Preservation.

As part of full disclosure for transfer of facilities to tribes, the IHS follows practices similar to those described earlier. For property acquisitions, due diligence is performed to identify environmental liabilities so tribal recipients do not acquire properties with unknown liabilities.

Environmental Considerations

Environmental liability can come from any number of sources, including the presence of lead or asbestos at the property, contaminated soil and groundwater, the discovery of hazardous materials on-site, historic properties, or even the presence of an endangered species.

Due to the time and expense associated with environmental liability, it is in the interest of IHS to conduct a thorough property acquisition and disposal process in order to avoid potential environmental liability. A properly executed analysis will:

- Avoid or minimize environmental liability;
- Avoid or minimize environmental impacts;
- Avoid or minimize unnecessary costs;
- Avoid or minimize unnecessary time delays;
- Protect the health and safety of the Tribe, public, contractors, and IHS personnel.

It is essential that environmental considerations and management be an integral part of real property management, from acquisition through operation and maintenance to disposal.

There are several different standards for performing environmental site assessments for the purpose of transferring a building or property, including EPA's All Appropriate Inquiry Rule and the American Society for Testing and Materials (ASTM) Environmental Site Assessment process. Whatever the process that IHS follows, the assessment/audit process will assist the IHS in collecting and assessing information about the property and facilitate decision making.

IHS property acquisition and disposal transactions may include one or more of the following general processes:

- Transaction Screen
- Phase I Environmental Site Assessment (Phase I ESA)
- Phase II Environmental Site Assessment (Phase II ESA)

5.2 Compliance Process

CERCLA holds potentially responsible parties (PRPs) liable for the cost of the environmental cleanup of facilities and sites where there is contamination. When contamination from hazardous wastes is found on a property, CERCLA can assign liability to PRPs. The PRP is then responsible for the cost of the environmental cleanup and treatment, which can be very expensive and time consuming. In order to avoid being named a PRP, IHS may be able to claim one of a few CERCLA defenses that were established to minimize liability, such as the "Innocent Landowner" defense. Other defenses include the Contiguous Property Owner and Bona Fide Prospective Purchaser Defenses.

The "innocent landowner" defense allows landowners to avoid CERCLA liability if they can prove that, if contamination is found, they did not know or have any reason to know of the presence of hazardous contamination, and that they took proper action once they discovered the problem. In order to qualify for the innocent landowner defense, IHS must have complied with the property assessment standards described in this section.

Proper acquisition and disposal of property requires undertaking due diligence and all appropriate inquiry. Due diligence is a process of investigating a piece of property to see if contamination and/or environmental liability exists. The process is outlined in Figure 5-1 and discussed in detail on the following pages.

The real property due diligence process consists of two steps:

1. Perform an initial evaluation of the property.
2. As needed, perform a more intensive survey of the property.

Step #1: Perform an Initial Evaluation of the Property

Depending on the potential for the property to have contamination or other issues, choose either a simple process (transaction screen) or a more robust process (Phase I ESA) to perform due diligence.

Transaction Screen

The least comprehensive form of due diligence is the transaction screen process. The transaction screen may be conducted by either IHS personnel or by an environmental professional. The process consists of filling out the transaction screen questionnaire, which is divided into three sections and includes:

- Limited research/records review
- A site visit
- Interviews

After completing the transaction screen process, IHS personnel can then make an informed decision whether further inquiry is needed to assess the environmental conditions at the property. If further inquiry is needed, IHS should proceed with the advice and guidance of an environmental professional who can assist as IHS either proceeds with a Phase I Environmental Site Assessment (ESA) or continues to research relevant areas of concern.

Although the transaction screen is included as a possible step in the due diligence process, it is highly unlikely that IHS personnel would apply it very often. One example of the appropriate use of a transaction screen may be the case of leasing office space.

Phase I Environmental Site Assessment

The Phase I ESA provides an initial evaluation of the proposed property to help determine the likelihood for encountering hazardous material contamination. The ESA may also help identify potential contamination sources within adjacent properties, which may migrate onto the property in question. According to the ASTM Standard, Phase I ESAs require completion by an environmental professional.

The level of detail necessary to complete the ESA must be enough to reasonably ensure that potential contamination is identified. The property's scope and complexity determine the level of "enough detail."

The information collected during the Phase I ESA is the background information needed for the ESA report and analysis.

The analysis consists of:

- Reviewing the collected information, including any initial samples that have been collected.
- Determining if contamination exists on the site, to what extent, and the scope of further investigations.

All of this information is then documented in the final report for review by the Area OEHE Director and ultimately by the Area Director. Depending on the property, the HQ OEHE Director will review the document as well.

The contents of the report and analysis will help determine if a Phase II ESA is needed to evaluate any potential contamination associated with the property.

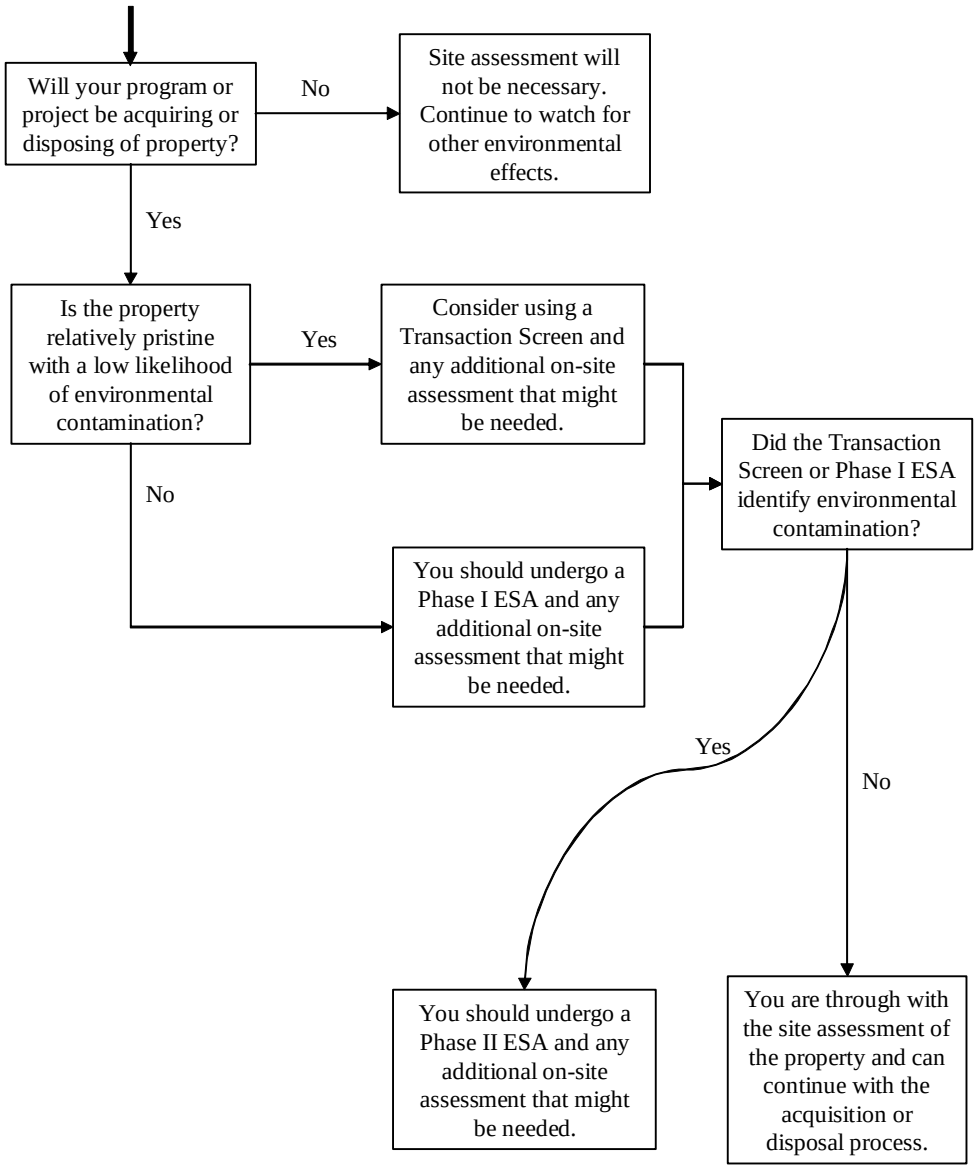

Figure 5-1. Real Property Due Diligence/Appropriate Inquiry

Step #2: As Needed, Perform a More Intensive Survey of the Property

As needed, or as determined from Step #1, if the property has the potential for contamination, a Phase II ESA may be warranted.

Phase II Environmental Site Assessment

The Phase II ESA includes intrusive survey techniques to determine and characterize the presence of hazardous material contamination at a site. The purpose of the Phase II is to estimate the nature of contamination and to provide the basis for a preliminary assessment of the cost for corrective or preventive action. The Phase II requires sampling and analysis of such media as soil, groundwater, surface water, unknown drum contents, or building materials (for asbestos and/or lead content).

An effective Phase II ESA contains:

- A sampling and analysis plan (location and depth of borings, hydrogeologic or hydraulic testing, appropriate analytical methods and detection limits, etc.).
- Sampling and analytical testing to identify and characterize the contamination.
- An assessment of public health exposure concerns.
- An assessment if further investigation is needed to determine the horizontal and vertical extent of the contamination.
- A determination of the regulatory handling, reuse, and/or disposal requirements for contaminated media.
- Recommendations for a cost-effective corrective action plan to address the contamination as well as ensuring the contamination is not aggravated during resulting activity at the site.

Due to the multiple tasks associated with the Phase II ESA (development of a sampling plan, sample collection and analysis, interpretation of results, etc.), these investigations require significant amounts of time and resources. For the IHS program or project manager involved in a real property acquisition, transfer, or disposal, it is important to allot sufficient time and resources for these investigations, if they are anticipated.

5.3 Legal Considerations

Federal Laws and Regulations

Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act (RCRA) banned all open dumping of waste, encouraged source reduction and recycling, and promoted the safe disposal of municipal waste. RCRA also mandated strict controls over the transportation, treatment, storage, and disposal of hazardous waste. The 1980 RCRA regulations established the basic "cradle to grave" approach to hazardous waste management that exists today. Cradle to grave management means that all entities defined as hazardous waste generators are responsible for the waste’s proper storage, treatment, transportation, and disposal, following EPA guidelines.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

CERCLA holds potentially responsible parties (PRPs) liable for the cost of hazardous waste cleanup of facilities and sites where there is a release or threat of a release. A National Contingency Plan directs how cleanups are addressed, and the National Priorities List includes sites that

should have a CERCLA-quality cleanup. EPA is the authorized agency for this law.

CERCLA Section 120, Federal facilities, states that each "department, agency, and instrumentality of the United States (including the executive, legislative, and judicial branches of government) shall be subject to, and comply with, [CERCLA] in the same manner and to the same extent, both procedurally and substantively, as any nongovernmental entity, including liability . . ."

CERCLA Section 120(h) has specific compliance requirements for the Federal government when it transfers property to a non-governmental entity. Section 120(h) is also known as the Community Environmental Response Facilitation Act (CERFA) and is discussed below.

A Federal agency that releases a CERCLA regulated amount of hazardous substances into the environment is responsible for cleaning up the release using its own funds. There is no special funding or account in the Federal government (unless Congress creates one) that will pay for releases by a Federal agency. In the case of any IHS facility, the funds used would probably come from the M&I account. The Superfund is only used for cleanup of sites that are on the National Priorities List or for emergencies.

CERCLA was reauthorized and strengthened by the Superfund Amendments and Reauthorization Act (SARA) in 1986.

Community Environmental Response Facilitation Act (CERFA)

Amended the CERCLA provisions dealing with Federal activities on any real property owned by the government. CERFA requires the Federal government to identify those parts of real property where no hazardous substance had been stored, released, or disposed of. The primary issue is that after the real property is transferred to a non-Federal entity, any additional remedial action found to be necessary after the date of such transfer shall be conducted by the Federal government, which may be the IHS. CERFA also makes the Federal government responsible for cleanup of any contamination, linked to Federal activities, that is discovered after the property is transferred.

It is important to note that CERCLA response actions cover hazardous substance as defined by these regulations; not all environmental liabilities associated with IHS facilities will be covered. For instance, while asbestos and lead are defined as CERCLA hazardous substances, asbestos- and lead-containing building materials are not.

Clean Air Act (CAA)

The Clean Air Act (CAA) was established for the regulation of air pollutants and air emissions. The CAA requires EPA to establish national ambient air quality standards (NAAQS) and national emission standards for hazardous air pollutants (NESHAP). The Act includes a list of 189 hazardous air pollutants selected by Congress on the basis of potential health and/or environmental hazards. EPA must regulate these listed air toxins.

IHS supported activities that include operation and maintenance, renovation, and demolition may fall under regulations dealing with asbestos. NESHAP requires an asbestos inspection to be conducted and regulatory agency notification prior to renovation or demolition. Activities within or around asbestos-containing buildings require specific training, mitigation measures, and observance of strict health and safety codes.

Clean Water Act (CWA)

The Clean Water Act established the basic structure for regulating discharges of pollutants into waters of the United States. It gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry. The Act also continued requirements to set water

quality standards for all contaminants in surface waters. The Act made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions.

National Historic Preservation Act (NHPA)

The NHPA establishes a national policy for the preservation of the cultural environment, and sets forth a mandate for protection in Section 106. The purpose of Section 106 is to protect properties listed in or eligible for listing in the National Register of Historic Places.

IHS-supported activities that affect or could potentially affect a site of historic or prehistoric importance must be reviewed through a public interest process in which there is consultation with the State Historic Preservation Officer (SHPO), the ACHP, interested organizations and individuals. The Section 106 process is designed to ensure that impacts to properties are identified, and that alternatives to avoid or mitigate an adverse effect on property eligible for the NRHP are adequately considered in the planning process. In addition, Section 110 of the Act sets out IHS's responsibility for identifying and protecting historic properties and avoiding unnecessary damage to historic properties it owns or controls. The IHS must establish a preservation program for the identification, evaluation, nomination to the National Register, and protection of historic properties.

State and Tribal Laws

In addition to the Federal laws listed above, many states and Tribes have requirements that govern the use, storage, and disposal hazardous materials, substances, and wastes. These additional requirements must be considered for their applicability to IHS supported activities.

Legal Implications of Phase I/II ESA Documentation

The documentation prepared as part of the Phase I/II ESA has legal ramifications and implications. A few notes of interest about the ESA:

- The Phase I/II ESA and all supporting documents (including photographs, note books, field notes, etc.) become a legal document.
- The Phase I/II ESA can only be used by the client for whom work was conducted.
- The environmental professional must legally disclose findings of contamination found on a property to the current property owner.

5.4 Responsibilities and Requirements

Real property personnel, facility managers, facility engineers, and any official that is the decisionmaker in real property acquisitions, disposals, and transfers must be aware of their responsibilities and requirements including:

- Coordinating with the Area Office of Environmental Health and Engineering;
- If required, ensuring completion of a Transaction Screen or Phase I Environmental Site Assessment, including:
  - A thorough review of records back to the first obvious developed use (including previous agricultural uses or placement of fill) or to 1940, whichever is earlier;
  - Regulatory records research;
  - A site visit;
  - Interviews;
  - A written report.

- If needed, ensuring completion of a Phase II Environmental Site Assessment that includes:
  - Sampling of potentially contaminated areas;
  - Confirmed presence of contamination;
  - A determination of the type of contamination;
  - A determination if further investigation is needed to determine extent of contamination;
  - An outline of the amount of remedial actions and cost required;
  - A list of any risks to current/future users from the contamination.

5.5 Where to Go for Help

During the revision of this Environmental Review Manual, a guidance document was developed that has particular relevance to IHS real property issues. The *Guidance Document for Managing Hazardous Materials in IHS Buildings* provides comprehensive overviews of asbestos, lead, polychlorinated biphenyls, radon, hazardous wastes, and refrigerants. In addition, detailed checklists which summarize both regulatory requirements and best practices for each of these materials are also provided. This document contains a section dedicated to property transfer issues.

Standard environmental record sources come from both Federal and state sources. Most of this information can be researched on the Internet. For the regulatory records review portion of the Transaction Screen/Phase I ESA, the following databases and search distances have been established by the ASTM Standard:

Type of Regulatory Listing	Minimum Search Distance miles (kilometers)
Federal Sources	
NPL site list	1.0 (1.6)
CERCLIS list	0.5 (0.8)
CERCLIS NFRAP site list	Property and adjoining properties
RCRA CORRACTS facilities list	1.0 (1.6)
RCRA Non-CORRACTS TSD facilities list	0.5 (0.8)
RCRA generators list	Property and adjoining properties
ERNS list	Property only
State Sources	
State Superfund	1.0 (1.6)
CERCLIS list	0.5 (0.8)
Landfill and/or solid waste disposal site lists (permitted and unpermitted)	0.5 (0.8)
Leaking UST lists	0.5 (0.8)
State-registered UST lists	Property and adjoining properties

You can access the databases through the Internet. Most can be reached at the EPA website www.epa.gov/enviro/html/qmr.html. The sites include:

- **Envirofacts Query.** Envirofacts is a database that integrates data from five EPA databases (CERCLIS, RCRIS, PCS, TRIS, and AIRS/AFS). The query allows you to obtain an integrated report of the five databases or search each database separately.
- **EPA Maps on Demand** www.epa.gov/enviro/html/mod/index.html This function allows you to create maps of the project site and the surrounding demographics, land use, and land cover.

- **National Priorities List (NPL).** The NPL database identifies the priority for cleaning up uncontrolled or abandoned hazardous waste sites under CERCLA. You can search the site by state at www.epa.gov/superfund/sites/npl.
- **Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS).** CERCLIS is a database of sites that have been or are under investigation for potential contamination and listing on the NPL. You can find reported Superfund sites and hazardous waste sites by zip code. However, there is no guarantee that CERCLIS contains all potential hazardous sites. Use this list in conjunction with the NPL.
- **Resource Conservation and Recovery Information System (RCRIS).** RCRIS lists hazardous waste handlers that are registered with EPA (a requirement). The corresponding RCRA Administrative Action Tracing System (RAATS) is a database that contains violations, evaluations and enforcement information.
- **Toxic Release Inventory System (TRIS).** This database contains information about releases and transfers of more than 300 toxic chemicals and compounds. However, the database may not be updated with current information for more than one year.

State environmental quality offices often have maps, reports, registration notices, correspondence, and other technical information for review. The following databases and resources may be available locally:

- **State Superfund Registry.** Includes sites that did not make the NPL, as well as sites that have hazardous substance releases (not just wastes).
- **Municipal Solid Waste Landfills.** All state regulated landfills are included on this list, including those that have been properly closed.
- **Petroleum Storage Tank Registration.** Contains registered ASTs and USTs, identifies number of tanks, capacity, location, and owner.
- **Priority Enforcement List (PEL).** Includes illegal tire sites.
- **Voluntary Cleanup Database.** Contains all sites that are in the Voluntary Cleanup Program (VCP). This is updated monthly.
- **Enforcement Actions.** An annual report describing enforcement actions for specific sites. Useful records include compliance inspection reports, enforcement notices, contamination assessment reports, remedial action plans, initial remedial action reports, etc.
- **Abandoned Landfills.** This information is available from local government officials or from the designated state environmental quality agency.
- **Leaking Petroleum Storage Tanks** database. It contains facility information, status, and priority on reported leaking PSTs.

Other websites include:

American Society for Testing and Materials

www.astm.org

ASTM E 1528, *Environmental Site Assessments: Transaction Screen Process*

ASTM E 1527, *Environmental Site Assessments: Phase I Environmental Site Assessment Process*

ASTM E 1903, *Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment*

Guide on Evaluating Environmental Liability for Property Transfers, (8/98)

www.epa.gov/swerffrr/pdf/cfatf_guide_liability.pdf

Superfund

www.epa.gov/superfund/action/law/cercla.htm

State Environmental Regulations--Brownfields

http://www.envirotools.org/regulations/state_local.shtml

www.envirotools.org/regulationstate_local.shtml

Environment/Energy: EPA Regions & State Environmental Departments

http://www.epa.gov/epahome/state.htm

GSA Real Property Disposal Home Page

http://www.gsa.gov/Portal/gsa/ep/channelView.do?pageTypeId=8211&channelPage=%2Fep%2Fchannel%2FgsaOverview.jsp&channelId=-17887

5.6 Definitions

ACM: Asbestos-containing material

AST: Above ground storage tank

ASTM: American Society for Testing and Materials

CAA: Clean Air Act of 1990

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980

CERCLIS: Comprehensive Environmental Response, Compensation and Liability Act Information System; a database that maintains CERCLA information.

CORRACTS: RCRA Corrective Action Sites

CWA: Clean Water Act of 1997

EPA: Environmental Protection Agency

ERNS: Emergency Response Notification System. EPA database on reported releases of oil & hazardous substances.

ESA: Environmental Site Assessment

GSA: General Services Administration

LBP: Lead-based paint

NEPA: National Environmental Policy Act of 1969

NFRAP: No Further Remedial Action Planned

NHPA: National Historic Preservation Act of 1966

NPL: National Priorities List (defined by CERCLA)

PAD: Property acquisition and disposal

PCBs: Polychlorinated biphenyls

PRPs: Potentially responsible parties

RCRA: Resource Conservation and Recovery Act of 1976

SARA: Superfund Amendments and Reauthorization Act of 1986

SHPOs: State Historic Preservation Officers

THPOs: Tribe Historic Preservation Officers

TSD: Treatment, Storage, or Disposal Facilities

Transaction Screen: The most basic form of due diligence including limited records review, site visit, and interviews to assess environmental conditions of a property.

USTs: Underground storage tanks

6.0 Air Quality

6.1 Overview/Introduction

The principal legislation regulating air quality is the Clean Air Act of 1970 (CAA), which was most recently amended in 1990. The primary objective of the CAA is to establish Federal standards for air pollutant emissions from stationary and mobile sources and to work with states and Tribes to regulate polluting emissions. The Act seeks to improve air quality in areas of the country that fail to meet Federal standards, and to prevent significant deterioration in areas where air quality exceeds those standards.

Compliance with the CAA will depend on the location and type of IHS project and program. Health facilities on reservations may have to address ozone depletion compliance due to freon in chillers, air conditioners, and compressors. Asbestos must be considered in renovation and demolition projects. Where chemical disinfection devices, incinerators, emergency electrical generators, and boilers for heat and hot water must be used, applicable emission rules must be considered.

In addition to the above, IHS sponsored programs and projects must consider the same requirements as non-Federal facilities. Conformity with air requirements must be considered by IHS sponsored programs and projects and can often be dealt with during the environmental review process in consultation with the appropriate authority, usually the state and EPA. New facilities will have to consider any additional emissions from vehicles that will be traveling to the completed facility.

Note: A determination that the program or project is categorically excluded under NEPA does not exclude the program or project from compliance with air quality requirements.

Key issues with the CAA are:

- National Ambient Air Quality Standards (NAAQS)
- Hazardous Air Pollutants (HAPs)
- Tribal Air Programs and Tribal Implementation Plans (TIPs)
- State Implementation Plans (SIPs)

National Ambient Air Quality Standards (NAAQS)

The EPA established National Ambient Air Quality Standards (NAAQS) for six common air pollutants ("ambient air" is air to which the general public has access, as opposed to air within a facility (indoor air) or at a smokestack). There are NAAQS for carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), particulate matter (PM), and ozone (O_3). Ozone is formed when ozone precursors (nitrogen oxides [NOx] and volatile organic compounds [VOCs]) change into O_3 in the atmosphere in the presence of sunlight. Areas that do not comply with the ozone NAAQS regulate NO_X and VOCs. The NAAQS are based on comprehensive studies of available ambient air monitoring data, health effects data, and material effects studies. These studies are published in documents called *Air Quality Criteria Documents*, and these six pollutants are often referred to as "criteria" pollutants." Common emission sources of the six criteria pollutants are listed below.

- **Carbon monoxide [CO]:** Generated from combustion engines (e.g., grounds maintenance equipment and vehicles), heaters, and boilers. Low levels of CO are most serious for those who suffer from heart disease, like angina, clogged arteries, or congestive heart failure. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death. CO contributes to the formation of smog ground-level ozone, which can trigger serious respiratory problems.
- **Lead [Pb]:** Typically found in some paints or in old paints that may flake off of existing buildings or from demolished buildings. People, animals, and fish are mainly exposed to lead by breathing and ingesting it in food, water, soil, or dust.

Lead accumulates in the blood, bones, muscles, and fat. Infants and young children are especially sensitive to even low levels of lead.

- **Nitrogen oxides [NOx]:** Generated from internal combustion engines. NOx is a precursor for ozone, acid rain, particulates, eutrophication, greenhouse gas, and toxic products which may cause biological mutations. Its products can block the transmission of light, reducing visibility in urban areas and on a regional scale in our national parks.
- **Sulfuric oxide [SOx]:** Generated from processes using sulfur or hydrogen sulfides or acids in the process. It is also generated from the combustion of coal and fuel oil-containing sulfur. SO2 and its products can cause temporary breathing difficulty, respiratory illness, aggravate existing heart disease, and premature death. It is the major cause of reduced visibility in many parts of the U.S. It is a precursor for acid rain which damages forests and crops, changes the makeup of soil, and makes lakes and streams acidic and unsuitable for fish. SO2 accelerates the decay of building materials and paints, including irreplaceable monuments, statues, and sculptures that are part of our nation's cultural heritage.
- **Particulate matter [PM]:** Dust particles of various sizes (there are regulations for particles 2.5 and 10 micrometers [µm] in diameter or less) generated by diesel combustion, blowing dust, grading, etc. Particle pollution contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems, including respiratory symptoms, decreased lung function, aggravated asthma, development of chronic bronchitis, irregular heartbeat, nonfatal heart attacks; and premature death in people with heart or lung disease.

  They are the major cause of reduced visibility (haze) in parts of the United States. They can make lakes and streams acidic; change the nutrient balance in coastal waters and large river basins; deplete the nutrients in soil; and damage sensitive forests and farm crops.
- **Ozone [O_3]:** At ground level, ozone is created by a chemical reaction between NOx and volatile organic compounds (VOCs) in the presence of sunlight. VOCs and NOx, are emitted by motor vehicles, lawnmowers, boats, power plants and industrial facilities. Ozone can irritate lung airways and cause inflammation much like a sunburn. Other symptoms include wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities. People with respiratory problems are most vulnerable, but even healthy people that are active outdoors can be affected when ozone levels are high.

For additional information about these pollutants, their health and environmental effects, and common sources that emit them, go to http://www.epa.gov/ttn/naaqs/.

Most pollutants regulated by the NAAQS have two limits. The “primary” standard protects everyone from health risks. The “secondary” standard prevents unacceptable effects on the public welfare (e.g., unacceptable damage to crops and vegetation, buildings and property, and ecosystems).

A geographic area that meets or exceeds the primary standard is called an attainment area. Areas that do not meet the standards or that contribute pollution to nearby areas that do not meet the standards, are called nonattainment areas. An area may be designated attainment for some pollutants and nonattainment for others. For more information on primary and secondary NAAQS standards, go to http://www.epa.gov/air/criteria.html.

National Emission Standards for Hazardous Air Pollutants (NESHAPS)

The CAA lists 188 pollutants or chemical groups as hazardous air pollutants (HAPs). Limits for these pollutants, called National Emission Standards for Hazardous Air Pollutants (NESHAPS), have been set by EPA. Some Hazardous Air Pollutants (HAPs) include:

- Asbestos
- Mercury
- Chromium
- Benzene (found in gasoline)
- Perchlorethlyene (emitted from some dry cleaning facilities)
- Methylene chloride (used as a solvent and paint stripper)

HAPs are regulated because exposure can increase the chances of experiencing health problems. Adverse effects to human health and the environment due to HAPs can result from exposure to air toxics from individual facilities, exposure to mixtures of pollutants found in urban settings, or exposure to pollutants emitted from distant sources that are transported through the atmosphere.

Section 112 of the CAA contains a mandate for EPA to evaluate and control emissions of HAPs. Section 112(b)(1) includes an initial list of HAPs that is composed of specific chemical compounds and compound classes. The listed categories are subject to emission standards subsequently developed under Section 112. The EPA must periodically review the list of HAPs and, where appropriate, revise this list by rule.

Tribal Air Programs

The CAA of 1990 authorized EPA "to treat Indian Tribes in the same manner as states" and instructed EPA to promulgate regulations to that effect. Accordingly, EPA issued the Tribal Authority Rule (TAR). Under the TAR, Indian Tribes can be treated in the same manner as states for CAA provisions related to implementation plans except for certain provisions identified in 40 CFR §49.4.

The EPA authorizes eligible Tribes to have the same rights and responsibilities as states under the CAA and authorizes EPA approval of Tribal air programs meeting minimum requirements of the CAA. Tribes may also establish additional or more stringent air quality protection requirements. The TAR also outlines the eligibility criteria Tribes must meet in order to be treated in the same manner as a state, and defines the process by which EPA will approve Tribal CAA programs. The rule also lays out a strategy for Federal implementation of the CAA in Indian country when Tribes choose not to implement their own CAA programs. For more information, see EPA's TAR website at http://www.epa.gov/oar/tribal/

The rule notes that Congress provided for a grant to Tribes for authority over all air resources within the exterior boundaries of a reservation (including non-Indian owned fee lands). For non-reservation areas, Tribes must demonstrate the basis for jurisdiction.

State and Tribal Implementation Plans (SIPs/TIPs)

The primary purpose of an implementation plan, whether it is developed by a Tribe, a state, or EPA, is to ensure that the NAAQS are not exceeded. Implementation plans are also used to ensure that concentrations of criteria pollutants do not increase significantly, even if the NAAQS are met. A TIP is the Tribe's plan either for improving its ambient air quality when it is worse than the NAAQS, or for maintaining or improving its good air quality when it is cleaner than the NAAQS.

Developing a TIP gives the Tribe the option of implementing and enforcing its own program. Once EPA approves a TIP, the provisions of the implementation plan become Federally enforceable by the EPA or the Tribe.

6.2 Compliance Process (Conformity)

Section 176(c) of the Clean Air Act prohibits Federal entities from taking actions in nonattainment or maintenance areas which do not conform to the state implementation plan (SIP) for the attainment and maintenance of the national ambient air quality standards (NAAQS). Therefore, the purpose of conformity is to:

(1) ensure Federal activities do not interfere with the budgets in the SIPs;

(2) ensure actions do not cause or contribute to new violations, and

(3) ensure attainment and maintenance of the NAAQS.

In November 1993, EPA promulgated two sets of regulations to implement section 176(c). First, on November 24, EPA promulgated the Transportation Conformity Regulations (applicable to highways and mass transit) to establish the criteria and procedures for determining that transportation plans, programs, and projects that are funded under title 23 U.S. C. or the Federal Transit Act conform with the SIP (58 FR 62188). Second, on November 30, EPA promulgated regulations, known as the General Conformity Regulations (applicable to everything else), to ensure that other Federal actions also conformed to the SIPs (58 FR 63214; 40 CFR Part93).

With respect to General Conformity, all Federal actions are covered unless otherwise exempt (e.g.: actions covered by transportation conformity, actions with clearly *de minimis* emissions, exempt actions listed in rule, or actions covered by a Presumed to Conform demonstration [approved list]).

Conformity can be demonstrated by:

- showing emission increases are included in the SIP;
- State agrees to include increases in the SIP;
- No new violations of NAAQS and/or no increase in frequency/severity of violations in areas without a SIP;
- Offsets, and
- Mitigation.

Some emissions are excluded from conformity determination, such as those already subject to new source review; those covered by CERCLA or compliance with other environmental laws, actions not reasonably foreseeable, and those for which the Agency has no continuing program responsibility. (40 CFR 93.153)

In this section, compliance with air quality requirements is described in the following three steps:

1. Ensure air quality issues are addressed for any IHS activity.
2. Determine if the activity must conform to a SIP or TIP.
3. Comply with the National Environmental Policy Act.

Each step is summarized below.

Step #1: Ensure Air Quality Issues are Addressed for any IHS Activity

During the environmental evaluation prior to starting or approving a program activity, be sure to evaluate the potential impact of the activity on local air quality. Answer questions like the following:

- How long will the program or project last?
- Will the program or project occur during a time of the year when pollution is typically trapped close to the ground (an inversion)?
- Will any earth moving or digging activities occur during the program or project? What efforts will you make to prevent wind erosion, blowing dust, or other potential airborne pollutants?
- What effects will the final project have on air quality? Will the program or project require air quality permits to be issued in order to continue to operate?

As you answer these questions, include in your environmental analysis how these issues will be addressed and what the impact may be.

Step #2: Determine if the activity must conform to a SIP or TIP

Air conformity refers to the process of evaluating plans, programs, and projects to determine and demonstrate that they meet the requirements of the CAA and an applicable implementation plan. Air conformity analysis may require IHS to do one or more of the following:

- Evaluate the nature of the proposed action and associated air pollutant emissions.
- Determine whether the action is exempt by rule.
- Calculate air pollutant emissions and air quality impacts associated with the proposed action (including traffic, exhaust from engines necessary for operation, or from other sources).
- Mitigate emissions if regulatory thresholds are exceeded.
- Prepare formal documentation of findings.
- Publish findings to the public and regulatory community, if necessary.

To help determine how the nature of the project may impact air quality, ask the following questions:

Will there be emissions of regulated pollutants?

The proposed action must be evaluated to determine if it will generate direct or indirect air pollutant emissions that exceed allowed thresholds, aggravate a nonattainment problem, or jeopardize the maintenance status of the area. All criteria air pollutants must be evaluated in nonattainment and maintenance areas and both direct and indirect air emissions associated with the proposed action must be evaluated.

Direct emissions are those emissions caused by or initiated by the Federal action and occur at the same time and place as the action. Such emissions include, for example, operational emissions of a Federal facility or emissions from excavating equipment used in a Section 404 permit action. Indirect emissions are those caused by the Federal action, but may occur later in time and/or may be farther removed in distance from the action itself. Direct and indirect emissions must be reasonably foreseeable and, the Federal agency must be able to practicably control them as part of its continuing program responsibility. It must also be possible to locate and quantify direct and indirect emissions at the time a conformity determination is made. The Federal agency is not obligated to account for possible emissions that might result from the Federal action, but cannot be specifically identified, quantified or located.

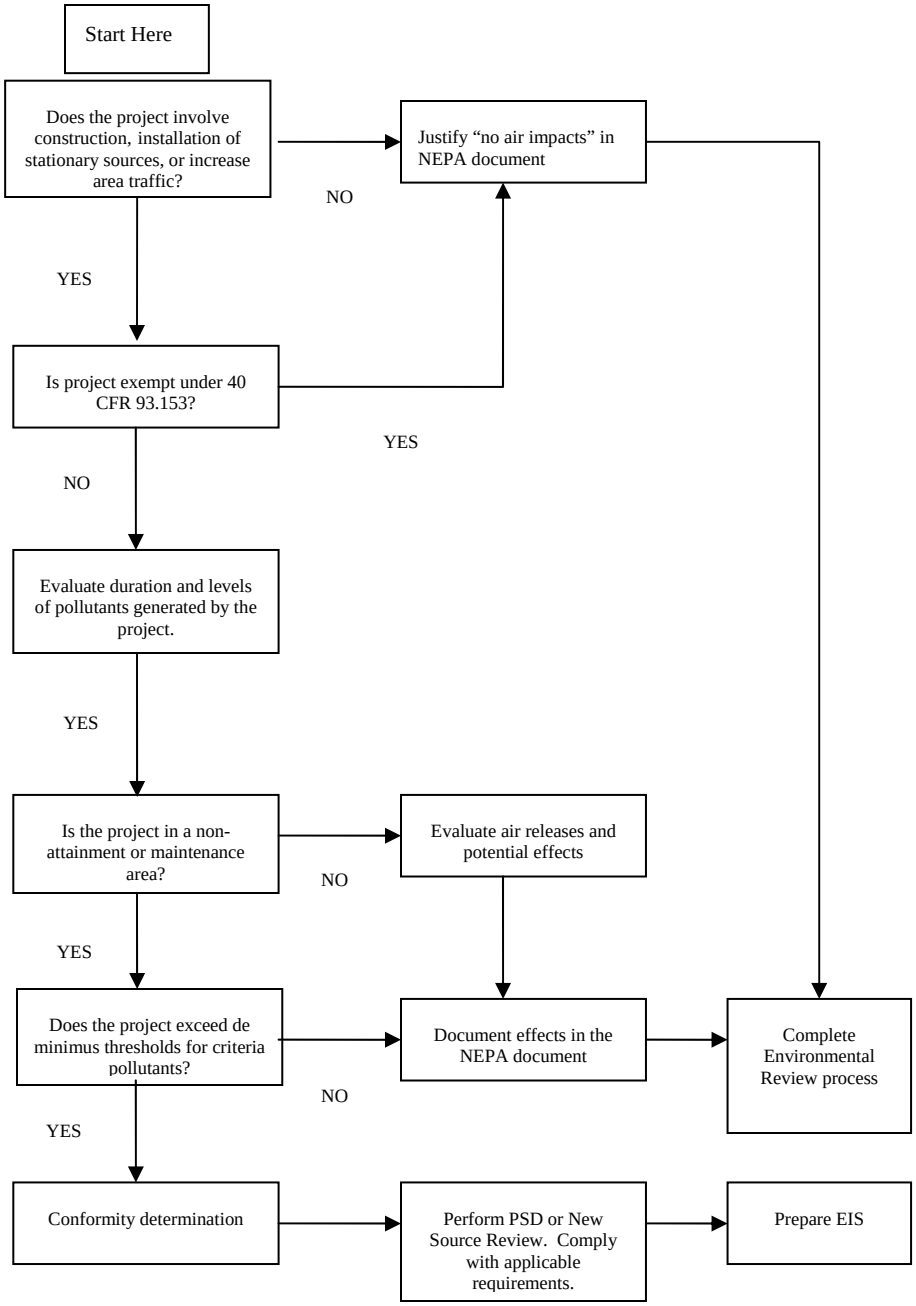

Figure 6-1. Flow Diagram of the Air Quality Assessment Process.

If the proposed action will not result in the direct or indirect emission of NAAQS nonattainment pollutants or precursors, then no further scrutiny is required and no documentation is required. If the proposed action is expected to produce NAAQS air pollutants or precursors that are regulated due to the area's nonattainment or maintenance status, then a determination must be made to see if the proposed action is exempt.

Is the proposed action exempt by rule?

The EPA allows certain actions to be considered exempt from the general conformity rule because the expected air emissions are not likely to impact the SIPs/TIPs. The list of exempt actions appears in 40 CFR 93.153(c) and (d), and includes a number of scenarios that could occur at an IHS facility. Some important exemptions include:

- Continuing and recurring activities at an existing facility where the scope of such activities does not vary significantly from the current activity
- Routine maintenance and repair
- Transfer of ownership or titles of land, facilities, real or personal property
- Actions in response to emergencies or natural disasters
- Actions that require a new or modified permit under the major New Source Review (NSR) or Prevention of Significant Deterioration (PSD) programs
- Modification to existing equipment undertaken as a requirement of environmental regulation
- Remedial activities carried out under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
- Routine and recurring transportation of material and personnel

The complete list of exemptions (as it appears in the 40 CFR 153) should be reviewed to determine whether an exemption is available, and to ensure that the exemption is appropriate for the proposed action. Conformity reviews resulting in a determination that the proposed action is exempt must be documented. However, if the action is not eligible for an exemption then a determination must be made as to whether the proposed action will result in emissions below the threshold levels.

IHS is responsible for making its own determination of whether an action conforms to an applicable implementation plan. This determination must be documented and can include:

- A project description;
- A list of NAAQS non-attainment or precursor pollutants resulting from the proposed action, their associated general conformity thresholds, projected annual emissions of each pollutant and a brief emission rate calculation (if necessary);
- A citation of exemption category (if applicable); and
- Other information to support the declaration of non-applicability.

This documentation is required when a proposed action is in a non-attainment or maintenance area, and:

- The action is exempt;
- The projected emissions do not exceed threshold levels; and
- The emissions will not be regionally significant.

Is the project proposed in an air quality nonattainment or maintenance area?

Only those Federal actions that take place in a region designated as a non-attainment area or maintenance area must be evaluated for general conformity. The attainment status for a region may be determined by checking EPA websites such as http://www.epa.gov/oar/oaqps/greenbk/ or by contacting local air quality authorities.

If the location where the action is designated as an attainment area for all criteria pollutants, no further conformity analysis is required. However, the project must still be evaluated for quantity of pollutants generated and may still require a permit for operation. The project must also be evaluated to determine if it will emit less than 10% of regional emissions.

If the proposed action will occur in a nonattainment or maintenance area, air quality compliance requirements will be more stringent.

Will emissions be below threshold levels?

Emission identification, analysis, and quantification are the foundation of any air quality conformity review. Examples of activity emissions that may be in a review include:

- Health facilities HVAC equipment, maintenance activities, incinerators, boilers, paints, pesticides, solvents.
- Vehicle emissions (typically an indirect impact due to traffic increase related to the implementation of a program or construction of a facility).
- Construction operations (equipment and particulate matter).

Air pollutant emissions generated by the proposed action must be calculated and compared to the appropriate threshold level(s). Some specific requirements associated with the calculation include:

- An annual emission rate (in tons/year) reflecting actual emissions must be calculated for the proposed action.
- The annual emission rate must include both direct and indirect emissions.
- The annual emission rate must include emissions from both mobile and stationary sources associated with the proposed action.
- For multi-year actions, the annual emission rate must reflect the year for which air emissions are expected to be highest.
- If emission rates are estimated, calculations must be performed using EPA-preferred emission factors such as AP-42 for stationary and area sources, and the EPA motor vehicle emission model for the preparation of SIPs/TIPs.

If projected emissions will be below threshold levels, the action may be exempt from further conformity analysis, but only if the emissions are not considered regionally significant. Calculations for proposed actions that do not exceed threshold levels must be documented. If the total of direct and indirect emissions for any individual pollutant will equal or exceed the associated threshold(s), then consultation with the regulatory agency may be required to plan for mitigating or offsetting emissions.

Is the proposed action regionally significant?

An action is considered regionally significant if the total direct and indirect emissions of an individual pollutant (as calculated in the threshold determination) amount to 10% or more of a region's emissions of that pollutant.

If the proposed action is not regionally significant, then the action is exempt from further analysis under the conformity rule.

If the proposed action is regionally significant, it must undergo a full general conformity determination.

Full General Conformity Determination

If a full general conformity determination is applicable to an action, the agency must determine if the action conforms to an applicable SIP or TIP. An IHS action cannot conform unless the total direct and indirect emissions for criteria pollutants from the action are in compliance with all relevant requirements contained in the SIP/TIP. The EPA provides several methods to determine if an action conforms

to a SIP/TIP. IHS can use one or any combination of the methods, described below, to show positive conformity.

To properly conduct a conformity determination, the decision must be based on the latest:

- Planning assumptions showing the estimates of populations, employment, travel, and congestion.
- Emission estimation techniques taking into account mobile sources (automobiles and trucks).
- Stationary sources (buildings, structures, or equipment which may emit any regulated air pollutants).
- Area source emissions (facilities considered as a whole that may emit regulated air pollutants).
- Applicable air quality modeling software and databases.
- Total direct and indirect emissions from the action, which must reflect emission scenarios expected to occur.

At this stage, IHS determines and documents that the total direct and indirect emissions from the action, with all other emissions in the nonattainment or maintenance area, are at a level that would not exceed the specified emissions budget. IHS can now begin the action after the required public involvement.

What mitigation will be included in the project to reduce air quality impacts?

To obtain a positive conformity determination with an applicable implementation plan, IHS may mitigate the air quality impacts of the action. Mitigation measures are specified conditions within the conformity determination that lower the total direct and indirect emissions of an action, thereby achieving a positive conformity. However, if all available mitigation measures are implemented and the action still has a negative conformity determination, the action cannot be implemented and may have to be altered to achieve a positive finding.

There are many mitigation measures available; however, it is up to the Federal agency to select the most effective measures. Despite the type of mitigation measure intended to mitigate impacts, the measures must be identified and the Federal agency must include an implementation schedule with enforcement measures in the conformity determination. Also, prior to determining conformity, the Federal agency must obtain written commitments from the individuals implementing the mitigation measures.

The agency must submit the following information in writing to the EPA, for any action in which the total direct and indirect emissions would exceed the emission budget of the applicable implementation plan:

- A specific schedule for adoption of a revised implementation plan that would achieve the necessary emission reductions prior to the action.
- Identification of specific measures for incorporation into the implementation plan that would result in a level of emissions, together with all other emissions in the nonattainment or maintenance area, and would not exceed any specified emissions budget.
- Demonstrate all existing applicable implementation plan requirements are being implemented and that local authority to implement additional requirements has been fully pursued.
- A determination that all reasonable mitigation measures were implemented.
- Documentation of all air quality analyses supporting the conformity determination.

Reporting and Public Participation Requirements

When a draft conformity determination is made, the Federal agency must give a 30-day notification and provide the draft document to the EPA region, state and local

air quality agencies, and affected Federal land managers. IHS is also required to make the draft conformity determination with supporting documentation, describing the methods and conclusions used in conducting the applicability analysis, available to the public for a 30-day review period.

Any comments received during the public comment period, as well as any Federal agency responses must be made available to the public upon request. Also, within 30 days after the final conformity determination is made, the Federal agency must notify the public, EPA region, state and local air quality agencies, and any affected Federal land manager.

Step #3: Comply with the National Environmental Policy Act

The conformity analysis may be integrated into the National Environmental Policy Act (NEPA) process. The General Conformity Rule allows for this integration; however, the extent of integration depends on the individual situation, and is ultimately determined by the Federal agency.

The two processes may share a combined public comment period and notification; however, there are certain requirements of NEPA that are not required under the conformity rule, such as the development of alternative actions. Also, Federal actions which are categorically excluded (CATEXs) under NEPA are not automatically excluded from the conformity rule; and a conformity determination only has to be conducted on the preferred alternative as indicated by the NEPA process. When the two are integrated, the conformity applicability analysis and determination can be recorded as appendices in the NEPA document.

Timelines

When a draft conformity determination is made, IHS must give a 30-day notification and provide the draft document to the EPA Region, state and local air quality agencies, and any affected Federal land managers.

IHS is also required to make the draft conformity determination, with supporting documentation describing the methods and conclusions used in conducting the applicability analysis, available to the public for a 30-day review period.

Within 30 days after the final conformity determination is made, the Federal agency must notify the public, EPA Region, state and local air quality agencies, and any affected Federal land manager.

The conformity status of a Federal action lapses 5 years from the date of the final conformity determination. Continuous Federal actions do not have to be re-determined if the action is still within the scope of the final conformity determination. However, a new conformity determination is required if a Federal action is altered causing an increase of the total direct and indirect emissions of the action.

The general conformity rule does not specify a deadline for completing the conformity review and associated tasks. However, the rule states clearly that these tasks must be accomplished in a timely manner prior to initiating the proposed action.

6.3 Legal Considerations

Federal Laws

Clean Air Act (CAA) ***42 U.S.C. s/s 7401 et seq. (1970)*****:** The Clean Air Act (CAA) was originally passed in 1970, and was the subject of substantial amendment, most recently in 1990. The CAA: requires EPA to set national air quality standards for certain pollutants; requires EPA to develop programs to address specific air quality problems; establishes EPA's enforcement authority; and provides for air quality research. For most CAA programs, EPA establishes Federal guidelines and gives the state or Tribe regulatory authority flexibility in how it implements the programs. For more information: www.epa.gov/oar/oaqps/peg_caa/pegcaain.html.

National air quality standards ensure that all Americans have the same basic health and environmental protections. The CAA allows individual states and Tribes to have air pollution standards that are stronger than the national standards, but they are not allowed to have weaker standards. Congress recognizes in the CAA that it is sensible for states and Tribes to take the lead in carrying out the CAA because air quality problems are best addressed by those who hold a special understanding of local industries, geography, housing patterns, and other local circumstances.

National Environmental Policy Act (NEPA) of 1969 ***42 U.S.C. 4321-4347****:*

The project level air quality analysis required during the NEPA process will vary considerably in content and in level of detail from one project to another based on the project scope, size, geographic location, background conditions and anticipated impacts. The project level air quality analysis, which primarily addresses localized emissions of CO, is performed to assure that violations of the NAAQS will not occur as a result of the proposed project.

State Processes

EPA does not generally recognize state or local air regulations as being effective within Indian country for purposes of the CAA.

Penalties

Criminal penalties for air pollution are very stringent, reflecting both the seriousness of the crime and that the law has been around for a while. The law states that the regulatory agency may fine and imprison those who are convicted of criminally violating the law.

There are also civil penalties associated with violations of the CAA that impose strict fines assessed each day per violation.

6.4 Responsibilities and Requirements

IHS program, facility and project managers should take the following steps to evaluate air quality issues:

- Review either the TIP or the SIP to evaluate emissions levels set for criteria pollutants
- Evaluate the potential for emissions with the proposed project or activity, including:
    - Construction activities (facility construction/demolition, utility installation, and paving operations)
    - Operation of the project
        - Air quality permits needed (incinerators, VOCs, petroleum tanks and storage, waste gases from boilers and heaters)
        - Traffic to and from the finished project area (parking and other uses)
- Perform an Air Quality Conformity Determination, if necessary
- Look for ways to reduce impacts to air quality within the project

6.5 Where to Go for Help

EPA Office of Air and Radiation (OAR) Guidance website

www.epa.gov/ttn/oarpg/

EPA's Office of Air and Radiation's homepage

www.epa.gov/air/

National Tribal Environmental Council

http://www.ntec.org/Programs/Air%20Program/ntaa.htm

Institute for Tribal Environmental Professionals, Northern Arizona University

www4.nau.edu/itep/

EPA: Tribal Air Programs

www.epa.gov/air/tribal/airprogs.html

Fact sheets on NAAQS

www.epa.gov/ttn/oarpg/t1fs.html

Clean Air Act (CAA) (42 United States Code (USC) 7401, et seq.)

www.epa.gov/oar/oaq_caa.html

www.epa.gov/air/oaqps/peg_caa/pegcaain.html

Tribal Air Monitoring Support Center

www4.nau.edu/tams/

State and Local Air Pollution Agencies

www.epa.gov/air/partners.html

EPA Green Book Nonattainment Areas for Criteria Pollutants

www.epa.gov/oar/oaqps/greenbk/

Air Quality Control Regions

www.access.gpo.gov/nara/cfr/waisidx_02/40cfr81_02.html

EPA AirData used to determine regional air emissions

www.epa.gov/air/data/index.html

6.6 Definitions

Administrator: Administrator of the Environmental Protection Agency (EPA).

Air pollutant: Any air pollution agent or combination of agents, including any physical, chemical, biological, radioactive substance or matter which is emitted into or otherwise enters the ambient air.

Attainment area: Any area that meets the national primary or secondary ambient air quality standard for the pollutant.

CAA: Clean Air Act Amendments of 1990 *42 U.S.C. s/s 7401 et seq. (1970)*

Conformity: Section 176(c) of the Clean Air Act prohibits Federal entities from taking actions in nonattainment or maintenance areas that do not conform to the state implementation plan for the attainment and maintenance of the national ambient air quality standards. Therefore, the purpose of conformity is to (1) ensure Federal activities do not interfere with the budgets in the SIPs; (2) ensure actions do not cause or contribute to new violations, and (3) ensure attainment and maintenance of the NAAQS.

Direct emissions: Those emissions caused by or initiated by the Federal action and occur at the same time and place as the action.

EPA: Environmental Protection Agency

Indirect emissions: Those caused by the Federal action, but may occur later in time and/or may be farther removed in distance from the action itself.

Maintenance area: Any geographic region of the United States previously designated nonattainment pursuant to the CAA Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under section 175A of the CAA, as amended.

Maintenance plan: An implementation plan under section 175A of the CAA, as amended.

NAAQS: National Ambient Air Quality Standards. Federal standards that set allowable concentrations and exposure limits for various pollutants.

NEPA: National Environmental Policy Act of 1969 *42 U.S.C. 4321-4347*

Nonattainment Area: A geographic region of the United States that the EPA has designated as not meeting the NAAQS.

TAR: Tribal Authority Rule

TIP: Tribal Implementation Plan – An optional plan described in the CAA that may contain procedures to monitor, control, maintain, and enforce compliance with the National Ambient Air Quality Standards (NAAQS).

7.0 Petroleum

7.1 Overview/Introduction

Many facilities use or store petroleum, oil, and lubricants (POLs). These facilities are required by law to take special care to properly store and use these products to prevent soil and water contamination and other health and safety hazards. The temporary storage of petroleum products at an active construction site are not regulated by the same laws; however, the EPA does recommend various best management practices (discussed below) that will decrease the likelihood of a negative environmental impact from a petroleum spill. The laws require the facilities that use or store POL products to prevent spills and overfills and institute measures to contain and clean up any product that is released for any reason.

Section 311(a)(1) of the Clean Water Act defines “oil” as “oil of any kind or in any form including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil” [33 USC Sec. 1321]. EPA interprets this definition to include crude oil, petroleum and petroleum-refined products, as well as non-petroleum oils such as vegetable and animal oils [40 CFR 112.2].

Facilities can avoid the environmental and economic consequences of oil spills by preventing and containing them in the first place. For more than two decades, EPA's Spill Prevention, Control, and Countermeasures (SPCC) program has been implemented at several hundred thousand oil storage facilities to prevent the discharge of all types of oil onto land and into waters of the United States. EPA's approach to preventing oil spills combines preventive planning measures with monitoring and enforcement measures. These apply to owners or operators of certain facilities (based on volume of oil stored on site) that drill, produce, gather, store, process, refine, transfer, distribute, or consume oil.

The regulations apply to facilities with a total aboveground (i.e., not completely buried) oil storage capacity of greater than 1,320 gallons and for total underground (i.e., buried) oil storage capacity greater than 42,000 gallons. The regulations apply specifically to a facility's storage capacity, regardless of whether the storage tank(s) is completely filled. When applied to the 1,320-gallon threshold, only containers of oil with a capacity of 55 gallons or greater are counted (40 CFR112.1(d)(2)(ii). The aboveground storage capacity of a facility does not include the capacity of containers that are permanently closed. The threshold applies to storage capacity contained in operating equipment as well as to storage capacity in containers. In addition to the storage capacity criteria, facilities are regulated if, due to their location, the facility could reasonably be expected to discharge oil into navigable waters or wetlands of the U.S., essentially any natural surface water in the U.S., or adjacent shorelines and tributaries to navigable waters.

To prevent oil spills, EPA requires owners or operators of oil storage facilities with the capacities described above to prepare and implement SPCC Plans that detail the facility's spill prevention and control measures.

This information applies to IHS when it stores petroleum, oil and lubricants, in above ground and underground storage tanks that meet the above volume criteria. In addition, IHS must ensure the proper storage and management of oil at construction sites, including on-site fueling or construction-related spills.

7.2 Compliance Process

Petroleum compliance consists of two steps (see Figure 7-1):

1. Determine if the proposed project requires on-site storage and use of petroleum, oil, and lubricants.
2. Identify permits and compliance requirements necessary for operation of the project.

Step #1: Determine if the Proposed Project Requires On-site Storage and Use of Petroleum, Oil, and Lubricants.

Evaluate the project for potential petroleum storage and usage impacts by looking for the following:

- Will the project have permanent underground or aboveground petroleum/gas/diesel storage tanks?
- Will construction of the project require temporary aboveground petroleum/gas/diesel storage tanks? Will IHS or the contractor be responsible for these tanks?
- Will activities during operation of the project generate waste oil or lubricants?
- Are vehicle maintenance bays included in the project?
- Does the project require removing an existing tank?

Step #2: Identify Permits and Compliance Requirements Necessary for Operation of the Project.

Based on the answers to the above questions, identify what compliance requirements must be met in order to carry out the project. For example:

- If the project will include permanent underground storage tanks for petroleum storage, then state this in the NEPA document. A SPCC Plan may be required, based on the storage capacities of these tanks.
- If the project requires temporary aboveground storage tanks, state in the NEPA document that contingency plans will be in place if spills occur. Require the contractor to provide a temporary SPCC plan for petroleum and other hazardous materials during project construction.
- If the project will generate waste oils, state in the NEPA document what permits and requirements must be met.
- If the project includes vehicle maintenance bays, there may be oil on the floor that can be inadvertently washed into nearby surface waters. State how the project would contain oil spills and how oil would be prevented from being discharged into surface waters.
- If an existing petroleum tank is in place and must be removed, there are specific requirements that must be met in order to remove it. Consider also where the removed tank will be disposed. If a release is detected during this removal, specific state and Federal requirements for sampling, investigation, and remediation planning will need to be addressed.

If your activity includes a UST, the following may apply to that UST, in addition to the existing enforceable regulations. Consult the Energy Policy Act of 2005, Title XV, Subtitle B, and Legal Considerations in this section for more discussion.

Fuel Delivery Prohibition: Underground storage tank owners/operators and product deliverers are responsible for not delivering, depositing, or accepting product to an underground storage tank identified by EPA or a state as ineligible to receive product (does not comply with UST regulations). Beginning August 8, 2007, it will be unlawful to deliver to "identified" tanks.

Secondary Containment: New or replaced tanks and piping within 1,000 feet of an existing community water system or existing potable drinking water well must be secondarily contained (includes interstitial monitoring). New dispenser systems within 1,000 feet of an existing community water system or existing potable drinking water well must have under-dispenser spill containment. This requirement does not apply to repairs meant to restore a tank, pipe, or dispenser to operating condition.

Financial Responsibility/Installer Certification: Installers must be certified or licensed, or they must certify the installation of underground storage tank systems they install. Owners and operators must comply with the requirements to report a release and perform all necessary corrective action and to maintain financial responsibility to pay for corrective action and compensate third parties. See the reference to the Energy Policy Act of 2005 in Legal Considerations for additional requirements that may apply to your activity.

Requirements of the SPCC Plan

The SPCC Plan must be certified by a licensed professional engineer. Facilities must implement the Plan, including carrying out the spill prevention and control measures established for the type of facility or operations, such as measures for containing a spill (e.g., berms). In the event that a facility cannot implement containment measures, the facility must: demonstrate that secondary containment is impracticable; conduct periodic integrity and leak testing of bulk containers and associated valves and piping; develop and incorporate a strong spill contingency plan into the SPCC Plan; and provide a written commitment of manpower, equipment, and materials required to quickly remove any quantity of oil discharged that may be harmful. In addition, facility owners or operators must conduct employee training on the contents of the SPCC Plan. Facilities that become operational between August 17, 2002 and August 18, 2006 must have prepared and implemented an SPCC Plan by August 18, 2006. Facilities that become operational after August 18, 2006, must prepare and implement a Plan before beginning operations.

As a facility operator, you must provide appropriate containment and/or diversionary structures or equipment to prevent a discharge. The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. The minimum prevention system or its equivalent includes dikes, berms, or retaining walls sufficiently impervious to contain oil. [40 CFR 112.7(c)]

If you determine that the installation of any of the structures or pieces of equipment to prevent a discharge from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan, provide in your Plan the following [40 CFR 112.7(d)]:

(1) An oil spill contingency plan following the provisions of 40 CFR 109.

(2) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Double Wall Above Ground Tanks. While shop-fabricated double-wall ASTs may satisfy the SPCC requirements, such tanks must also continue to satisfy all other applicable SPCC requirements. If bulk transfers occur, where loading/unloading area drainage does not flow into a catch basin or treatment facility designed to handle spills, a quick drainage system must be used. The containment system must be designed to hold at least the maximum capacity of any single compartment of a tank car of tank truck loaded or unloaded at the facility. Additionally, any piping, equipment, or device not contained within a double-wall AST is subject to the containment requirements, if such piping, equipment, or device is in an undiked area.

The owner or operator must also frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. To comply with the requirement to frequently inspect the outside of the tank, an owner or operator must inspect the inner wall and interstitial spaces of a shop-built double-wall AST. The EPA recommends the use of automatic detection devices to detect discharges into the interstitial space. Owners or operators should conduct this integrity testing

and inspection in accordance with industry standards, when practicable.

7.3 Legal Considerations

Federal Laws and Regulations

Oil Pollution Act of 1990 ***33 U.S.C. 2701 to 2761:*** This Act requires the prevention of oil pollution into navigable waters. It requires a spill prevention plan, sets specifications for tank vessel construction, and applies to the storage of flammable/combustible liquids.

Resource Conservation and Recovery Act ***42 U.S.C. § 3251 et seq. (1976):*** Although used oil has not been declared a hazardous waste at a Federal level, it does need to be stored, handled, and documented according to specific Federal and state regulations. If used oil is mixed with any other substance or other oils, it may become a Federally regulated waste. RCRA also regulates the installation, testing, removal, and remediation of underground storage tanks. The requirements are different if the facility is a used oil generator, a used oil collection center, a used oil transporter, a used oil burner, or a used oil marketer (see 40 CFR 279 for more specific information). However, the old rule at 40 CFR Part 266, although superseded on the Federal level, remains in effect in many states and depending on the location of the facility, IHS may need to comply with those regulations. Regulations most commonly come into play for vehicle maintenance facilities.

Underground Storage Tank (UST) Provisions Of The Energy Policy Act Of 2005 (P.L. 109–58—Aug. 8, 2005) The Energy Policy Act of 2005, Title XV, Subtitle B (entitled the Underground Storage Tank Compliance Act) contains amendments to Subtitle I of RCRA -- the original legislation that created the underground storage tank (UST) program. This new law significantly affects federal and state underground storage tank programs and requires major changes to the programs.

The UST provisions of the Energy Policy Act focus on preventing releases. The Energy Policy Act expands eligible uses of the Leaking Underground Storage Tank (LUST) Trust Fund, extends the LUST Trust Fund tax through 2011, and includes provisions regarding inspections, operator training, delivery prohibition, secondary containment and financial responsibility, and cleanup of releases that contain oxygenated fuel additives.

- Inspecting Underground Storage Tanks (Section 1523): EPA or a state receiving funding under Subtitle I shall conduct on-site inspections to determine compliance for all tanks not inspected since December 22, 1998. After completion of these inspections EPA or the state shall conduct on-site inspections at least once every three years. EPA may extend the first three-year inspection interval up to one additional year if a state demonstrates it has insufficient resources.
- Operator Training (Section 1524): EPA will issue guidelines that specify training requirements for three distinct classes of operators responsible for operation and maintenance of federally regulated UST systems.
- Public Record (Section 1526): States must maintain, update at least annually, and make available to the public a record of USTs regulated under the subtitle. The EPA Administrator must prescribe the manner and form for the information after consulting with states. The public record shall include (to the maximum extent practicable, for each year) the number, sources, and causes of UST releases; the record of compliance by USTs in the state with Subtitle I or approved state program; and data on equipment failures.
- Fuel Delivery Prohibition (Section 1527): Delivery prohibition is prohibiting the delivery, deposit, or acceptance of product to an underground storage tank that has been determined to be ineligible (does not comply with UST regulations) by EPA or a state implementing agency for such delivery, deposit, or acceptance. Underground storage tank owners and operators and product deliverers are responsible for not delivering, depositing, or accepting product to an underground

storage tank identified by EPA or a state as ineligible to receive product. Beginning August 8, 2007, it will be unlawful to deliver to "identified" tanks.

- Secondary Containment (Section 1530): New or replaced tanks and piping within 1,000 feet of an existing community water system or existing potable drinking water well must be secondarily contained (includes interstitial monitoring). New dispenser systems within 1,000 feet of an existing community water system or existing potable drinking water well must have under-dispenser spill containment. This requirement does not apply to repairs meant to restore a tank, pipe, or dispenser to operating condition.

  Secondary Containment includes a release prevention and release detection system for an underground tank and/or piping. The release prevention part of secondary containment is an underground tank and/or piping having an inner and outer barrier. Between these two barriers is a space for monitoring. The release detection part of secondary containment is a method of monitoring the space between the inner and outer barriers for a leak or release of regulated substances from the underground tank and/or piping (called interstitial monitoring). Interstitial monitoring must meet the release detection requirements in 40 CFR 280.43(g).

- Under-Dispenser Containment (UDC) is defined as containment underneath a dispenser that will prevent leaks from the dispenser from reaching soil or groundwater. Such containment must:

  - Be liquid-tight on its sides, bottom, and at any penetrations;
  - Be compatible with the substance conveyed by the piping; and
  - Allow for visual inspection and access to the components in the containment system and/or be monitored.

- Where Must The 1,000 Feet Be Measured From? To determine if a new or replaced underground tank or piping or new motor fuel dispenser system is within 1,000 feet of any existing community water system or any existing potable drinking water well, at a minimum the distance must be measured from the closest part of the new or replaced underground tank or piping or new motor fuel dispenser system to:

  - The closest part of the nearest existing community water system, including such components as:
  - The location of the wellhead(s) for groundwater and/or the location of the intake point(s) for surface water;
  - Water lines, processing tanks, and water storage tanks; and
  - Water distribution/service lines under the control of the community water system operator.
  - The wellhead of the nearest existing potable drinking water well.

- Financial Responsibility/Installer Certification (Section 1530): A person that manufactures an underground storage tank or piping for an underground storage tank system or installs an underground storage tank system must maintain evidence of financial responsibility under Section 9003(d) of Subtitle I in order to provide for the costs of corrective actions directly related to releases caused by improper manufacture or installation unless the person can demonstrate themselves to be already covered as an owner or operator of an underground storage tank under Section 9003 of Subtitle I. In addition, installers must be certified or licensed, or they must certify the installation of underground storage tank systems they install. These provisions do not affect or alter the liability of any owner or operator of an underground storage tank. Owners and operators must still comply with all technical regulations. For example, they must comply with the requirements to

report a release and perform all necessary corrective action and to maintain financial responsibility to pay for corrective action and compensate third parties.

Clean Water Act *33 U.S.C. §1251 et seq. (1977):* Section 311 of the CWA addresses pollution from oil and hazardous substance releases, providing EPA and the U.S. Coast Guard with the authority to establish a program for preventing, preparing for, and responding to oil spills that occur in navigable waters of the United States. EPA implements provisions of the Clean Water Act through a variety of regulations, including the Oil Pollution Prevention regulations.

Emergency Planning and Community Right-to-Know Act (EPCRA) *42 U.S.C. 11001 et seq. (1986):* EPCRA establishes requirements for Federal, state and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. states and communities, working with facilities, can use the information to improve chemical safety and protect public health and the environment.

EPCRA's provisions form two primary programs: (1) emergency planning, and (2) community right-to-know. The law requires local communities to prepare plans for dealing with emergencies relating to the release of extremely hazardous substances from facilities within those communities. EPCRA is made applicable to Federal agencies by Executive Order (EO) 13148, Greening the Government Through Leadership in Environmental Management [previously EO 12856], which modifies the term "person" to include Federal executive agencies like HHS, and by extension, IHS. Reporting requirements and other facility responsibilities are described in GAM 30-60, which can be viewed at http://www.hhs.gov/hhsmanuals/read/gam/part30/.

7.4 Responsibilities and Requirements

During the NEPA planning process, IHS personnel have the following responsibilities

- Evaluate the project for potential petroleum impacts.
- Determine if the proposed project requires on-site storage and use of petroleum, oil, and lubricants.
- Identify permits and compliance requirements necessary for operation of the project.
- Prepare and maintain a current SPCC plan, if applicable.
- Prepare and maintain a current Contingency Plan, if applicable.
- Be familiar with Federal, state, and local regulations and reporting requirements.
- Keep record of all spills, leaks, and cleanups.
- Report any spill, when required due to size and constituents, or *any* spill that enters a waterway, to the appropriate agency or regulatory authority.
- Keep refueling and maintenance areas clean.

<u>Summary of criteria for oil removal contingency plans [see 40 CFR 109.5 for detailed requirements]</u>:

(a) Definition of authorities, responsibilities and duties of all persons, organizations or agencies.

(b) Notification procedures for early detection and timely notification of an oil discharge including:

(1) Identification of critical water use areas
(2) Current list of names, telephone numbers and addresses of the responsible persons
(3) Reliable communications system for timely notification of an oil discharge and for interconnection of communications systems
(4) Established procedure for requesting assistance during a major disaster or when the situation exceeds the local response capability

(c) Full resource capability is known and can be committed including:

(1) Inventory of applicable equipment, materials and supplies
(2) Equipment, materials and supplies to remove the maximum oil discharge
(3) Agreements for the acquisition of equipment, materials and supplies used in response

(d) Actions to be taken after discovery and notification of an oil discharge including:

(1) Response operating team consisting of trained, prepared and available personnel.
(2) Qualified response coordinator with the authority for directing and coordinating response operations and who knows how to request assistance from Federal authorities
(3) Location for an response operations center and a reliable communications system
(4) Varying degrees of response effort depending on the severity of the oil discharge
(5) Priority of various water uses to be protected where more than one water use may be adversely affected

(e) Procedures to facilitate recovery of damages and enforcement measures.

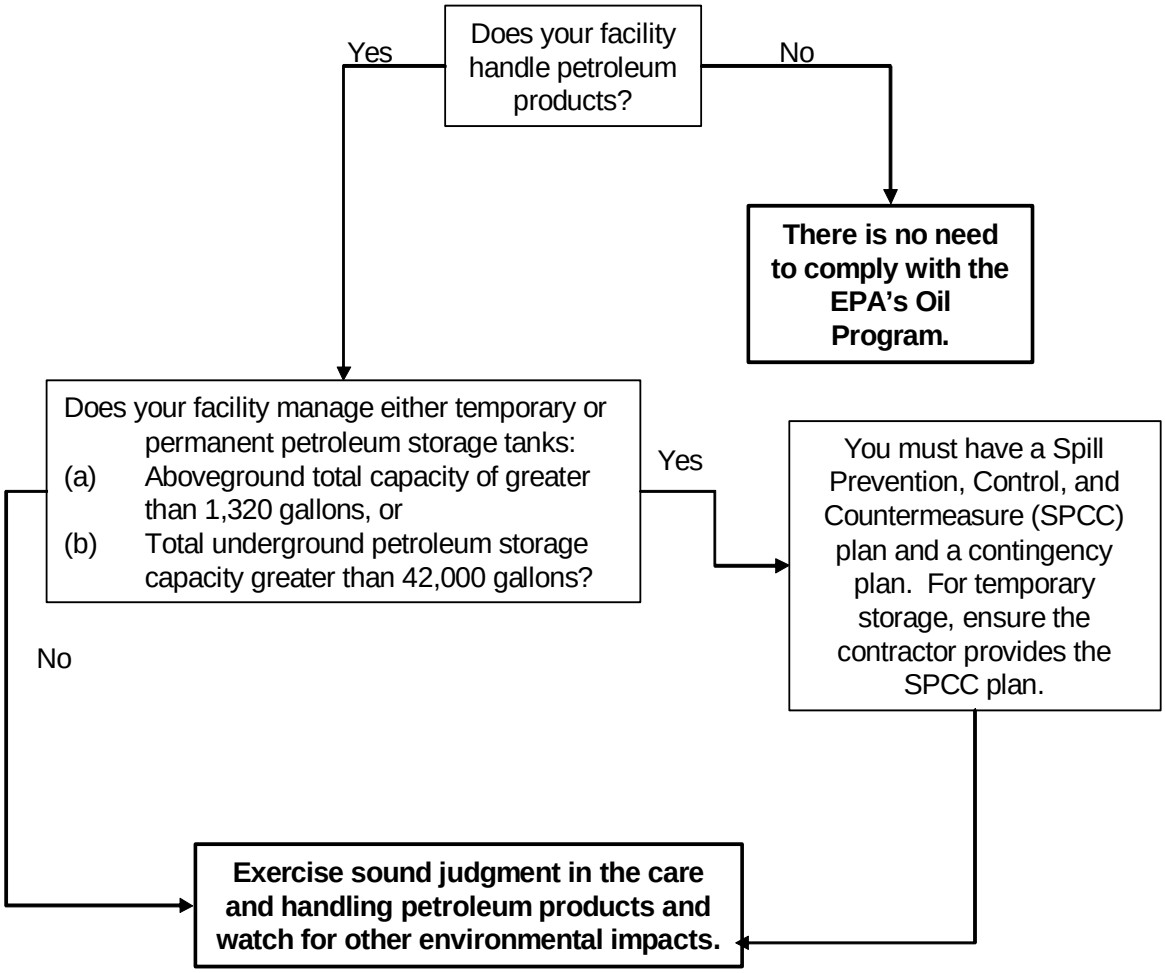

Figure 7-1. Petroleum Products Compliance process.

7.5 Where to Go for Help

IHS Guidance Documents – Two recently published agency documents contain information on aboveground and underground storage tanks. These documents are the ***Guidance Document for Managing Hazardous Materials in IHS Buildings*** and the ***Environmental Health and Safety Awareness Guide***. Both of these documents contain detailed information on AST and UST management as well as checklists that provide regulatory compliance and best practice suggestions.

Oil Pollution Act Overview

www.epa.gov/oilspill/opaover.htm

Nearest local or regional Fire Department

EPA Spill Program

www.epa.gov/oilspill/

EPA's Oil Pollution Prevention Regulation

40 CFR 112

40 CFR 112.7 for SPCC plan requirements

National Response Center (1-800-424-8802)

www.nrc.uscg.mil/nrchp.html

SPCC Compliance Assistance Guides

http://www.epa.gov/epahome/state.htm

Inter-Tribal Environmental Council UST Program

http://www.itecmembers.org/Default.aspx?tabid=1303

7.6 Definitions

AST: Aboveground Storage Tank

CFR: Code of Federal Regulations

CWA: Clean Water Act Amendments of 1977

EPA: Environmental Protection Agency

EPCRA: Emergency Planning & Community Right-to-Know Act of 1986

Discharge: Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping onto land or into waters of the United States.

NRC: National Response Center

Oil: Includes oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.

Oil Spill Contingency Plan: Administered under EPA's Oil Program; outlines a plan of

www.epa.gov/oilspill/spccguid.htm

Used Oil Program (40 CFR 279)

Response Division's Information Hotline
202 260-2342

USCG Response Operations

www.uscg.mil/hq/g-m/nmc/response/index.htm

State Environmental Offices/EPA regions

action and cleanup measures after a spill has occurred.

OPA: Oil Pollution Act of 1990 emitting, emptying or dumping onto land or into waters of the United States.

POL: Petroleum, Oil and Lubricants

RCRA: Resource Conservation and Recovery Act of 1976

SPCC: Spill Prevention, Control, and Countermeasure program

Substantial harm: Defined under EPA's Oil Program. Refers to facilities that meet one or more of the following criteria: (a) the facility has a total oil storage capacity greater than or equal to 42,000 gallons and performs over-water oil transfers to or from vessels; or (b) the facility has a total oil storage capacity greater than or equal to one million gallons, and meets one of the following conditions: does not have secondary containment, could cause environmental harm, would affect drinking water, or had a reportable spill greater than or equal to 10,000 gallons

UST: Underground Storage Tank

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8.0 Solid Waste Disposal

8.1 Overview/Introduction

Management of solid waste affects every aspect of life—public health, economic growth, environmental health, culture, community pride, and land stewardship.

In the past, communities disposed of their waste in open pits or by burning it, with few environmental or health implications. However, changes in the nature and quantity of waste produced today have rendered these practices unsafe and ineffective ways to manage waste.

Congress enacted the Solid Waste Disposal Act of 1965 to address the growing quantity of waste generated in the United States and to ensure its proper management. Subsequent amendments to the Solid Waste Disposal Act, such as the Resource Conservation and Recovery Act (RCRA), have substantially increased the Federal government's involvement in solid waste management. The parts of the Act that address solid waste are Subtitles C and D.

RCRA banned all open dumping of waste, encouraged source reduction and recycling, and promoted the safe disposal of municipal waste. RCRA also mandated strict controls over the transportation, treatment, storage, and disposal of hazardous waste. The first RCRA regulations published in the Federal Register in 1980 (45 FR 33066; May 19, 1980), established the basic "cradle to grave" approach to hazardous waste management that exists today.

Subtitle D of RCRA addresses non-hazardous solid wastes. What is a RCRA Subtitle D solid waste? According to EPA regulations, solid waste means any garbage, or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities. Subtitle D solid wastes include certain wastes that are exempted from the Subtitle C hazardous waste regulations such as household hazardous wastes.

Under Subtitle D, state and local governments and Tribes are the primary planning, permitting, regulating, implementing, and enforcement agencies for management and disposal of household and industrial or commercial non-hazardous solid wastes. EPA establishes technical design and operating criteria (which, at a minimum, the states include in their own regulations) for disposal facilities. Also, per Subtitle D, EPA must determine the adequacy (approval status) of the state permit programs. Tribes can request (petition) EPA for use of flexibility on a site-specific landfill basis.

Across the country, many communities, businesses, and individuals have found creative ways to reduce and better manage solid waste through a coordinated mix of practices that include source reduction (reducing waste at the source of the product), recycling (including composting), and disposal.

Although source reduction will prevent some waste from entering landfills, a need still exists for landfills. The challenge is to make them safe for communities and the environment—an action that requires cooperation among Federal, state, and Tribal governments.

EPA's minimum national technical criteria include specific requirements for location, operation, design, groundwater monitoring, corrective action, closure and post-closure care, and financial assurance responsibility. The primary regulations are found in 40 CFR Part 257, Criteria For Classification Of Solid Waste Disposal Facilities And Practices, and Part 258, Criteria For Municipal Solid Waste Landfills. EPA has also issued regulations under the Clean Air Act that apply to emissions from very large landfills, and certain EPA criteria issued under the Clean Water Act may apply as well.

8.2 Compliance Process

Solid waste compliance consists of two steps (see Figure 8-1):

1. Determine if the proposed project generates solid waste.
2. Identify permits necessary for operation of the project.

The IHS program, facility, or project manager must determine whether the program's activities or sponsored activities will generate solid waste. This is especially important if any of the generated waste could be hazardous waste. Any IHS program and sponsored programs should know where its solid waste is disposed of. If the waste is not disposed at an authorized facility, the IHS could be liable for the cost to clean up the illegal disposal.

In the policy memoranda of June 1, 1990, and October 23, 1991, to all Area Directors, the IHS Director stated that:

> *". . . the IHS accepts its responsibilities to comply with RCRA in the operation of its health facilities and quarters in Indian country. Specifically, the IHS must insure that solid waste generated at IHS and IHS-funded health facilities and quarters is disposed of in compliance with EPA standards and not in violation of the open dumping provision of RCRA.*
>
> *Indian Health Service and IHS-funded health facilities and quarters must utilize waste disposal sites which are operated in accordance with EPA guidelines or utilize other sites having a current State operating permit. [IHS] Area Directors are to explore all feasible options for compliance including cooperative efforts with tribes and the BIA to develop on-reservation alternatives to hauling waste off reservation to State permitted facilities. The current EPA guidelines and applicable tribal ordinances should be reviewed to evaluate acceptability of on-reservation waste disposal sites; the selection of approved off-reservation waste disposal sites should be guided by the existence of a current State operating permit."*

Step #1: Determine if the Proposed Project Generates Solid Waste

Evaluate the proposed project for solid waste generation activity, such as:

- Does the property need any waste cleanup?
- Does the proposed activity generate solid waste (e.g., wood debris, metal, plastic, cardboard, concrete, asphalt, etc.)?
- Will the operation of the facility generate solid waste?
- Will the facility receive solid waste?

If the site does need cleanup, be sure to dispose of the waste properly. If hazardous waste exists on the property, ensure that it is properly handled, packaged, and shipped by an approved contractor to a facility that is licensed to receive it. For regular solid waste, be sure to send it to the proper facility or dispose of it in an approved manner.

If the construction activity will generate solid waste, be sure to collect it for off-site disposal at an approved facility. While storing on site, beware of potential disease vectors (such as rodents, birds, and insects) that seek to reside in debris piles. Implement control mechanisms in those situations.

Construction debris can sometimes be sorted for recycling (e.g., wood studs, cardboard, and some metals) with the rest being sent to a construction landfill that is state permitted and that complies with EPA regulations, if available. Either way, seek to understand the regulatory requirements for handling construction debris disposal.

When evaluating the operation of the facility, consider how waste will be stored on site prior to disposal. Access will be needed by the disposal contractor, and the storage area must be designed to prevent migrating odors, and reduce potential for blowing debris.

Step #2: Identify Permits Necessary for Operation of the Project

When considering the operation of the facility, will the facility need permits to dispose of waste that is generated? If only non-hazardous municipal solid waste is to be generated, that waste can be disposed of in a regulatory compliant municipal solid waste landfill. The program, facility, or project manager must insure that the disposal facility is in compliance with EPA regulations. If any regulated waste (hazardous waste) is generated (see Section 9 -

Hazardous Substances), be sure to indicate in the NEPA document whether specific permits will be required for operation of the facility.

If the proposed project is a landfill, specific criteria must be met, as stated in 40 CFR 258, regarding Municipal Solid Waste Landfills (MSWLF).

State governments are required to develop their own programs based on Federal regulations, and are responsible for implementing and enforcing waste programs. Normally, states do not have jurisdiction to enforce solid waste laws on Indian Lands. As a result, a statutory void exists on reservations for regulating waste disposal. Tribes must act to fill this void, not only to protect the reservation environment, but also to protect the Tribe fiscally from potential cleanup liability for violations of RCRA's open dump prohibition.

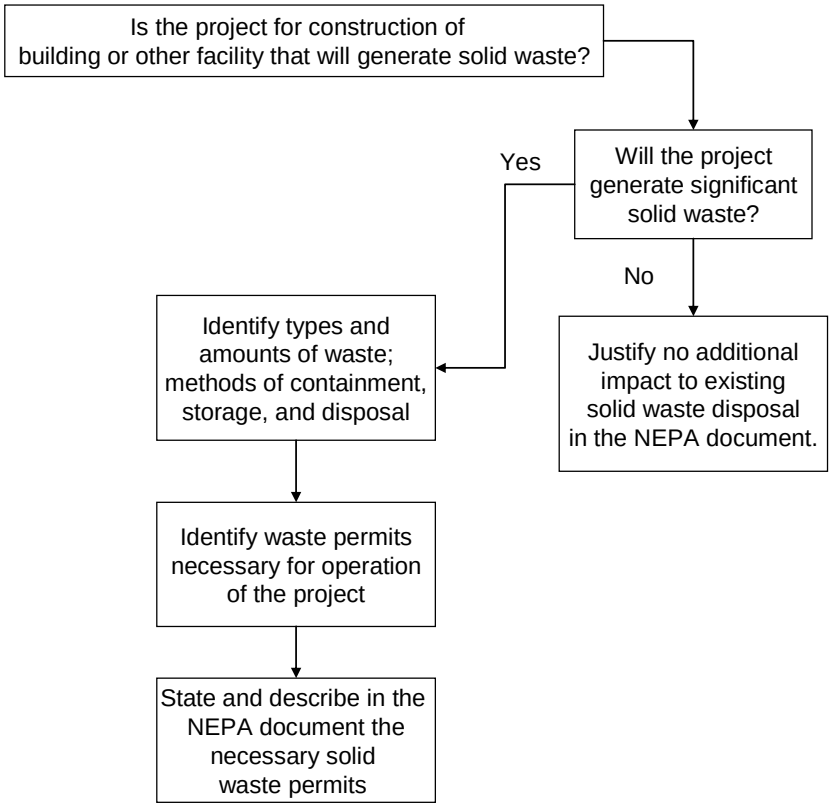

Figure 8-1. Flowchart for Considering Solid Waste Requirements.

Tribes may develop permitting programs that incorporate the Federal landfill criteria to ensure that owners/operators are in compliance. Tribes may establish more stringent requirements than those set by the Federal government. EPA's role is limited to evaluation and approval of these programs.

The regulations describe six categories of criteria for municipal solid waste landfills:

- **Location:** MSW landfills may not be built in the following restricted areas: airports, floodplains, wetlands, fault areas, seismic impact zones, and unstable areas.

- **Operation:** Specifications have been established regarding solid waste cover, hazardous waste detection, air quality, vector control, liquids, storm water, and record keeping.
- **Design:** New and expanding units must comply with EPA-sanctioned landfill designs to prevent leachate migration. Also, consider methane gas generation/ removal/reuse in the design.
- **Groundwater monitoring and corrective action:** The following programs must be in place regarding groundwater: groundwater monitoring systems, programs for sampling and analysis of ground water, and corrective action to ensure that human health and the environment are protected.
- **Closure and post-closure care:** All owners/operators must abide by specific standards when closing a landfill and establishing a program of maintenance and monitoring during the post-closure period.
- **Financial assurance:** The owner/operator must show financial accountability for the expense of closure, post-closure maintenance, and corrective action for known releases.

Process for Tribal Government MSWLF Owners and Operators

The EPA had intended to offer permitting program approval to Tribes as well as states under RCRA, Subtitle D. However, a court decision, commonly known as the Campo decision, ruled that EPA cannot treat Tribes the same as states and approve Tribal permitting programs. As a result, the Agency has created a site-specific rulemaking procedure to meet its objective of providing flexibility to owners and operators in Indian Country.

Under this process, an owner or operator can request to use alternative approaches to meet the performance standards at a specific MSWLF site. The operator could also request a waiver from the standards. These requests must be submitted to the Tribal government. The Tribal government will review the request and forward it to EPA for approval. If the EPA approves the request, it will issue a site-specific rule allowing alternative approaches. For more information, see EPA's *Site-Specific Flexibility Requests for Municipal Solid Waste Landfills in Indian Country*.

8.3 Legal Considerations

Criteria for Classification of Solid Waste Disposal Facilities and Practices *40 CFR 257 et seq. (1976):* Addresses the management of solid waste disposal sites, with the exception of mining and agricultural waste. Minimum standards include evaluating landfill sites (including endangered species and floodplains), and reducing disease-carrying insects or rodents, groundwater contamination, and volatile gases. These rules apply to disposal facilities ranging from monofills (sludge disposal) to construction and demolition debris disposal sites.

Municipal Solid Waste Landfill Criteria *40 CFR 258 et seq. (1976):* Applies to disposal sites that accept municipal solid waste. This includes any solid waste from households (single or multiple residences), hotels, bunkhouses, ranger stations, campgrounds, and picnic grounds.

Solid Waste Disposal Act of 1965 *42 U.S.C. 6901–6992k:* Establishes permits, licenses, and reporting for disposal of solid waste. Also establishes controls on landfills. Amendments to this act direct EPA to control how landfills may be built. Landfill operators must control leachate and gases from escaping or causing other environmental and health problems.

Indian Lands Open Dump Cleanup Act *25 USC 3901 et seq (1994.:* Charges IHS with responsibility to conduct an inventory and evaluation of the contents of open dumps on Indian lands with the cooperation and concurrence of EPA. Requires IHS to develop and begin implementation of a 10-year plan to address solid waste disposal needs on Indian lands.

Resource Conservation and Recovery Act *42 U.S.C. § 321 et seq. (1976):* Subtitle D of this Act establishes Federal standards and requirements about solid waste disposal. The

Act encourages recycling as a first option before disposing of waste in an environmentally sound manner.

Occupational Safety and Health Act *29 U.S.C. 651 et seq. (1970):* Ensures that every worker in the US works under safe and healthful conditions. The act specifies controls for various types of work and establishes acceptable procedures for ensuring personnel are safe and protected during work.

Clean Air Act Amendments *42 U.S.C. § 7401 et seq. (1970):* As part of the prevention and control of air pollution, operators of municipal solid waste landfills are required to control, monitor, and report emissions.

Clean Water Act *33 U.S.C. §1251 et seq. (1977):* Establishes the basic structure for regulating discharges of pollutants into waters of the United States. It gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry. The Act also continued requirements to set water quality standards for all contaminants in surface waters.

Potential Fines and Penalties

The illegal disposal of hazardous chemicals or hazardous waste into solid waste dumpsters can, if discovered, result in fines and penalties. Most municipal and private landfills are not allowed to accept hazardous chemicals and wastes, and these wastes may cause more serious problems down the road. The cost of remediation for hazardous leachate in the groundwater is very high compared to the cost of properly disposing of hazardous wastes

For those Tribes that do run their own landfill—especially landfills that have been started in the last two decades—the land-ban restrictions on what can be placed in the landfill can be rigorous. The facility must agree that none of the banned waste will be knowingly allowed into the dump. Otherwise, the landfill may be audited as out of compliance and—in the case of hazardous waste being disposed there—have the potential of being reclassified as a Treatment, Storage, and Disposal Facility (TSDF), regulated under RCRA. Fines and penalties for operating as a TSDF without a permit can be severe. The actual fines and penalties for illegal disposal of hazardous waste are established under RCRA.

Each facility with a landfill must have a long-term management plan in place and approved in order to operate. The plan includes life expectancy estimates, closure plans and methods, and ongoing monitoring to ensure the material remains in place and does not leach out into the surrounding soils. If the landfill is found to be out of compliance during an audit, fines can reach thousands of dollars per violation per day of non compliance.

8.4 Responsibilities and Requirements

Facilities management personnel responsible for solid waste management should be aware of solid waste compliance requirements. Depending upon whether the facilities will be operated by IHS or the Tribe, the IHS or Tribal facility manager should consider the following:

- Review proposals for disposal of solid waste at various locations on site.
- Plan and prepare solid waste management and disposal options, such as composting of tree and yard waste, and establishing household hazardous waste collection sites.
- Develop community education programs to encourage recycling and waste reduction.
- Keep records of solid waste disposed and diverted from disposal.
- Periodically review procedures and plans for effectiveness and need for updating.
- Use periodic inspections to ensure compliance and train site personnel on good housekeeping techniques.

If IHS is assisting a Tribe with the collection or disposal of solid waste, then the applicable IHS staff should encourage the Tribe to perform the above-listed tasks.

8.5 Where to Go for Help

Municipal Solid Waste

www.epa.gov/epaoswer/non-hw/muncpl/index.htm

Decision Makers' Guide to Solid Waste Management

www.epa.gov/epaoswer/non-hw/muncpl/dmg2.htm

EPA Office of Solid Waste

www.epa.gov/osw/

EPA Waste Management in Indian Country

www.epa.gov/tribalmsw/

EPA Region 10: RCRA Subtitle D: Managing Municipal and Solid Waste

yosemite.epa.gov/R10/OWCM.NSF/7468f0692f73df9a88256500005d62e8/d73eb5eb795edd8c8825675a006285e3?OpenDocument#state

Environmental Learning Community Online Course: Environmental Planning for Small Native American Communities

multimedia.mtech.edu/elc/OnLineCourses/ShortCourse/EP/

Tribal Waste Management—Working with Tribes

yosemite.epa.gov/R10/OWCM.NSF/webpage/Tribal+Waste+Management+-+Working+With+Tribes

Environmental Planning for Small Communities (TRILOGY-downloadable software)

www.epa.gov/seahome/trilogy.html

EPA Region 6: Guidance for Design and Installation of Landfill Covers

www.epa.gov/region6/6pd/pd-u-sw/swguide.htm

A Collection of Solid Waste Resources on CD ROM

www.epa.gov/epaoswer/osw/cdoswpub.htm

Tribal Waste Journal

http://www.epa.gov/tribalmsw/pdftxt/twj-4.pdf

Environment/Energy: EPA Regions & State Environmental Departments

http://www.epa.gov/epahome/state.htm

Waste Management in Indian Country—Tribal Programs

www.epa.gov/tribalmsw/thirds/remsw.htm

8.6 Definitions

CAA: Clean Air Act Amendments of 1990

CWA: Clean Water Act of 1972

Composting: The controlled decomposition of organic materials, such as leaves, grass, and food scraps, by microorganisms. The result of this decomposition process is compost, a crumbly, earthy-smelling, soil-like material.

Integrated Solid Waste Management (ISWM): EPA defines integrated solid waste management as a process for managing solid waste and materials diverted from solid waste through a combination of any of the following four methods of management: source reduction, recycling, combustion, and landfilling.

Municipal solid waste (MSW): More commonly known as trash or garbage—consists of items such as product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, appliances, paint, and batteries.

Open dump: The term "open dump" means any facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste.

Recycling: A series of activities that includes collecting recyclable materials that would otherwise be considered waste, sorting and processing recyclables into raw materials such as fibers, and manufacturing raw materials into new products.

RCRA: Resource Conservation and Recovery Act of 1976, 1984. Amended the Solid Waste Disposal Act. Federal law which regulates treatment, storage, and disposal of municipal

and hazardous waste, and underground storage tanks.

Solid Waste: Wastes from residential, commercial, and institutional sources, such as durable and nondurable goods, containers and packaging, food scraps, yard trimmings, inorganic wastes, and construction and demolition debris.

Source Reduction: Refers to reducing waste at the source, or point of creation, of consumer products.

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9.0 Hazardous Substances

9.1 Overview/Introduction

Hazardous substances and waste may be of concern in IHS projects and ongoing operations. Potential actions include:

- Cleanups (hazardous waste disposal, closing landfills, brownfields conversion)
- Demolition (asbestos, lead-based paint, polychlorinated biphenyls [PCBs])
- Construction or renovation (contaminated soils, hospitals [biological waste], landfills, storage of hazardous substances)
- Operations (hospitals, hazardous waste generators, transporting substances)

Effective hazardous substance and waste management is a growing environmental concern. This section includes information on how to recognize, safely handle, and ensure that hazardous substances and waste are not released into the environment.

What is Hazardous Waste?

The Resource Conservation and Recovery Act (RCRA) was introduced in the previous section on solid wastes. Subtitle C of the RCRA regulates the generation, transport, treatment, storage, and disposal of hazardous waste.

To be considered a hazardous waste, a material first must be classified as a solid waste or combination of solid wastes. Hazardous waste can be any material—solid, liquid or gaseous—that because of quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to:

- An increase in mortality
- Serious irreversible illness, or incapacitating reversible illness
- Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Commercial chemical products that are discarded might also become hazardous waste. For a complete listing of hazardous waste codes, see 40 CFR Part 261 (RCRA). If your waste is hazardous, you will need to manage it according to appropriate Federal regulations. Any discarded material must be evaluated to determine if it has been listed by the EPA as hazardous waste or if the waste exhibits any of the following characteristics regulated by RCRA:

- Ignitability
- Corrosivity
- Reactivity
- Toxicity (as determined by the Toxicity Characteristic Leaching Procedure [TCLP] test). More information on testing can be found at www.epa.gov/epaoswer/hazwaste/test/mice.htm.

One way to help determine if waste exhibits any of the characteristics listed above is to check the Material Safety Data Sheet (MSDS) that comes with all products containing hazardous materials (www.msds.online.com for information).

Under hazardous waste management regulations, EPA developed a comprehensive program to ensure that hazardous waste is managed safely from the moment it is generated; while it is transported, treated, or stored; until the moment it is finally disposed. This cradle-to-grave management system establishes requirements for listed and characteristic hazardous waste.

Hazardous waste IHS may generate, purchase, handle, transport, or store includes:

Medical Waste

Medical wastes are typically generated by health facilities (e.g., hospitals, health centers, clinics), although other facilities may also include wastes that can be classified as medical. The disposal of medical waste is regulated by the laws in the state in which the waste is disposed.

Regulated medical waste is defined by the Centers for Disease Control (CDC) Hospital Infections Group as:

> *"…A waste or reusable material known to contain or suspected of containing an infectious substance in Risk Group 2 or 3 and generated in the diagnosis, treatment, or immunization of human beings or animals; research on the diagnosis, treatment or immunization of human beings or animals; or the production or testing of biological products. Regulated medical waste containing an infectious substance in Risk Group 4 must be classed as Division 6.2, described as an infectious substance, and assigned to UN 2814 or UN 2900, as appropriate."49 CFR 173.134(a)(5).*[1]

OSHA defines *regulated waste* related to bloodborne pathogens as:

> *"…Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials."29 CFR 1910.1030(b).*

Other hazardous substances associated with medical operations include batteries and cleaning supplies.

Construction-Related Waste

Hazardous substances used in construction that could become waste includes: explosives, motor oil, cleaning chemicals, solvents, paints, glues, degreasers, and caulking compounds.

Additional construction-generated waste may include debris from demolition. This debris may include asbestos, lead-based paint, and polychlorinated biphenyls (PCBs).

Universal Waste

Universal waste is items commonly thrown into the trash by households and small businesses. This waste includes batteries, pesticides, mercury-containing equipment, and lamps. Although generators of universal waste (referred to as "handlers" in the regulation) are subject to less stringent standards for storing, transporting, and collecting this waste, regulatory penalties and fines can still be assessed to facilities that improperly manage and dispose of this waste. Basic information on universal waste can be found at: www.epa.gov/epaoswer/hazwaste/id/univwast/index.htm and 40 CFR Part 273.

For more help determining if your facility produces hazardous waste, see EPA's website www.epa.gov/epaoswer/hazwaste/id/id.htm.

9.2 Compliance Process

During the revision of this Environmental Review Manual, two additional IHS guidance documents were developed and published that have particular relevance to hazardous substances and waste.

The ***Guidance Document for Managing Hazardous Materials in IHS Buildings*** provides comprehensive overviews of asbestos, lead, polychlorinated biphenyls, radon, hazardous waste, and refrigerants. In addition, detailed checklists which summarize both regulatory requirements and best practices for each of these materials are also provided. The *Guidance Document* is divided into the following four sections, depending on the type of activity associated with the facility: routine building operations; renovation and construction; demolition; and building transfer.

The ***Environmental Health and Safety Awareness Guide*** was developed for IHS facility managers and contains short summaries as well as "awareness" checklists for a wide range of environmental topics. Topics relevant to this chapter include hazardous waste, universal waste, and polychlorinated biphenyls.

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[1] Division 6.2 (infectious substance)

Risk groups are rated 1 (lowest risk) to 4 (highest risk)

UN 2814, Infectious Substances (affecting humans)

UN 2900, Infectious Substances (affecting animals)

see 49 CFR § 173.134 for detailed compliance requirements

In general, compliance process for hazardous substances and waste requires the following five steps (see Figure 9-1):

1. Determine if the proposed grant or project involves hazardous substances or waste.
2. Properly store and handle hazardous substances and waste.
3. Properly transport and dispose of hazardous substances and waste.
4. Report and monitor, as necessary.
5. Avoid liability.

Step #1: Determine if the Proposed Grant or Project Involves Hazardous Substances or Waste

Evaluate the proposed grant or project. Review all phases of the grant or project; e.g., from site preparation (demolition, contaminated soil removal, etc.), to site construction (on-site storage and use of paints, cements, additives, etc.), to site operation (what is brought to and sent out from the facility).

If you identify project activities that involve hazardous substances or waste, then you must prepare for compliance according to the remaining steps in this process. The grantee is responsible for compliance with any environmental requirements for the grantee's activities that involve hazardous substances and waste, and the grant documents should contain appropriate language to that effect. The grants officer should be aware of any potential activities in order to comply with any Federal environmental requirements, such as NEPA. If no hazardous substances will be present, stored, used, or generated during construction or operation of the facility, no compliance efforts at this stage are necessary.

IHS healthcare facilities, and potentially some renovation, demolition, and construction projects, could become Conditionally Exempt Small Quantity Generators (CESQGs) of hazardous waste. A CESQG facility or activity produces less than 100 kilograms (approximately 220 pounds) of hazardous waste per calendar month.

CESQGs enjoy less burdensome RCRA record-keeping and reporting requirements, but must comply with the general hazardous waste management requirements. Pollution prevention techniques allow many hazardous waste generators to maintain CESQG status by minimizing waste or, in some circumstances, eliminating the hazardous waste stream entirely.

CESQGs must comply with three basic waste management requirements to remain exempt from the full hazardous waste regulations that apply to other generators:

- Identify your hazardous waste.
- Comply with storage quantity limits.
- Ensure proper treatment and disposal of your waste.

If a CESQG exceeds the storage quantity limits, the facility will be required to comply with the stricter transportation, storage, and disposal standards of a larger quantity generator of hazardous waste.

Step #2: Properly Store and Handle Hazardous Substances and Waste

Accumulating hazardous substances or waste on site can pose a threat to human health and the environment. If the program or project requires on-site storage of hazardous substances or waste, either in individual cans or in bulk quantities, store and label the materials properly.

In the NEPA document, be sure to include a discussion of specific best management practices that will be used at the program location or construction site to ensure the protection of health and safety to workers and any visitors to the site. This type of discussion shows that you have thought about potential issues that may occur for the duration of a grant activity or in the site preparation, site construction, and ultimate operation of the facility, even though you do not need to have specific plans or other regulatory compliance-related documents prepared at the time.

If the potential grant or project will generate hazardous waste, be sure to follow the same approach.

Below is simplified guidance on how to handle hazardous materials and waste storage, including lockers, containers, and tanks.

- Properly label all storage lockers.
- Properly label all containers and tanks.
- Segregate hazardous substances from incompatible materials.
- Store substances in containers/tanks that are compatible with the hazardous materials or waste to prevent reactions with or corrosion of the container.
- Keep containers closed, inspect storage areas weekly, and keep containers, tanks and lockers in good repair.
- Provide for secondary containment around storage areas in case of accidental spills.
- Never mix hazardous substances; cleanup and disposal become much more complex and expensive.

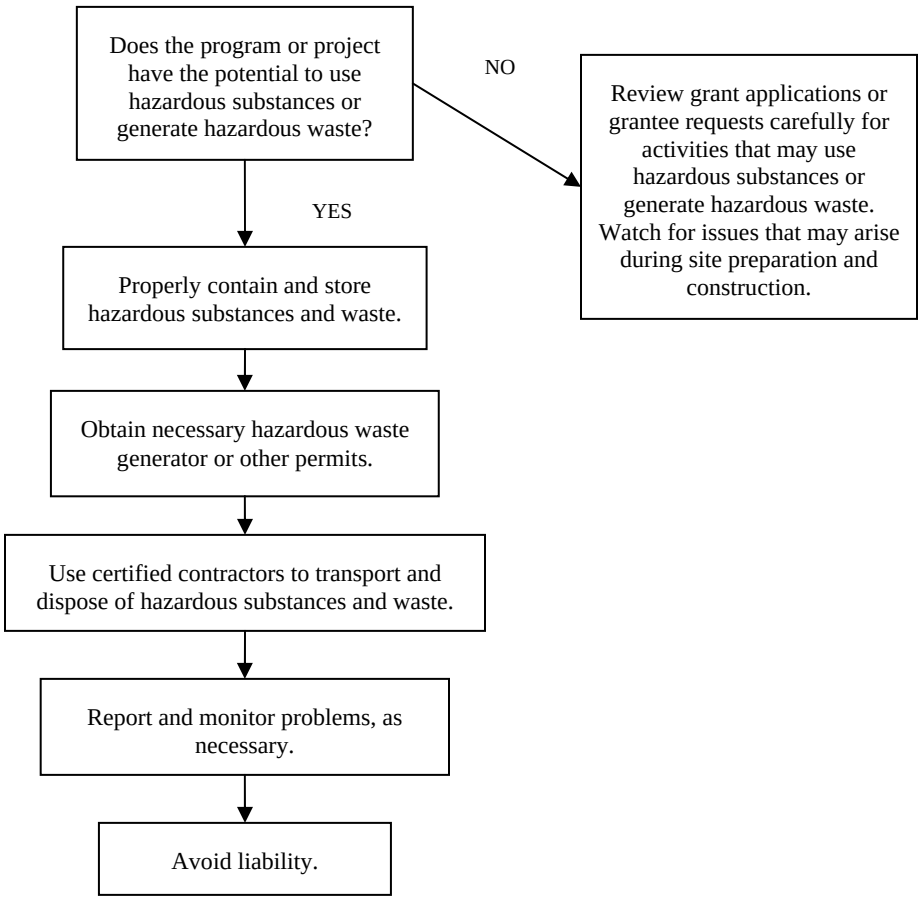

Figure 9-1. Flowchart for Avoiding Hazardous Substance and Waste Liability

Before shipping the waste for disposal or recycling, you are responsible for its safe management, which includes safe storage, safe treatment, preventing accidents, and responding to emergencies in accordance with Federal regulations.

Step #3: Properly Transport and Dispose of Hazardous Substances and Waste

The IHS program, facility, or project manager must follow certain procedures when shipping waste for disposal that are designed to ensure safe transport and proper management of the waste. Hazardous waste cannot just be disposed in the trash.

Regardless of generator status, ALL generators must comply with basic RCRA requirements, including the use of manifests to track hazardous waste shipments, obtaining an EPA ID number for facility and waste tracking, and packaging, labeling, and accumulation requirements.

The program, facility, or project manager or designated contractors must do the following:

- Package, label, and mark your shipment and placard the vehicle in which your waste is shipped as specified by DOT regulations.
- Prepare a hazardous waste manifest to accompany your shipment.
- Include a Land Disposal Restriction (LDR) notice and certification with each waste shipment.
- Ensure the proper management of any hazardous waste you ship (even when it is no longer in your possession).
- Ensure waste is sent only to the proper landfill or storage facility.

For construction debris that contains asbestos or lead-based paint, only state-certified companies are authorized to handle and remove these materials. There are specific responsibilities, with liability attached, for the proper handling of these wastes. For disposal, these wastes must be taken to an authorized disposal site. The program, facility, or project manager should know, from the disposal contractor, where the wastes will be disposed and must ensure it has the proper paper trail documenting the process from leaving the site to when and where disposal occurs.

If a facility or project becomes a CESQG, IHS (at an IHS-operated facility) or the grantee (at the grantee's site) has specific obligations for the disposal of hazardous waste at the proper facilities (e.g., hazardous waste landfills with state authorization to handle these wastes and quantities). For example, in Arizona, the Department of Environmental Quality provides permits to some landfills to take certain kinds of hazardous waste from CESQGs. These landfills cannot take hazardous waste from CESQGs that are not on their permit.

Step #4: Report and Monitor, as Necessary

In the event of a fire, explosion, or other release of hazardous substance or wastes that could threaten human health outside the facility, or if you have a spill that reaches surface water, call 911 and the National Response Center at 800 424-8802 to report the emergency. The Response Center will evaluate the situation and help you make appropriate emergency decisions. In many cases, you will find that the problem you faced was not a true emergency, but it is better to call if you are not sure. Serious penalties exist for failing to report emergencies. If the spill could travel onto public lands or waters, the state and/or Tribe must also be notified of any spill incident.

Step #5: Avoid Liability

Proper care of hazardous materials and waste will allow the program, facility, or project manager to stay out of trouble on any grant or project. This care comes from proper compliance with several environmental laws and regulations, including CERCLA, RCRA, TSCA, CAA, and the Clean Water Act.

When dealing with hazardous waste disposal, RCRA regulates hazardous waste from the instant it is generated until the waste is ultimately destroyed. RCRA includes severe

penalties for violators (up to $50,000 in fines per day of non-compliance, per violation) whenever improper management of hazardous waste is shown to severely impact human health or the environment.

9.3 Legal Considerations

Federal Laws and Regulations

Resource Conservation and Recovery Act (RCRA) 40 CFR Parts 240-299

Passed by Congress in 1976, RCRA defines solid and hazardous waste, authorizes EPA to set standards for facilities that generate or manage hazardous waste, and establishes a permit program for hazardous waste treatment, storage, and disposal facilities. The Act has been amended since 1976 to include specific rules for land disposal, underground storage tanks, and universal waste.

If a facility produces or stores hazardous waste, the facility manger and facility personnel must comply with RCRA regulations.

Occupational Safety and Health Act of 1970 (OSHA) 29 CFR 1910, 1926

OSHA establishes regulations for site safety procedures, worker or employee training, and worker safety and health standards. Provisions include occupational safety and health standards; inspections, investigations, and record keeping; citations; procedures for enforcement; training; and employee education.

Material Safety Data Sheets (MSDSs) are required to be prepared by the manufacturer of each substance or product that may impact safety and health. MSDSs provide the information necessary to understand the occupational safety and health concerns in handling or using the product.

Hazardous Materials Transportation Act (HMTA) 49 CFR 172

The HMTA designates regulations for the transportation of hazardous materials in commerce. Hazardous materials include hazardous substances and hazardous waste that are defined by other laws such as CERCLA, RCRA, TSCA, OSHA. The U.S. Department of Transportation (DOT) regulates hazardous substances of particular quantities and form that may pose an unreasonable risk to health and safety or property. Transportation of hazardous materials will need to be in accordance with applicable DOT regulations for hazardous materials.

HMTA applies to IHS activities where hazardous waste or contaminated soils or groundwater are being transported off site. The program, facility, or project manager must be aware of state and Federal DOT requirements and ensure that contractors are properly licensed and insured. Grantees and Tribes that receive support from IHS are responsible for complying with HMTA requirements if they generated hazardous materials that must be shipped off-site. Usually, responsibility for hazardous waste rests with the generator and does not transfer to the transporter or waste disposal facility.

Also, be careful when shipping hazardous materials in the mail. The U.S. Postal Service has different requirements that are sometimes ***more stringent*** than DOT requirements. Check with the Postal Service for requirements for shipping hazardous materials through the mail.

Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) 42 U.S.C. 11001 et seq. (1986)

EPCRA's provisions form two primary programs: (1) emergency planning, and (2) community right-to-know. EPCRA establishes a mechanism for providing the public with important information on the hazardous and toxic chemicals in their communities, and it creates emergency planning and notification requirements to protect the public in the event of a release of extremely hazardous substances. The law requires local communities to prepare plans for dealing with emergencies relating to the release of extremely hazardous substances from facilities within those communities. EPCRA also provides the public and local and state governments with the right to obtain information concerning the types, amount, location, storage, use, disposition, and possible health effects from the release of hazardous and

extremely hazardous substances from facilities that are in their communities.

EPCRA is made applicable to Federal agencies by Executive Order (EO) 13148, Greening the Government Through Leadership in Environmental Management [previously EO 12856], which modifies the term "person" to include Federal executive agencies like HHS, and, by extension, IHS.

EPCRA establishes requirements for Federal, state, and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on chemicals. These requirements include worker safety training regarding chemical use, and making MSDSs available to workers. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. States, Tribes, and communities, working with facilities, can use the information to improve chemical safety and protect public health and the environment.

The appropriate program, facility, or project manager should be aware of EPCRA requirements to 1) comply with worker chemical safety, and 2) be involved with community planning regarding management of potential releases and liabilities, as well as other possible hazardous releases within surrounding communities.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA)

CERCLA holds potentially responsible parties (PRPs) liable for the cost of hazardous waste cleanup of facilities and sites where there is a release or a threat of a release. A National Contingency plan directs how cleanups are addressed, and the National Priorities List includes sites that should have a CERCLA-quality cleanup. CERCLA funds come from a national level and are reimbursed to a national level. EPA is the agency administering this law. Superfund Amendments and Reauthorization Act (SARA) amended CERCLA in 1986, expanded EPA's and ATSDR'S authorities and responsibilities, and gave a greater role to states and citizens.

State and Local Laws

In most cases, state and local laws will govern how hazardous materials, substances, and waste are addressed, since disposal usually occurs in state and locally regulated facilities. State and local involvement with hazardous materials can come from city/county fire departments or state agencies. Check with the state environmental office, health services office, and industrial safety office.

Most of the fines and penalties associated with hazardous substance management result from improper record-keeping and reporting, non-compliance in workplace safety, and from improperly transporting hazardous substances.

9.4 Responsibilities and Requirements

Depending upon project requirements, the program, facility, or project manager may have hazardous material or substance compliance responsibilities. Some of the key responsibilities include:

- Ensure that hazardous substances are properly stored, and containers have labels and warning markings.
- Properly inform and train employees about potential exposure to hazardous substances and waste, and their responsibilities in handling them.
- Ensure that current MSDSs are on site for each required hazardous chemical.
- Keep planning and documentation up to date.
- Ensure that appropriate engineering controls and personal protective equipment (PPE) are provided to protect the safety of employees.
- Contact the National Response Center (and state or local entities where required) when releases occur.

- Do not store flammable/combustible chemicals with incompatible materials.

9.5 Where to Go for Help

National Response Center (800 424-8802)

EPA Form 8700-12

www.epa.gov/epaoswer/hazwaste/data/form8700/forms.htm

Managing Your Hazardous Waste—A Guide for Small Business.

www.epa.gov/epaoswer/hazwaste/sqg/handbook/k01005.pdf

RCRA Online

www.epa.gov/rcraonline/

Universal Waste

www.epa.gov/epaoswer/hazwast/id/univwast/index.htm

Title 40 of the Code of Federal Regulations (CFR), Parts 260 to 299

Medical Waste

www.epa.gov/epaoswer/other/medical/

Chemical emergency preparedness and prevention

yosemite.epa.gov/oswer/ceppoweb.nsf/content/epcra_law.htm

EPA's searchable list of chemicals which provides the TPQs and RQs for a wide range of chemicals
http://web-services.gov/lol/

Hazardous Materials Transportation

hazmat.dot.gov/

Occupational Health and Safety Administration

www.osha.gov/

EPA Regions

ww.epa.gov/epahome/whereyoulive.htm#regiontext

Waste Management in Indian Country

www.epa.gov/tribalmsw/

Frequently Asked Questions about Waste

www.epa.gov/epaoswer/osw/basifact.htm

9.6 Definitions

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9601)

CESQG: Conditionally Exempt Small Quantity Generator. Facilities that generate less than 100 kilograms (2,200 pounds) a month of any hazardous waste are conditionally exempt from RCRA regulations.

Disposal: The discharge, deposit, injection, dumping, spilling, leaking or placing of any hazardous substance into or on any land or water so that it may enter the environment or be emitted into the air or discharged into any waters, including groundwater.

EPCRA: Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11001)

Hazardous Substances: Refers generally to hazardous substances, petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals. Defined under CERCLA 101(14) in 40 CFR 302.4, Solid Waste Disposal Act (42 U.S.C. 6921), Clean Water Act (33 U.S.C. 1317(a)), Clean Air Act (42 U.S.C. 7412).

HMTA: Hazardous Materials Transportation Act of 1990 (49 CFR 172)

MSDS: Material Safety Data Sheet. Written or printed material that contains information on hazardous chemicals such as common name, physical hazards, or health hazards (29 CFR 1910.1200(c)).

NPL: National Priority List. Defined under CERCLA and SARA.

NRC: National Response Center

RCRA: Resource Conservation and Recovery Act of 1976 (40 CFR Parts 240-299)

OSHA: Occupational Health and Safety Act of 1970 (29 CFR 1910, 1926)

SARA: Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C.9601)

Storage: The holding of hazardous substances for a temporary period, at the end of which the hazardous substance is either used, neutralized, disposed of, or stored elsewhere.

TCLP: Toxicity Characteristic Leaching Procedure**.** A test to determine the toxicity of a solid waste. If the substance proves toxic and meets other hazardous waste requirements, it may be classified as a hazardous waste.

TSDF: Treatment, Storage, or Disposal Facility. A regulated facility that treats, stores, and/or accepts hazardous waste from various sources.

Universal Waste: Items include pesticides, thermostats, batteries, and mercury-containing lamps. Universal waste must be managed in a way that prevents the release of hazardous substances to the environment. Requirements are the same as any hazardous waste for employee training, packaging and labeling, accumulation time, and tracking of shipments off site.

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10.0 Environmental Justice

10.1 Overview/Introduction

Environmental justice (EJ) encompasses a broad range of impacts, including impacts on the natural or physical environment and related social, cultural, and economic impacts. Executive Order 12898 directs Federal agencies, to the greatest extent practicable and permitted by law, to identify and address disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations in the United States.

EJ mandates the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

EJ also ensures that covered populations are allowed to share in the benefits of, and are not excluded from, the consequences resulting from industrial, municipal, and commercial operations or the execution of Federal, state, local, and Tribal programs and policies. Meaningful involvement means that:

- Potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health.
- The public's contribution can influence the agency's decision.
- The concerns of all participants involved will be considered in the decision-making process.
- The decision makers seek out and facilitate the involvement of those potentially affected.

For IHS projects and activities located in an Indian community, IHS program, facility and project managers should always consult with Tribal governments in a manner consistent with the government-to-government relationship. Since IHS improvement projects are requested by the Tribe, the Tribes are actively involved in the planning and environmental review, and EJ is unlikely to be applicable.

Usually, the resultant determination will be that the proposed project will not cause disproportionately high and adverse human health or environmental effects on minority or low-income populations.

For those determinations that conclude that there may be a disproportionate adverse impact on the Indian population being served, the procedure for addressing EJ is outlined below. While American Indians and Alaska Natives are the group IHS serves, there may be other minorities in the project area that may need consideration under EJ.

10.2 Compliance Process

IHS program, facility and project managers must consider EJ during the preparation of NEPA environmental documents and include a discussion in EAs and EISs. Program, facility and project managers must consider the environmental consequences, including EJ, of their actions. EJ is discussed below in four steps (see Figure 10-1):

1. Is there a minority or low-income population in the project area?
2. Does the project cause disproportionately high and adverse impacts to the identified low income or minority populations?
3. Can the impacts be avoided or minimized?
4. Document finding and determinations.

It is important to note that the topic of “public involvement” is not presented as a distinct or separate step. It is crucial that public involvement occur throughout the process. In order to ensure that programs, policies, and activities are consistent with the Executive Order requirements, the following principles in

planning and project development need to be applied:

- Identify and evaluate a broad range of alternatives.
- Use a strong public involvement process.
- Use a systematic interdisciplinary approach.
- Identify, avoid, minimize, and mitigate adverse effects and impacts.

Step #1: Is There a Minority or Low-Income Population in the Project Area?

The first step is usually determining if a minority or low-income population is present within the project area. If not, then EJ is not applicable. Since IHS projects on Tribal or reservation lands would have minority populations in the project area, you can skip this step. For IHS projects on other lands, the procedures in this step should be followed, if applicable.

Minority and low-income populations are defined in the Federal Rules as, "readily identifiable groups of low income or minority persons who live in geographical proximity, and if circumstances warrant, geographically dispersed transient persons..." If this information is not available from other sources, then IHS staff should use some or all of the following steps:

- Use the EPA's Environmental Justice Geographic Assessment Tool.
- Examine census information, at the lowest level of aggregation available for the project area.
- Contact Tribal Governments in the project area.
- Identify organized groups who may reside in the project area. This may involve contacting places of worship, or initiating contact with various state councils.
- Contact relevant city or county officials. This may include a city administrator, or a city or county planner.
- Contact various state agencies, e.g., Indian Affairs Councils, and others.
- Contact appropriate Federal agencies. This may include Housing and Urban Development, Bureau of Indian Affairs, and others.
- Contact the appropriate Metropolitan Planning Organization (MPO) or Regional Development Commission.
- Talk directly to people who live in and near the project area.
- Undertake direct observation—walk or drive through the area.

If your conclusion is that no minority or low-income population is present within the project area, document how the conclusion was reached and indicate this in the NEPA document. If your conclusion is that there are minority or low-income population(s) within the project area, you must continue on to the next step.

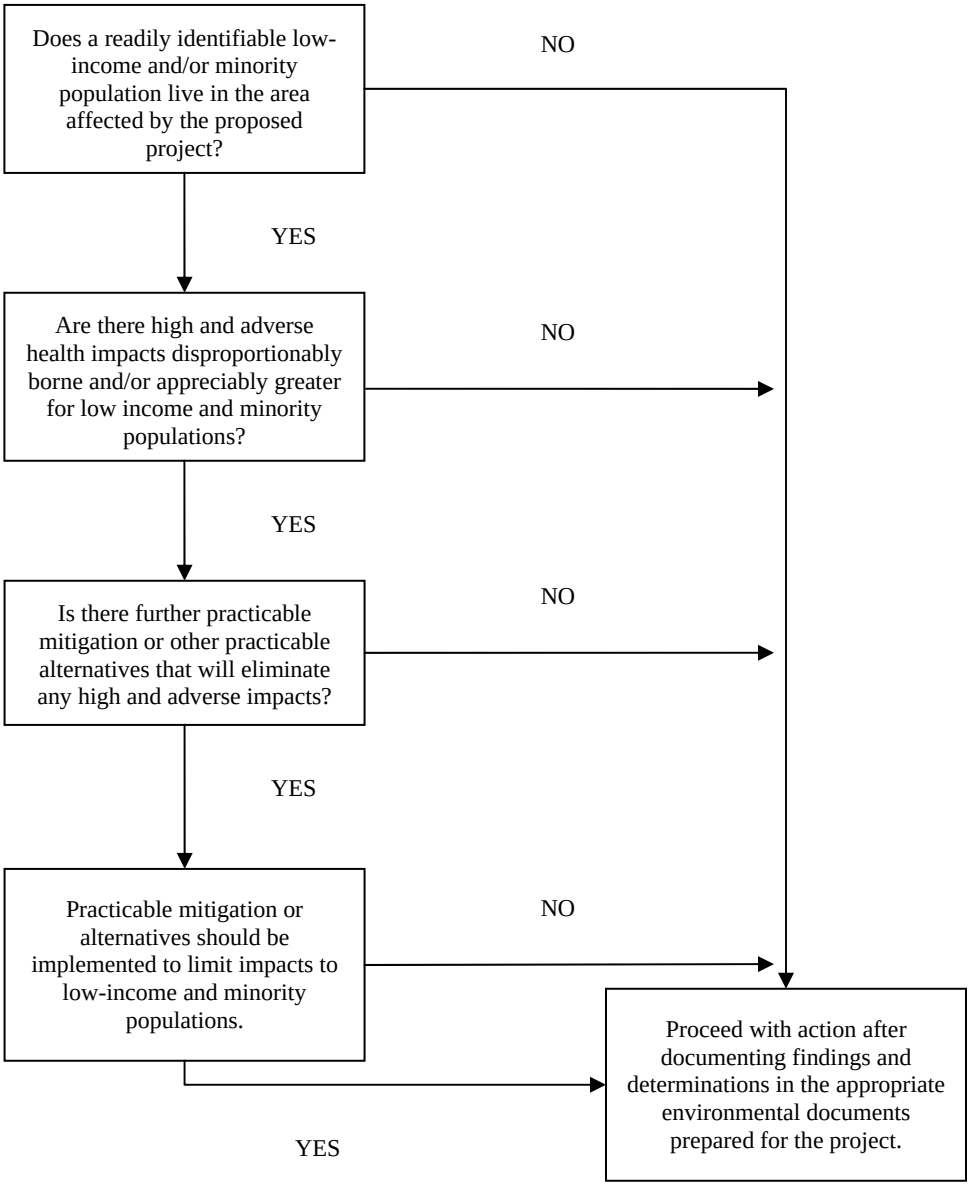


Figure 10-1. Process for Addressing Environmental Justice.

Step #2: Does the Project Cause Disproportionately High and Adverse Impacts to the Identified Low-Income or Minority Populations?

IHS projects, services and activities are designed to have a positive impact on the health and environment of the American Indian and Alaska Native people. However, IHS personnel must still consider if a project causes disproportionately high and adverse health or environmental impacts to low-income or minority populations. While the determination of whether an impact is adverse is rather straightforward (e.g., other than temporary increase in air, noise, and water pollution; destruction or disruption of a community's economic vitality; displacement of persons, businesses, or farms; increased traffic congestion; or impact to the benefits of IHS programs, policies, or activities), the determinations as to whether a project will cause "disproportionately high and adverse impacts" is more difficult. This determination involves two separate questions:

- Is the anticipated adverse impact high?
- Is the high and adverse impact anticipated to fall disproportionately on low-income or minority populations?

Both these questions require IHS to reach a reasonable decision. In making the decisions detailed throughout this process, IHS staff should remember that they are making decisions based on "net" impact. Rather than simply considering the gross impact, IHS should make their determinations after mitigation, enhancements, and calculation of all "off-setting benefits" to the low income or minority populations.

NOTE: If the NEPA review results in an Environmental Assessment or EIS, EJ concerns must be addressed in the document.

Is the anticipated adverse impact high?

As a general rule, an impact that exceeds an applicable Tribal, state, or Federal standard should be considered high. Additionally, a determination that an impact is "significant" under NEPA would also lead to a determination that an impact is high. However, an EJ high adverse impact may not necessarily be "significant" under NEPA.

Is the high and adverse impact anticipated to fall disproportionately on low-income or minority populations?

The term disproportionate can be defined in two ways. The first question to ask is: "Will the overall impact be 'predominantly borne' by the minority or low-income group?" If the answer is no, then the impact may not be disproportionate.

The second question is: "Will the effect experienced by either of these groups be 'appreciably more severe' than that experienced by non-minority or non-low-income persons?" If the answer is no, then the impact may not be disproportionate.

However, if the answer to either of these questions is yes, then EJ needs to be addressed in the project documentation. Answering these questions will require the IHS program or project manager to make a qualitative decision and support the decision in the environmental document.

Step #3: Can the Impacts be Avoided or Minimized?

If the project will have a disproportionately high and adverse health or environmental impact on low-income or minority populations, the IHS program or project manager is required to determine whether the impacts can be avoided or minimized. The IHS program or project manager may start a public involvement effort so that minority or low-income populations can have a meaningful opportunity to offer their opinion of a project, including mitigation measures. If, after mitigation, there remains a high and disproportionate impact to minority populations or low-income populations, then the program or project manager must consider:

- Are there further mitigation measures? If so, then those measures must be considered unless they are not practicable.

- Are there additional alternatives that would avoid or reduce the impacts? If so, and the alternative is practicable, then that alternative must be considered.

If further mitigation or alternatives that avoid the impact are judged to be "not practicable," that conclusion must be supported and justified and included in the NEPA document. The program or project manager should consider the social, economic (including cost), and environmental effects of the mitigation measures and alternatives.

Step #4: Document Finding and Determinations

Document the findings that were developed in the steps above. The topic area of environmental justice should be introduced with a statement similar to the following:

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, dated February 1, 1994, directed each Federal agency to achieve "environmental justice as part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The proposed project has XXXXXX (e.g. Federal funding, will be implemented by a Federal agency, and/or has Federal permit requirements) and is considered a Federal project for purposes of compliance with the Executive Order.

The IHS program, facility or project manager needs to specifically outline the steps taken to comply with the EO. It is recommended that general statements and statements of what was not done be avoided. Instead, more affirmative statements of what was done should be included in the environmental document.

The description should indicate specifically how EJ was considered and whether (and how) the public involvement process fully included all interested and affected publics. The consideration of EJ requires sensitivity to certain groups rather than a reference to them as sensitive.

For projects that do not have EJ considerations, the following statement can be used:

It has been determined that the proposed project will not cause disproportionately high and adverse human health or environmental effects on minority or low-income populations.

This statement should then be followed by a clear statement about how this determination was reached. A discussion of the public involvement undertaken as part of the project should also be included.

For projects that would affect covered populations, a discussion of the topic will need to be included in the environmental document. The discussion should clearly outline the following, though this is not a comprehensive list:

- The covered populations that are located within the project area (usually presented graphically on a map).
- The disproportionately high and adverse impacts to the low-income or minority populations expected as part of the project, the extent and magnitude of those impacts, and how these determinations were made.
- Any further mitigation measures that could be employed to avoid or reduce the adverse effect to the minority or low income population.
- Why further mitigation measures were deemed practicable or not-practicable.
- Other alternatives to the proposed action that would avoid or reduce the impacts to the low income or minority population.
- Why other alternatives to the proposed action were deemed practicable or not practicable.
- If there is a substantial need for the project.

- The public involvement process undertaken as part of the project
- Any findings and/or determinations that were reached in the EJ consideration.
- Any early coordination with city, county, or other local governments.
- Any early coordination with appropriate agencies and groups, including those that specifically represent the covered population.
- Any other relevant information that may have come to light during the review process.

Tips for Writing EJ Discussions

Environmental justice should always be addressed in a separate EJ section in the EA or EIS. The EJ discussion should be a straightforward presentation of the information. The socioeconomic discussion should not be used as a substitute for the EJ section. It is acceptable to refer to EJ in the Socioeconomic Impacts (or similar) section, but there should be an EJ section or subsection as well.

Document preparers should use or stick closely to the actual language of the Executive Order so as to correctly reflect the intent of the Order. It is better to cite the exact language of the EO than to paraphrase or use alternate terms which may not be correct.

10.3 Legal Considerations

Executive Order 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*: Signed on February 11, 1994 and requires Federal agencies to achieve environmental justice by identifying and addressing, as appropriate, any disproportionately high and adverse human health or environmental impacts that their programs, policies, and activities may have on minority populations and low-income populations. To achieve this objective, the Order and the President's accompanying memorandum establish the following goals:

- Promoting enforcement of environmental and health regulations in minority and low-income populations.
- Ensuring that agency actions substantially affecting human health or the environment do not have discriminatory effects based on race, color, or national origin.
- Increasing public participation by providing concise, understandable, and readily accessible documents and, where appropriate, translating documents and public hearing notices into other languages.
- Improving research, data collection, and analysis on human and environmental health issues in minority and low-income populations.
- Seeking to protect populations that consume fish or wildlife as subsistence.
- Analyzing the environmental effects (including human health, economic, and social effects) of Federal actions on minority and low-income communities when such analysis is required by NEPA or when mitigation measures, environmental assessments, or records of decision are developed.

Agencies are responsible for developing and implementing their own agency-wide strategy that describes the steps agencies will take to identify and address disproportionately high and adverse human health or environmental effects of their actions on minority populations or low-income populations.

Civil Rights Act of 1964, Title VI, 42 U.S.C. § 2000d et seq The Act prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving Federal financial assistance.

If a recipient of Federal assistance is found to have discriminated and voluntary compliance cannot be achieved, the Federal agency providing the assistance should either initiate fund termination proceedings or refer the matter to the Department of Justice for appropriate legal action. Aggrieved individuals may file administrative complaints with the Federal agency that provides funds to a recipient, or the individuals may file suit for appropriate relief in Federal court. Title VI itself prohibits intentional discrimination. However, most

funding agencies have regulations implementing Title VI that prohibit recipient practices that have the effect of discrimination on the basis of race, color, or national origin.

10.4 Responsibilities and Requirements

All IHS program, facility or project managers should:

- Assess the beneficial and adverse effects of IHS activities on different population groups.
- Work with regional/state EPA offices and applicable Tribal and state environmental authorities to ensure Title VI and environmental justice considerations are incorporated into all IHS activities.
- Determine if there are minority or low-income populations in the project area.
- Determine if the project has disproportionately high and adverse impacts to low-income or minority populations.
- If so, determine if there are any mitigation measures that could be employed to avoid or reduce the adverse effect to the minority or low-income populations.
- Determine if there are any other alternatives to the proposed action that would avoid or reduce impacts to the low-income or minority populations.
- Determine if there is a substantial need for the project.
- Undertake a concerted public involvement process.
- Document:
    - Any findings and/or determinations that were reached in the process.
    - Any early coordination with regional/state EPA offices and applicable Tribal and state, county, or other local governments and environmental authorities.
    - Any early coordination with appropriate agencies and groups, including those that specifically represent covered populations.
    - Any other relevant information that may have come to light during the review process.

10.5 Where to Go for Help

For more information, consult the following resources.

Cover Memorandum for Executive Order 12898

http://www.epa.gov/compliance/resources/policies/ej/clinton_memo_12898.pdf

CEQ Environmental Justice Guidance

ceq.eh.doe.gov/nepa/regs/ej/ej.pdf

Department of Health and Human Services' Notice of Proposed Rulemaking (also includes amendments to Title IX regulations), published October 26, 2000 (65 FR 64194) http://www.usdoj.gov/crt/cor/byagency/hhscrranprm.pdf

Department of Health and Human Services' Title VI Regulations (45 C.F.R. § 80.1 et seq.)

http://www.usdoj.gov/crt/cor/byagency/HHST6reg.pdf

Environmental Justice Guidance Under the National Environmental Policy Act

http://www.epa.gov/compliance/resources/policies/ej/ej_guidance_nepa_ceq1297.pdf

Environmental Justice Hotline (202) 260-6357 and 1-800-962-6215.

EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting

http://www.epa.gov/compliance/resources/policies/ej/ej_permitting_authorities_memo_120100.pdf

EPA's Environmental Justice Geographic Assessment Tool

http://www.epa.gov/enviro/ej/index.html

EPA Environmental Justice Websites

www.epa.gov/compliance/environmentaljustice/index.html

www.epa.gov/oswer/ej/index.html

EPA's Commitment to Environmental Justice

http://www.epa.gov/compliance/resources/policies/ej/admin_ej_commit_letter_081401.pdf

Executive Order 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

http://www.epa.gov/compliance/resources/policies/ej/exec_order_12898.pdf

Final Guidance For Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses

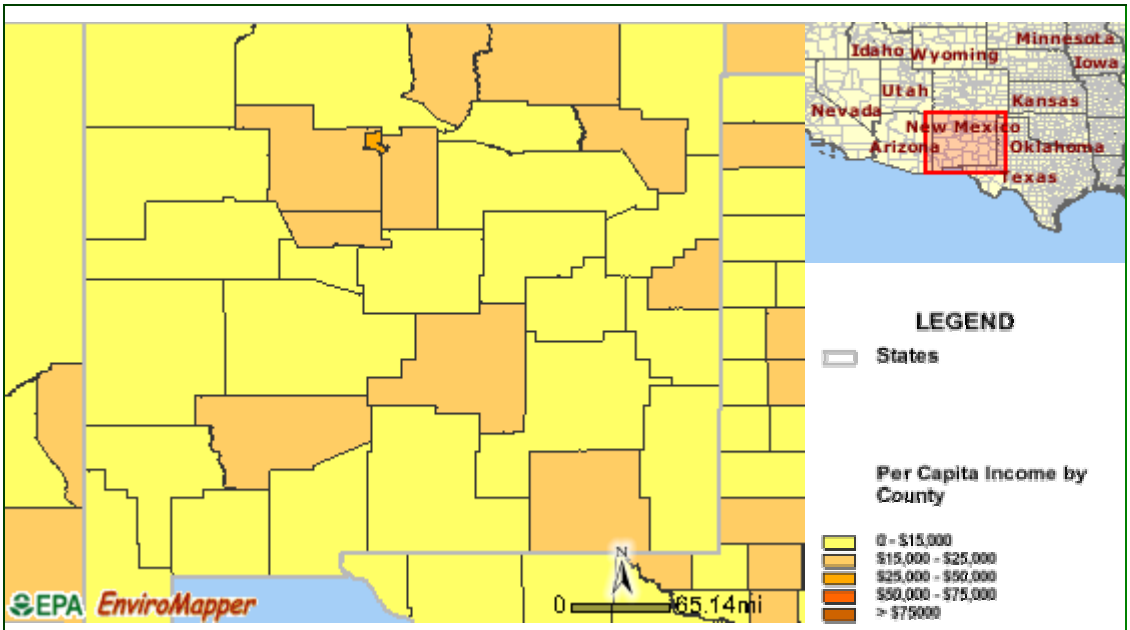
http://www.epa.gov/compliance/resources/policies/ej/ej_guidance_nepa_epa0498.pdf

Title VI Statute

http://www.usdoj.gov/crt/cor/coord/titlevistat.htm

10.6 Example of EJ Information

Provided below are maps developed from EPA's Environmental Justice Geographic Assessment Tool. The first map shows the per capita income of New Mexico and the second map illustrates the percentage of minority populations of New Mexico within each county.

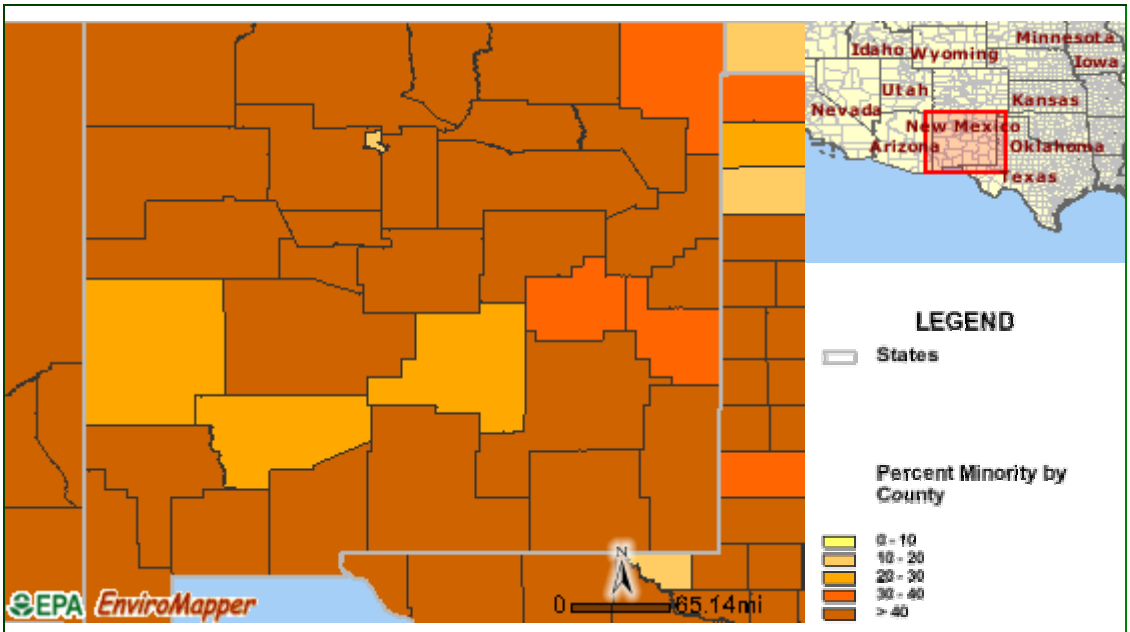


EnviroMapper for EJ

Per Capita Income of New Mexico

EPA United States Environmental Protection Agency

EPA does not guarantee the accuracy, completeness, or timeliness of the information shown, and shall not be liable for any loss or injury resulting from reliance upon the information shown.



EnviroMapper for EJ

Minority Populations of New Mexico

EPA United States Environmental Protection Agency

EPA does not guarantee the accuracy, completeness, or timeliness of the information shown, and shall not be liable for any loss or injury resulting from reliance upon the information shown.

10.7 Definitions

Activities, programs, and policies: All projects, programs, policies, and activities that affect human health or the environment, and which are undertaken or approved by IHS. These include, but are not limited to, permits, licenses, and financial assistance provided by IHS. Interrelated projects within a system may be considered to be a single project, program, policy or activity for purposes of E.O. 12898.

Adverse effects: The totality of individual or cumulative human health or environmental effects, including interrelated social and economic effects, which may include, but are not limited to: bodily impairment, infirmity, illness or death; air, noise, and water pollution and soil contamination; destruction or disruption of man-made or natural resources; destruction or diminution of aesthetic values; destruction or disruption of community cohesion or a community's economic vitality; destruction or disruption of the availability of public and private facilities and services; vibration; adverse employment effects; displacement of persons, businesses, farms, or nonprofit organizations; increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community; and the denial of, reduction in, or significant delay in the receipt of benefits of programs, policies, or activities.

Disproportionately high and adverse effect on minority and low-income populations: An adverse effect that:

- Is predominately borne by a minority population and/or a low-income population.
- Will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.

Environmental Justice: The fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Fair treatment: No group of people, including a racial, ethnic, or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of Federal, state, local, and Tribal programs and policies.

Low-Income: A person whose median household income is at or below the Department of Health and Human Services poverty guidelines who lives in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed program, policy or activity.

Meaningful involvement:

- Potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health.
- The public's contribution can influence the regulatory agency's decision.
- The concerns of all participants involved will be considered in the decision-making process.
- The decision makers seek out and facilitate the involvement of those potentially affected.

Minority: Means any readily identifiable groups of minority persons who live in geographic proximity and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed program, policy or activity. Minority persons include:

- Black: A person having origins in any of the black racial groups of Africa.

- Hispanic: A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- Asian American: A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.
- American Indian and Alaskan Native: A person having origins in any of the original people of North America and who maintains cultural identification through Tribal affiliation or community recognition.

11.0 Socioeconomics

11.1 Overview/Introduction

The NEPA implementing regulations at 40 CFR §1508.8 state that "effects" includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. This means that social (e.g., population, land use, public safety) and economic (e.g., local economies, labor markets, land values) effects must be considered for proposed IHS programs and projects if related to impacts to the environment of sufficient significance as to warrant an EA or an EIS. Most IHS projects and programs will not have to consider socioeconomics unless they meet that condition; however, any environmental review documents should state that one of the objectives of the proposed project is to improve the health of the Indian people.

The IHS is an invited guest on Indian reservations and on Indian lands. The IHS provides health services to the Indian people because it is mandated to do so by Federal laws. Indians are full partners in the provision of those services through the tribal consultation process; i.e., the Tribes have requested those health services the IHS is authorized to provide. From the IHS perspective, the provision of those services is beneficial toward improving the health and environment of the Indian people.

If there is a potential for an environmental impact, the consideration of social and economic impacts of proposed projects ensures that impacts to people and communities are integrated into the decision-making process.

By improving the health of the Indian people, IHS projects and programs frequently enhance the long-term social and economic vitality of the project area. These effects, even though they are often beneficial, need to be included in a socioeconomic discussion when the related effects are discussed in the environmental statement.

11.2 Compliance Process

There are no mandated compliance requirements governing socioeconomic analysis within the NEPA process. It must be addressed adequately in the EA or EIS for the proposed project. Importantly, significant economic or social effects alone do not require the preparation of an EIS (40 CFR 1508.14).

11.3 Responsibilities and Requirements

If required, all IHS personnel should:

- Evaluate effects to the current socioeconomic environment.
- Develop mitigation measures, if required.
- Incorporate mitigation measures into program or project design.
- Prepare the appropriate documentation.

11.4 Where to go for Help

For more information see the following sources.

US Census

http://www.census.gov/

EPA's Environmental Justice Geographic Assessment Tool

http://www.epa.gov/enviro/ej/index.html

US Bureau of Labor Statistics

http://www.bls.gov/

US Department of Housing and Urban Development

http://www.hud.gov/

Interorganizational Committee Guidelines and Principles for Social Impact Assessment, U.S. Department of Commerce, NOAA Technical Memorandum, NMFS-F/SPO-16, 1994. http://www.nmfs.noaa.gov/sfa/social_impact_guide.htm

State, city, and county professional staff/agencies (i.e., city planners, city administrator, school district staff, etc.)

Civic or professional groups in the community (e.g., Chamber of Commerce, Development Associations, etc.)

Local/state Departments of Labor

Local/state Departments of Commerce

Tribal governments in the project area

Organized groups who may reside in the project area. This can include places of worship, and/or various state councils

Appropriate Federal agencies. (e.g. Housing and Urban Development, Bureau of Indian Affairs)

Appropriate Metropolitan Planning Organization (MPO) or Regional Development Commission

11.5 Definitions/Acronyms

CEQ: Council on Environmental Quality

Cost-benefit analysis: A comparison of the economic value of using a productive resource with the opportunity cost of using the resource. Projects or regulations are evaluated based on how they change net economic value.

Demographics: The study of statistics relating to populations.

NEPA: National Environmental Policy Act

12.0 Noise

12.1 Overview/Introduction

Noise is defined as unwanted sound. The degree to which noise disturbs others can be subjective and depends upon its intensity. The loudness of a sound is measured in units called decibels (dB). "A-weighted" decibel (dB(A)) measurements 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 noise event to represent the way in which the average human ear responds to the noise event. The EPA identifies 24-hour exposure levels in excess of 45 dB(A) indoors and 55 dB(A) outdoors as interfering with activities and causing annoyance. Levels below these noise thresholds permit spoken conversation and other activities such as sleeping, working, and recreation.

Sounds are emitted from many sources, several of which can be associated with IHS projects or activities. Excessive and/or prolonged exposure to noise can affect humans, animals, and even structures.

Table 12-1. Examples of Potential Noise Impacts

Potential Impacts to Humans	Potential Impacts to Animals	Potential Impacts to Structures
• Affect sleep • Affect learning • Affect conversation • Lead to psychological impacts like annoyance and stress • Decrease enjoyment of outdoor activities • Lead to hearing loss • Lead to physiological responses like nausea, disequilibrium, disorientation, and headache	• Affect the predator-prey relationship • Affect species communications • Induce stress responses • Induce behavioral changes • Interfere with mating • Interferes with the ability of the animal to obtain sufficient food, water, and cover	• Rattle windows, doors and household items • Affect property values • Cause vibration damage to any structure, including historical structures and artifacts

Compliance for IHS programs or activities with noise issues follows five steps:

1. Identify project-specific noise levels.
2. Determine or measure existing background and ambient sound levels.
3. Identify nearby noise-sensitive land uses or receptors (i.e., schools, churches, & hospitals).
4. Determine potential direct, indirect, and cumulative effects.
5. Develop noise mitigation strategies.

Some, but not all, of the sound sources associated with IHS projects can be labeled as noise. These potential noise sources may require environmental review and are discussed below.

Construction Noise and Vibration

Though it is a transient (i.e., temporary) impact, noise generation during project construction is an important consideration. Construction noise is assessed qualitatively in terms of the distance between sensitive areas and construction

activities. Reference construction noise data illustrate that operation of a typical piece of construction equipment could result in sound levels between approximately 75 dB(A) and 100 dB(A) measured 50 feet from the source, depending primarily on the type of equipment used (see Table 12-2). Common construction activities could include:

- Demolition
- Grading
- Excavation
- Foundation work
- Truck traffic

Earthmoving activities and most demolition activities are capable of causing noise levels between approximately 85 and 90 dB(A) at a distance of 50 feet from the source without noise control. With noise control, the same sources would be between 75 and 80 dB(A).

Other noise- and vibration-generating activities include stationary sources, such as pumps, generators, mixers, and mobile sources, including dozers, trucks and scrapers. Beyond 100 feet of the noise source, routine construction noise levels would be between approximately 79 to 84 dB(A) without noise control, or 69 to 74 dB(A) with noise control.

Table 12-2. Noise Generated by Types of Construction Equipment

Operator or Task	Mean dB(A)
Quiet Urban Daytime	50
Heavy-duty bulldozer	89
Vibrating road roller	97
Light-duty bulldozer	96
Asphalt road roller	95
Wheel loader	94
Asphalt spreader	91
Light-duty grader	89
Power shovel	88
Laborers	90
Truck-mounted crane	79
Tower crane	74

These potential levels of noise and vibration imply that construction noise could have an impact on the environment surrounding a proposed project site. Therefore, construction noise should be reviewed as part of all IHS proposed actions.

Aircraft Noise

The noise of any flight operation associated with an IHS facility can potentially impact surrounding areas. LifeFlights/MediVac flights to or from medical facilities and operations for other administrative purposes are regulated and enforced by the Federal Aviation Administration (FAA), and IHS may need to review the potential impact of flights on sensitive noise land uses and receptors as part of the project's environmental review.

IHS flights can occur over 1) residential areas, disturbing people and rattling windows; 2)

Federally managed areas, disturbing recreational enthusiasts and animals alike; and 3) Tribal lands, impacting sacred sites and other traditional cultural properties (TCPs). Though IHS may not operate these flights themselves, IHS may need to analyze the impacts of these flights on the local community as part of the project's environmental review.

Industrial Noise

Light industrial facilities (such as water treatment plants or landfills) produce noise from a variety of sources, including:

- Warehousing facilities, including trucks, fork lifts, and machinery
- On-site maintenance and repair facilities, including heavy equipment, power or pneumatic tools
- Earthmoving equipment (i.e., landfill operations)
- Heating, ventilating and air conditioning (HVAC) equipment
- Rotating machinery
- Impacting mechanical sources
- Other mechanical equipment and machinery, such as conveyors

These potential sources of noise need to be properly reviewed and documented as part of the project record.

Traffic Noise

Proposed projects that will substantially increase traffic in a specific area must be reviewed to determine the level of potential impact. Noise associated with emergency vehicles is also a source that should be considered. However, emergency vehicles are exempt from noise ordinances and regulations.

12.2 Compliance Process

For a project that may have noise impacts, take the following five steps and document them in the environmental review document (Figure 12-1).

Step #1: Identify Project-Specific Noise Levels

When developing a new project, IHS managers should be aware of the facility's noise and vibration "footprint" and have a thorough understanding of project or facility noise potentials as well as the noise and vibration that can be expected from the construction process.

- What is the nature of the facility?
- Will there be use of heavy equipment or machinery temporarily or throughout the life of the facility?
- Will there be an increase in community or specialized traffic (aircraft flights, emergency vehicles)?

Project requirements such as these will help determine the noise and vibration impact to be included in the NEPA process.

Most IHS projects have noise and vibration impacts that are limited in time (short-term construction) or distance from potential receptors. These situations typically do not require analysis in a NEPA document. However, larger projects that are of longer duration (several months of construction or activity), are closer to noise and vibration receptors (homes, urban centers), or will offer ongoing services that generate noise outside of daytime hours (e.g., hospital with helicopter pad; water pumps; etc.) may benefit from a noise and vibration evaluation.

If no noise impact exists, document these facts in the NEPA report.

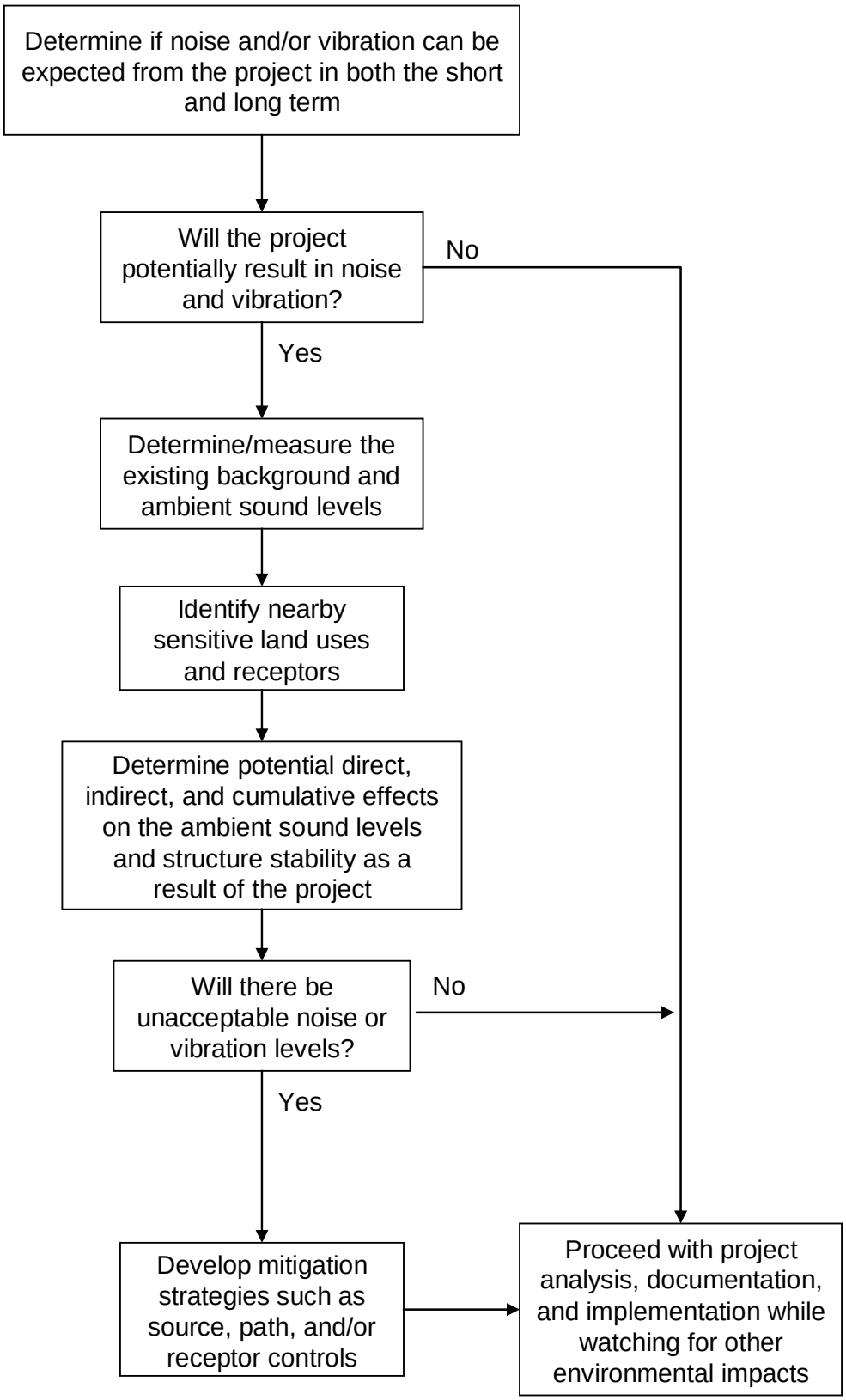


Figure 12-1. Flow Chart for Noise Evaluation

Step #2: Determine or Measure Existing Background and Ambient Sound Levels

If the anticipated conditions warrant further investigation, ambient sound levels should be measured using established methods relevant to the source type and expected level of impact. For example, aircraft and helicopter noise is regulated by Federal law through the FAA. The FAA has well-defined guidelines that can assist in the evaluation of ambient noise. If the facility is located in a more urbanized area, it is likely that the data needed are already available from the local or regional airport. Aircraft noise contours may also be found in local planning documents or zoning maps.

State Departments of Transportation may have noise and vibration information to help predict short-term construction and long-term project life noise impacts.

Noise data that relate to particular facility types or industrial operations may be available from similar operations in other parts of the state or country. Approximations of ambient sound levels can be extrapolated from existing data for areas with similar topography.

The National Park Service has established several measurement programs at national parks that may provide data indicative of certain natural or wilderness areas. An excellent summary of this issue within the National Park System is located at: www.nature.nps.gov/naturalsounds.

If a measurement of the ambient sound levels cannot be extrapolated from existing sources, a qualified contractor should be hired to make proper measurement of the existing soundscape.

Step #3: Identify Nearby Noise-sensitive Land Uses or Receptors

Sensitive land uses may include residential areas, natural areas, parks, Federal lands, Tribal lands, and other areas that would be especially susceptible to noise or vibration intrusion. Typically, the most sensitive land use is residential, especially those residential areas composed of single-family housing. Other land uses with less sensitivity include open range and pasture lands, wooded areas, commercial and industrial properties, and agricultural areas.

IHS must take special consideration of sensitive areas. Some of these areas have specific restrictions related to noise that must be considered as part of the project record. A few noise- and vibration-sensitive areas include:

Tribal Lands: Cultural sites need to be considered as part of the environmental review.

Communities: Sensitive areas include:

- Outdoor assemblies of persons
- Churches
- Hospitals
- Schools
- Nursing homes
- Residential areas designated as noise-sensitive by airports or by an airport noise compatibility plan or program

Local communities and municipalities can designate areas they feel are noise- and vibration-sensitive and in need of special protection. IHS projects are required to comply with these state and local land use standards that may be more stringent than Federal guidelines. These standards are usually illustrated on noise exposure maps that use noise contour lines to depict the extent of existing and future noise exposure within the community and the location of noise-sensitive land uses.

If a land use or a sensitive noise receptor is impacted by a long-term 2 dB increase, further review may be required. A 2 dB change is a threshold used by several agencies.

Federal Lands: Examples of sensitive areas on Federally-managed lands include:

• National Parks • National Monuments • National Seashores • National Lakeshores • National Recreation Areas	• National Scenic Riverways • Big Game Refuges • Game Ranges • Wildlife Ranges • Wilderness Areas • Primitive Areas • National Wildlife Refuges

Step #4: Determine Potential Direct, Indirect, and Cumulative Effects

Once predicted or measured noise levels have been determined for the ambient environment, IHS should then compare the ambient environment with the expected project-specific noise levels. The results should be evaluated in context of the land uses nearby, and a determination as to level of expected impact to nearby sensitive and non-sensitive land should be made.

For projects with no adverse impacts (e.g., no additional unacceptable noise added to the ambient environment; no exceedance of local standards), the project can continue after proper documentation has occurred. For projects with adverse impacts (e.g., the project would add additional unacceptable noise to the ambient environment, or the project would exceed local standards) mitigation may be needed to decrease the noise impacts and/or allow the project to comply with local standards.

Step #5: Develop Noise and Vibration Mitigation Strategies

As required by law, or as influenced by local public sentiment, IHS should consider feasible and reasonable mitigation strategies where noise and vibration impacts may be adverse. Control solutions fit into three categories of action: source, path, and receptor.

Source Control

Source control is the most highly prioritized form of noise mitigation because it is generally the most effective form of noise control. Source controls that limit noise emissions or restrict allowable types or operating times of heavy equipment are also the easiest to oversee on a construction project. Source controls include, but are not limited to:

- Schedule Constraints – prohibiting work during sensitive nighttime hours; conversely, performing noisy work during less sensitive periods
- Equipment Restrictions – restricting the type of equipment used
- Emission Restrictions – specifying stringent noise emission limits, such as limiting noise to 75 dB at the property line
- Substitute Methods – using quieter methods/equipment when possible
- Exhaust Mufflers – ensuring equipment have quality mufflers installed
- Lubrication and Maintenance – well maintained equipment is quieter. Like any vulnerable part, noise control measures, such as gaskets and mufflers, need to be maintained and replaced when necessary to provide the desired attenuation.
- Incorporating appropriate building design to minimize noise impacts
- Reduced Power Operation – use only necessary size and power
- Limit Equipment On site – only have necessary equipment on site
- Noise Monitoring – technician on site to ensure noise levels are not excessive
- Quieter Backup Alarms – manually adjustable or ambient-sensitive types
- Dampeners – equipment that slows the impacts of vibrating equipment
- Using “Quiet” Equipment – some equipment is manufactured with consideration of noise reduction and, as a result, is specifically designed to be quieter than standard equipment.

- Retrofitting – includes installing mufflers, and enclosing parts of noisy machines. Table 12-3 lists construction equipment and suggested retrofit controls. For example, changing from an inadequate muffler to a better design could make a difference of 1–3 dB, and installing a muffler where one had been lacking could make a difference of 10–12 dB.

Table 12-3. Examples of Noise Controls for Construction Equipment

Equipment	Noise Controls
Pile driver	Enclosure, muffler
Stone cutting saw	Noise control pad with water
Handheld impact drills	Reduction of reflected sound
Circular saw blades	158 tooth angle, new tooth configuration, slotted saw blades, viscoelastic damping
Pneumatic tools	Muffler
Portable air compressor	Muffler, acoustic enclosures
Bulldozer	Cab-liner material, enclosure, sound absorption in canopy, sealing of all openings
Wheeled loader	Absorption of sound cooling air route
Vibratory roller	Flexible mounting for pump compartment
Joint cutter	Anti-vibration mounting fixtures

Path Control

When source control measures by themselves are not sufficient to avoid noise impacts, path control measures should be designed and implemented. Noise pathways to sensitive receptors can be effectively interrupted with path controls, providing care is taken to completely (or partially) block the line-of-sight between the noise source and the affected receptors. Path controls include, but are not limited to:

- Noise Barriers – semi-permanent or portable wooden or concrete barriers; taking advantage of any natural topographical features or multilevel buildings that can be used to screen noise impacts; allowing for less noise-sensitive land uses (active recreation areas or access ways) in high noise areas
- Noise Curtains – flexible intervening curtain systems hung from supports
- Enclosures – encasing localized and stationary noise sources
- Increased Distance – perform noisy activities farther away from receptors

In general, noise barriers or curtains are cost-effective when they can provide perceptible noise reduction benefits to a relatively large number of sensitive receptors. When properly installed such that the barriers break the line-of-sight between the receptors and the equipment and are free of holes or gaps, a noise barrier system is capable of providing losses of 10 to 15 dB. Even at upper-story receptor locations where the barriers just break the line-of-sight, barrier insertion losses of about 5 dB can be realized.

Receptor Control/Mitigation

Occasionally there are circumstances where source and path noise control measures are not feasible or sufficient. In these cases, receptor control measures are necessary.

Receptor controls include, but are not limited to:

- Window Treatments – reinforcing a building's noise reduction ability
- Community Participation – open dialog to involve affected residents
- Noise Complaint Process – ability to log and respond to noise complaints
- Temporary Relocation – in extreme cases where mitigation is not possible

Because window openings are typically a building's weakest link for noise infiltration, acoustical window treatments can significantly reduce the outside-to-inside noise contribution.

Also, the benefits of effective public outreach and participation cannot be overstated as a form of human receptor noise control. Working in partnership with the affected community greatly increases the community's tolerance to noise.

Noise Control Tips:

Some noise control tips that IHS should consider include:

- Construction noise controls should be considered throughout the duration of the project.
- While the means may vary from location-to-location, noise policy commitments and noise control goals should be consistently applied across the construction site and across the completed project.
- Noise control strategies must be flexible to accommodate different community needs as work conditions change.
- Noise barriers not only significantly reduce construction noise, but they also provide an extra benefit of "hiding" the noise-producing sources, thus increasing receptors' tolerance.
- A noise technician on site can proactively avoid many noisy situations and respond to and evaluate noise complaints immediately. The noise technician should have the authority to shut down particularly noisy operations until acceptable mitigation is implemented.
- The affected community must be actively involved and informed regarding noise producing operations and proposed noise mitigation measures. Large projects may want to establish a 24-hour-a-day hotline to receive and act upon noise complaints.

Use of these key measures, along with consistent implementation of the policies, specifications, and strategies of a comprehensive noise control program, should successfully manage noise on any project.

12.3 Legal Considerations

Federal Noise Requirements

The Office of Noise Abatement, which functioned in the US EPA between 1972 and 1982, made significant efforts to control noise in the general environment. Funding for the program was terminated in 1982 by the Reagan administration, and the office was closed. The Noise Control Act of 1972 and the Quiet Community Act of 1988 (P.L. 92–574, 1972 as amended at U.S.C. 4901–4918, 1988) are the laws that address noise, including noise from construction, transportation, and facilities. EPA is the regulatory agency, with regulations found at 40 CFR 201-211. Noise nuisance issues are often resolved in the courts.

Of interest in the area of construction are the regulations for medium- and heavy-duty trucks, air compressors, and regulations for the existing motor carrier fleet. These regulations are still in effect but are not being enforced. Two pieces of construction equipment, pavement breakers and rock drills, were identified as major sources of noise. However, regulations were not developed before the program closed in 1982. The agency also considered the regulation of wheel and crawler tractor noise emissions. The Noise Control Act required EPA to regulate the labeling of products that emitted or reduced noise, but EPA only promulgated one regulation in this category, the attenuation of Hearing Protection Devices (HPDs).

A considerable amount of information about construction noise was generated by the agency, most of which is listed in EPA's *Bibliography of Noise Publications.* In addition, EPA has microfilmed much of the material from the Office of Noise Abatement, and many of its contractor reports are still obtainable.

Aviation Safety and Noise Abatement Act of 1979

This Act gives the FAA authority to issue regulations on "air noise compatibility planning" and to make funds available for airport projects contained in an approved noise compatibility program. The Act also requires the Secretary of Transportation to establish Federal standards for measuring and assessing noise impacts on residences near airports.

Construction Noise Regulations

29 CFR 1926.52

29 CFR 1926.101

EO 12088: Compliance with Pollution Control Standards

Requires the head of each Executive agency to be responsible for ensuring that all necessary actions are taken for the prevention, control, and abatement of environmental pollution with respect to Federal facilities and activities under the control of the agency.

Federal Aviation Act Amendments of 1968

This Act authorized the FAA to prescribe standards for the measurement of aircraft noise and to establish regulations to abate noise.

General Industry Noise Regulations

29 CFR 1910.95

Traffic Noise and Construction Noise Regulations

23 CFR Part 772

National Parks Air Tour Management Act of 2000

This Act instructs the National Park Service and Federal Aviation Agency to develop plans to control commercial air-tour noise disturbances over National Parks.

Noise Control Act of 1972

This Act was designed to establish noise standards and to regulate noise emissions caused by commercial products such as transportation and construction equipment. The Act also specifies that Federal agencies should comply with Federal, state, and local requirements regarding the control and abatement of noise. NCA was amended by the Quiet Communities Act of 1978. NCA lost its funding in 1981. It still has enforceable regulations on the books, but no budget to enforce them.

Procedures for Abatement of Highway Traffic Noise and Construction Noise (23 CFR Part 772)

This Act provides procedures for noise studies and noise abatement measures to help protect the public health and welfare, supplies noise abatement criteria, and establishes requirements for information to be given to local officials for use in the planning and design of highways.

Quiet Communities Act of 1978

This Act amended portions of the 1972 Noise Control Act to require coordination among Federal agencies on noise control. It was intended to speed up FAA response to noise regulations proposed by the EPA and requires the FAA to provide the public with a detailed analysis of EPA proposals.

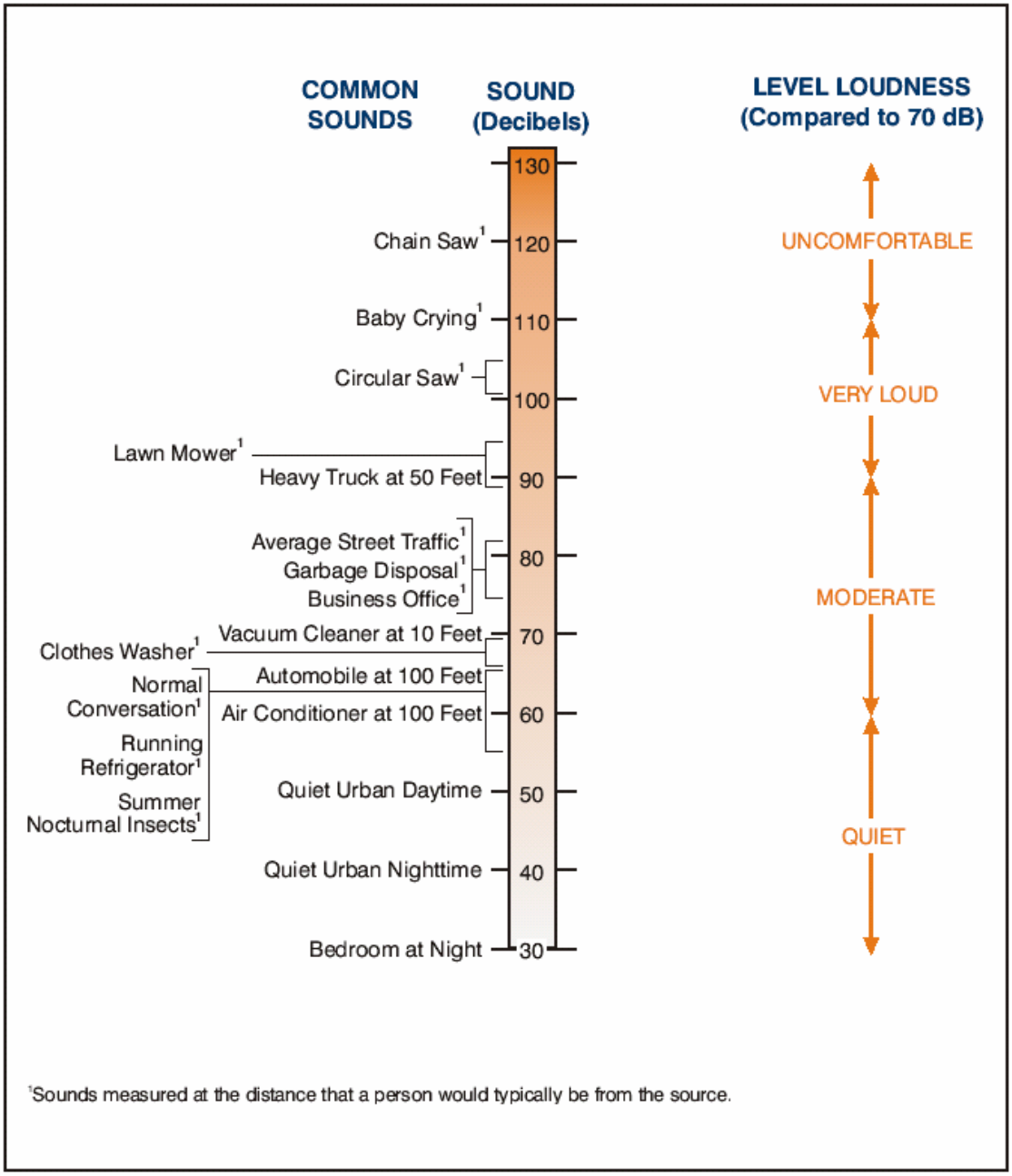
Airport Noise and Capacity Act of 1990

This Act established a "national policy on aviation noise." Its main feature was to require that by the year 2000, all jet aircraft at civilian airports be stage-3 aircraft (aircraft that incorporate the latest technology for suppressing engine noise).

State Noise Requirements

When dealing with noise, where applicable, IHS should contact the appropriate state environmental office. The state and/or local city can have any number of noise requirements that must be complied with, and technical staff to assist in mitigation.

Figure 12-2 shows standard noise levels for common noise generators.



Adapted from: Handbook of Noise Control, C.M. Harris, Editor, McGraw-Hill Book Co., 1979, and FICAN 1992.

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Figure 12-2. Common Noise Generators.

Local Noise Requirements

Tribal communities and non-tribal communities can have noise requirements of their own. Check with the community authorities before beginning an action that might have a noise impact.

12.4 Responsibilities and Requirements

The IHS program, facility or project manager's responsibilities regarding noise and vibration evaluation include, but are not limited to:

- Considering the impacts that operational noise will have on the surrounding environment.
- Avoiding adding additional long-term noise to noise-sensitive areas.
- Avoiding contact with a specific noise-sensitive animal population.
- Contacting the appropriate state and local environmental agency.
- Complying with applicable state and local noise requirements.

12.5 Where to Go for Help

Noise Control: A Guide for Workers and Employers, US Department of Labor. This guide pertains to general noise problems and their solutions, as well as some of the principles of construction noise control. It was originally published by the Swedish Work Environment Fund, translated, then edited and adapted by OSHA.

"Noise Control: Principles and Practice," published in *Noise News International* between June 1994 and June 1999, form a series of 15 articles by Stig Ingemansson.

Institute of Noise Control Engineering of Poughkeepsie, NY

City Noise Ordinances

www.nonoise.org/lawlib/cities/cities.htm

FAA

www.faa.gov

Federal Interagency Committee on Aviation Noise

www.fican.org/

NASAO—National Association of State Aviation Officials

www.nasao.org/

B&K Environmental Noise Handbook

www.nonoise.org/library/envnoise/index.htm)

Cirrus Research, UK

www.cirrusresearch.co.uk/glossary.html

National Physics Lab, UK

www.npl.co.uk/npl/publications/acoustics/

Sound Dictionary

www.nonoise.org/library/diction/soundict.htm

12.6 Definitions

A-weighted: An adjustment to sound level measurements that reflects the sensitivity of the human ear. Used for evaluating continuous or average noise levels.

Ambient Noise: The total of all noise in the environment, other than the noise from the source of interest. This term is used interchangeably with background noise.

Attenuation: The process by which sound is reduced in concentration over time, through adsorption, degradation, dilution, and/or transformation. Sound can also be decreased by increasing the distance between the receptor and the source.

Background Sound Level: This is the sound level that can be measured in those situations where it is not possible to measure the natural ambient sound level with certainty because of high levels of human-caused sound, or where it is prohibitively expensive to measure natural ambient sound levels. In such situations, this level will be estimated using a statistic called L90, the sound level that is exceeded 90 percent of the time. This metric is often used in acoustics literature to characterize "background" or "ambient," and is incorporated, for example, in state laws in Massachusetts, Connecticut and Illinois.

Decibel: A unit used to express relative difference in power, usually between acoustic or electric signals, equal to ten times the common logarithm of the ratio of the two levels.

Man-made Sound Levels: The ambient sounds attributable to human activities. The sound

levels associated with these sounds are actually composed of many human-made sounds, near and far, which may be heard individually or as a composite.

Natural Ambient Sound Level: The natural ambient sound level of an area is the natural soundscape of that area. It is comprised of the natural sound conditions which exist in the absence of any human-produced noises. These conditions are actually composed of many natural sounds, near and far, which often are heard as a composite, not individually. In an acoustic environment subjected to high levels of human-caused sound, natural ambient sounds may be masked by other noise sources. The natural soundscape is an important resource in some areas; there may also be important relationships between how this environment is perceived and understood by individuals and society (natural ambient sound is considered synonymous with the term "natural quiet"). This is the basis for determining the "affected environment" in environmental assessments related to human actions producing inappropriate or intrusive impacts on nearby soundscapes.

Noise: Noise is generally defined as an unwanted or undesired sound, often unpleasant in quality, intensity, or repetition. This makes noise a subjective term and pushes society to address which sounds or aspects of sound constitute unwanted interruptions in specific situations. Noise is often a byproduct of desirable activities or machines.

Noise Abatement: Measures to reduce noise at the source, to encourage quieter technologies or equipment, or to prevent or reduce the propagation of sound. Measures may include the isolation and damping of vibration sources; the replacement of components with quieter parts and material; the enclosure of particularly noisy components; the provision of noise barriers, etc.

Sound: A mechanical wave or an oscillation in pressure, stress, particle displacement, and particle velocity transmitted through solids, liquids, and gases—some types of which are able to cause a sensation of hearing. The vibration causes the propagation of sound waves. Basic analytical parameters of sound include frequency, amplitude (related to sound pressure and intensity), envelope (shape of amplitude in time), spectrum, and duration.

Sound Propagation: The traveling of acoustic waves in the atmosphere with a speed independent of their amplitude. The speed only depends on the acoustic medium and is proportional to the square route of the absolute temperature for any given medium.

Soundscape: The total ambient acoustic environment associated with a given environment (sonic environment). Soundscape also refers to the total ambient sound level for the area.

13.0 Visual Resources

13.1 Overview/Introduction

The National Environmental Policy Act states that it is the “continuous responsibility” of the Federal government to "use all practicable means" to "assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings." This applies equally to *visual* or *scenic* resources. NEPA requires that all Federal agencies identify and develop procedures for ensuring that presently unquantified environmental amenities and values are considered on an equal basis with economic and technical aspects of major Federal actions affecting environmental quality.

Visual resources and scenic resources are terms that are used almost interchangeably, and are defined as the general appearance of a place and the features of its views or landscapes—the arrangement of predominantly natural features of the landscapes we see. The adjective “scenic” has to do with natural scenery, e.g., affording beautiful views.

The physical setting of various places is the product of both natural processes and human culture. Scenery consists of both biophysical elements (landforms, water, and vegetation) and cultural elements (positive features resulting from human activities in the landscape). These might include structures: fences, rock walls, historic buildings; modified natural areas: fields, hedgerows, windbreaks, canals, or earth mounds; as well as farmsteads, military posts, and plantations.

Natural processes such as fires, lava flows, stream erosion, and deposition, or the effects of insects on plants are dynamic, causing scenery to be ever changing. Cultural alterations often influence decisions made by people at various times and places and result in changes to the physical landscape. Human activities occurring in a landscape are generated by some type of objective or desire, such as harvesting timber or planting wheat.

Considering visual impacts is applicable to many IHS activities, including construction of facilities at new sites, as well as renovations of old facilities, including health facilities, modular buildings, trailers, mobile homes, water tanks and standpipes, pump houses, booster stations, sewage and water treatment facilities.

13.2 Compliance Process

There are three steps for addressing visual and scenic impacts in IHS projects:

1. Determine project requirements
2. Consultation
3. Mitigate visual impacts

Step #1: Determine Project Requirements

When developing a new project, IHS program, facility and project managers must consider the potential visual affect that it will have on the surrounding landscape.

Facilities have different visual characteristics. For example, some may have several structures spread over a large area, while others may only impact a very small site. The proposed facilities can be compared to the existing landscape and a determination can be made as to the extent of visual impact. Water storage tanks, large hospitals, and sanitation facilities located adjacent to rivers and streams often have noteworthy visual effects.

Secondary facilities needed to support primary facility should be included in the evaluation. For example, a construction access road, electrical power with a backup system, and sanitation facilities are usually part of most projects. At times, the visual impact of the support facilities is a deciding factor for the specific location of the main project.

Also consider the scale (the size of the proposed facilities in relationship to existing facilities) and design (is the design harmonious with existing built and natural environment?) of the proposed project, and existing human influence (is the area in its natural state, or are there existing human and cultural elements, and to what extent

are they noticeable on the landscape?) in the area of the proposed project.

Determine proximity of proposed project to visually sensitive resources, including:

- Wilderness areas
- Culturally important sites
- Historic properties – buildings, landmarks, historic districts, and cultural landscapes
- Wild and scenic rivers
- Recreational areas

If no sensitive resources are within or near the project area, document these findings.

Step #2: Consultation

If the project has the potential to effect visually sensitive resources, notify the following entities of the proposed project and, through consultation, determine the level of interest and issues that need to be considered:

Wilderness areas – National Park Service, see Section 14.0 of this manual.

Wild and scenic rivers – the land management agency, see Section 17.0 of this manual.

Historic properties – SHPO, THPO, Tribes, ACHP, see Section 1.0 of this manual.

Culturally important sites (traditional cultural properties, sacred sites) – see Section 1.0 of this manual.

Recreational areas, public lands, and/or parks – land management agency (local, state, or Federal).

Causing impacts to visual resources or scenic quality does not necessarily require an environmental assessment or environmental impact statement or consultation. However, visual intrusion and impacts to scenic resources are considered adverse effects under the Wilderness Act, the Wild and Scenic Rivers Act, and the National Historic Preservation Act. These laws do require consideration of effects and consultation. Land management agencies (i.e., BLM, NPS, USFS, and USFWS) are also required to manage scenic quality and resources. Controversy over a proposed project can also trigger the preparation of an environmental assessment or environmental impact statement.

Consultation can be initiated with a letter describing the proposed project, the existing visual environment, a map of the location, and photographs, if available) of the area. In most cases, the entity will respond within 30 days.

If the proposed project has the potential to adversely impact the scenic quality or visual resources important to stakeholders (managing or jurisdictional agencies, Tribes, or public), mitigate to reduce these effects.

Step #3: Mitigate Visual Impacts

There are numerous design techniques that can be used to reduce the visual impacts from IHS projects. The techniques described below should be used to minimize the visual contrast of proposed facilities with the predominant forms, lines, colors, and textures inherent in the existing landscape.

Project Location Selection and Site Design

Choosing the proper location for a proposed project is one of the easiest design techniques to understand and apply, and one that will normally yield the most dramatic results. The following considerations can be helpful in choosing a project location:

- Visual contrasts or impacts decrease as the distance between the viewer and the proposed development increases, so projects should be located as far away from prominent viewing locations as possible.
- The human eye is naturally drawn to prominent topographic features, so projects should not be located on or near such features.
- The shape and placement of projects should be designed to blend with topographic forms and existing vegetation patterns.

- Both topographic features and vegetation should be used to screen proposed development.
- Using existing openings, lines, and shapes in the landscape can help reduce visual impacts.

Projects and activities associated with linear alignments, including rights-of-way, roads, trails, pipeline developments, and underground and overhead utility lines, should be carefully sited, so as to avoid excessive visual impacts. The visual impact of a linear project depends largely on where it is located and how it is molded to the natural terrain. Proper location can often contribute significantly to the reduction of line and color impacts, making other measures either unnecessary or less costly and easier to accomplish. There are several major considerations for determining an alignment:

- Topography is a crucial element in alignment selection. Visually, it can be used to subordinate or hide manmade changes in the landscape. Projects located at breaks in topography or behind existing tree groupings are usually of much less visual impact than projects located on steep side slopes. By taking advantage of natural topographic features, cut and fill slopes can be greatly minimized.
- Topographic breaks frequently exhibit a natural line element that the proposed alignments can repeat or blend with to strengthen the design. This line element is partly established by a visual shadow zone, which will further aid in reducing the contrast of the project.
- Soils are especially important when selecting an alignment. They should be analyzed for stability and fertility and a revegetation program should be planned.
- Hydrological conditions can strongly affect the visual impact of buried and surface construction. The risks of surface and subsurface erosion within the corridor should be analyzed and evaluated.
- Crossings with other linear features or structures should be made at a right angle. Structures should be set as far back from the crossing as possible. In areas with tree and shrub cover, the rights-of-way and structures should be screened from the crossing area.

Determining the engineering design, landscape design, and visual considerations for a linear alignment must be accomplished together to ensure that all three are addressed and included in the final design solution.

Aesthetic Elements

Every landscape has the basic elements of form, line, color, and texture. Use the existing landforms, vegetation patterns, natural lines in the landscape, etc., to reinforce the design of the proposed activity or development. By planning and designing within the context of these naturally occurring elements, the proposed development will be in closer harmony with the natural landscape.

Strong contrasts between the facility and landscape create easily recognizable visual conflicts in the landscape. The following considerations can be helpful in mitigating these visual intrusions in sensitive areas:

- Repeating form, line, color, and texture found in the surrounding landscape.
- Minimizing the number of structures and combining different activities in one structure wherever possible.
- Using earth-tone paints and stains.
- Using self-weathering materials.
- Using native building materials (e.g., natural stone).
- Burying all or part of the structure.
- Selecting paint finishes with low levels of reflectivity.
- Using colors that blend with or are in harmony with the existing colors of the earth, rocks, and vegetation. These are usually more visually pleasing than sky colors. Color (hue) is most effective within 1,000 feet. Beyond that point, color becomes more difficult to distinguish and tone or value determines visibility and resulting visual contrast.

- Using natural-appearing forms to complement landscape character.
- Screening the structure from view with natural landforms and vegetation.

Construction and Site Disturbance

As a general rule, reducing the amount of land disturbed during project construction reduces the extent of visual impact. Techniques that help reduce site disturbance include:

- Co-locating several projects within the same right-of-way.
- Placing underground utilities either along the edge or under the surface of an existing road.
- Placing several underground utilities within the same trench.
- Establishing limits of disturbance that reflect the minimum area required for construction.
- Consolidating development of a similar nature within a common structure.
- Planning projects so that they utilize existing infrastructure whenever possible.
- Maximizing slope when it is aesthetically and technically appropriate.
- Locating construction staging and administrative areas in less visually sensitive areas.
- Requiring restoration of disturbed areas no longer required after construction has been completed.

Earthwork and Grading

The scars created by cut and fill activities during construction may leave long-lasting negative visual impacts. This is especially true of activities that disturb the highly mineralized soils of the arid west.

There are a number of ways to reduce the contrasts created by earthwork construction. Proper location and alignment are probably the most important factors. Fitting the proposed development to the existing landforms in a manner that minimizes the size of cuts and fills will greatly reduce visual impacts from earthwork. Other strategies may include:

- Hauling in or out excessive earth cut or fill in sensitive viewing areas.
- Rounding and/or warping slopes (shaping cuts and fills to appear as natural forms).
- Bending slopes to match existing landforms.
- Retaining existing rock formations, vegetation, drainage, etc., whenever possible.
- Split-face rock blasting (cutting rock areas so that the resulting rock forms are irregular in shape, as opposed to making uniform “highway” rock cuts).
- Toning down freshly broken rock faces through the use of asphalt emulsions, rock stains, etc.
- Using retaining walls to reduce the amount and extent of earthwork.
- Retaining existing vegetation by using retaining walls, reducing surface disturbance, and protecting roots from damage during excavations.
- Avoiding soil types that will generate strong contrasts with the surrounding landscape when they are disturbed.
- Prohibiting dumping of excess earth/rock on downhill slopes.

Vegetation

Another effective method of reducing the visual impact is to retain as much of the existing vegetation as possible and to use the existing vegetation to screen the development from public viewing areas. Some other techniques include:

- Designing vegetative openings to repeat natural openings in the landscape. Edges that are scalloped and irregular are more natural-looking. Straight line edges should be avoided.
- Protecting existing vegetation through partial clearing of the limits of construction rather than the entire area – leaving islands of vegetation results in a more natural look.
- Using irregular clearing shapes.

- Feathering/thinning the edges of cleared areas. Feathering edges reduces strong lines of contrast. To create a more natural look along an edge, a good mix of tree/shrub species and sizes should be retained.

13.3 Legal Considerations

National Environmental Policy Act of 1969 (P.L. 91-190)

Reference Part I of this Environmental Review Manual

National Historic Preservation Act of 1966 (NHPA), as amended (16 USC 470, P.L. 95-515), Sections 101, 106, 110-112, 304

Reference Section 1, Part II of this Environmental Review Manual

Wilderness Act of 1964 (P.L. 88-577)

This Act established the National Wilderness Preservation System to preserve Federal lands for "unimpaired future use and enjoyment as wilderness" and for the "preservation of their wilderness character."

Wild and Scenic Rivers Act of 1968 (P.L. 90-542)

This Act establishes a National Wild and Scenic Rivers System for the protection of rivers with important scenic, recreational, fish and wildlife, and other values. Rivers are classified as wild, scenic, or recreational. The Act designates specific rivers for inclusion in the System and prescribes the methods and standards by which additional rivers may be added. The Act contains procedures and limitations for control of lands in Federally administered components of the System and for disposition of lands and minerals under Federal ownership. Hunting and fishing are permitted in components of the System under applicable Federal and state laws.

13.4 Responsibilities and Requirements

All appropriate IHS program, facility, and project managers should:

- Identify and avoid the visual impacts of proposed projects.
- Undertake a landscape scenic assessment, using data from nearby Federal or Tribal projects for site assessment and analysis, where available.
- Mitigate visual impacts, where possible.

13.5 Where to Go for Help

U.S. Bureau of Land Management

www.blm.gov/nstc/VRM/

U.S. Federal Highway Administration

http://www.environment.fhwa.dot.gov/guidebook/chapters/v2ch1.asp

U.S. Forest Service

www.fs.fed.us/recreation/programs/beig/BEIG_readers_guide.htm

Scenic America

scenic.org

Scenic Byways

www.byways.org/

13.6 Definitions

Balance: A visual stability produced, and an equilibrium established in a landscape, by natural forces or human intervention.

Color: The property of reflecting light of a particular wave length that enables the eye to differentiate otherwise indistinguishable objects. A hue (red, green, blue, yellow, and so on), as contrasted with a value (black, white, or gray).

Contrast: Diversity or distinction of adjacent parts. Effect of striking differences in form, line, color, or texture of a landscape.

Form: Structure, mass, or shape of a landscape or of an object. Landscape form is often defined by edges or outlines of landforms, rockforms, vegetation pat terns, or waterforms, or the enclosed spaces created by these attributes.

Harmony: Combination of parts of a landscape into a pleasing or orderly whole. A state of agreement, congruity, or proportionate arrangement of form, line, color, and texture.

Intactness: Untouched or unaltered, especially by anything that harms or diminishes its character.

Line: An intersection of two planes; a point that has been extended; a silhouette of form. In landscapes, ridges, skylines, structures, changes in vegetation, or individual trees and branches —may be perceived as line.

Pattern: An arrangement of parts, elements, or details that suggests a design or somewhat orderly distribution.

Scenic Integrity: State of naturalness, or conversely, the state of disturbance created by human activities or alteration. Integrity is stated in degrees of deviations from the existing landscape character.

Texture: Visual interplay of light and shadow created by variations in the surface of an object. Grain or nap of a landscape or a repetitive pattern of tiny forms.

Unique: A landscape that is unequalled, very rare, or uncommon.

Unity: Landscape with a quality or state of being made whole or a condition of harmony.

Variety: An intermixture, diversity, or succession of different things, forms, or qualities in the landscape.

Visual Absorption Capability: A classification system used to denote relative ability of a landscape to accept human alterations without loss of character of scenic quality.

Vividness: The visual power or memorability of landscape components as they combine in striking or distinctive visual pattern.

14.0 Wilderness Areas

14.1 Overview/Introduction

The Wilderness Act defines a wilderness area as "an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions..." Other characteristics of wilderness areas include:

- Areas that are substantially unaffected by human activities;
- Provide outstanding opportunities for solitude;
- Generally are at least 5,000 acres in area; and
- Generally have features of ecological, geological, scientific, educational, scenic, or historic value.

Wilderness areas or wilderness study areas are designated as such for protection of these and other characteristics. These areas have boundaries that are clearly delineated. Although it is very unlikely that any IHS program or project activity would be proposed to occur in designated wilderness, the activity may occur adjacent to these areas.

IHS program, facility and project managers must ensure that their activities will not negatively impact wilderness areas. If IHS sponsored or funded activities are located adjacent to or very near a wilderness area, the potential impacts must be evaluated. If impacts are possible, consultation with the relevant land management agency is required for review and approval of the proposed action. Wilderness areas are administered by one of the four primary Federal land management agencies: U.S. Forest Service; U.S. Fish and Wildlife Service; National Park Service; or Bureau of Land Management.

14.2 Compliance Process

Compliance with wilderness issues is typically a simple process consisting of the following three steps:

1. Determine if the proposed activity is near any wilderness areas.
2. If so, evaluate potential impacts of the activity on the wilderness.
3. If impacts are suspected, initiate agency consultation for review and approval.

Step #1: Determine If the Proposed Activity is Near Any Wilderness Areas

Maps delineating wilderness areas and wilderness study areas are readily available. IHS program, facility and project managers must be aware of the locations of such areas. Though it is unlikely that any IHS program or project activity would be proposed to occur in designated wilderness, the activity may occur adjacent to these protected Federal lands. One source for information to determine the location of wilderness is: http://www.wilderness.net/index.cfm?fuse=NWPS

Step #2: Evaluate Potential Impacts of the Activity on the Wilderness Area

Regulations exist for wilderness areas that restrict the types of activities that may occur on these areas. The initial review should include whether any prohibited activities would be required to carry out the proposed action. Does the proposed action involve:

- Use of motor vehicles and motorized equipment?
- Low level overflights or landing of airplanes or helicopters?
- Construction of a structure or excavation (using construction equipment that may have air and noise impacts)?
- Removing water from or discharging water into a stream that passes through the wilderness area?

Other impacts must be considered when a proposed action is in proximity to wilderness areas, including:

- biophysical effects
- social/recreation effects
- societal/political effects
- health and safety concerns
- economic and timing considerations
- heritage resource considerations

Each alternative, including the proposed action, is evaluated using the following questions:

- Will the natural processes of the wilderness be adversely affected?
- Will the values of solitude or primitive and unconfined type of recreation be threatened?
- Will evidence of human manipulation, permanent improvements, or human habitation be substantially noticeable?
- Are considerations being made based on protecting the wilderness as a whole as opposed to protecting a single resource?
- Are the cumulative effects being considered?
- Are there other impacts to the wilderness character?

Step #3: Initiate Agency Consultation for Review and Approval

If there is a possibility of adverse effects to a wilderness area or wilderness study area, consultation with the appropriate agency that administers the area is required. If, during consultation, any adverse effects are determined or suspected, written approval by that agency is required before proceeding with any proposed action. NEPA requires Federal resource managers to examine cumulative effects on wilderness, even those that originate on state, Tribal, or private lands. Agency contacts can provide assistance in determining what actions are allowed and the most appropriate means of minimizing adverse impacts on the wilderness area.

Coordination with the appropriate agency will help determine the most appropriate means to avoid or mitigate potential impacts with regard to wilderness areas.

14.3 Legal Considerations

Wilderness Act of 1964 (P.L. 88-577)

Primary direction for managing wilderness comes from the Wilderness Act of 1964. According to the Act, the purpose for establishing Federal Wilderness areas is:

> "...to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States...leaving no lands designated for preservation and protection in their natural condition…." (Subsection 2a)

> "...for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness and so as to provide for the protection of those areas, the preservation of their wilderness character..." (Subsection 2a)

Several subsections of the Act further characterize wilderness and address the administration of these congressionally designated lands:

> "...there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act.... there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area." (Subsection 4c)

Eastern Wilderness Act of 1975 (P.L. 93-622)

This Act added 16 wildernesses in the eastern U.S. The Act also designated 17 wilderness study areas to be managed as wilderness, pending additional study and time for Congress to designate the areas as Wilderness. The Act relaxed classification criteria for wilderness areas in the East in response to the "purity" question and the fact that most natural areas in the East had already been significantly modified by human activity over time.

Federal Land Management and Policy Act of 1976 (P.L. 94-579)

This Act provided for wilderness study and recommendation by the BLM, a provision not included in the Wilderness Act.

Endangered American Wilderness Act of 1978 (P.L. 95-237)

This Act added 16 Wilderness areas to the National Wilderness Preservation System (NWPS) and was a response to perceived shortcomings of the U.S. Forest Services' (USFS) original inventory of roadless lands. The USFS did not originally recommend roadless lands for designation that were located too close to urban areas.

Alaska National Interest Lands Conservation Act of 1980 (P.L. 96-487)

This legislation provided management direction for large tracts of Federal land in Alaska. The law added over 56 million acres to the NWPS.

California Desert Protection Act of 1994 (P.L. 103-433)

This law designated 69 new BLM Wilderness units (7.6 million acres) in California. The Act more than doubled the number of Wilderness areas managed by BLM and increased BLM's wilderness acreage by 70 percent.

State Wilderness Designations

Wilderness preservation through state programs represents an important complementary activity to Federal efforts regarding the NWPS. States with designated wilderness programs typically model their designation process after that set forth in the Wilderness Act. In 2002, there were seven state wilderness programs in operation (see Table 14-1.).

Table 14-1. Characteristics of State Wilderness Programs in 2002.

State	Wilderness Programs in 2002		
	Number of Areas	Total Acreage	Level of Protection
Alaska	3	922,700	administrative
California	10	466,320	administrative and statutory
Maryland	27	39,412	statutory
Michigan	1	40,808	statutory
Missouri	11	22,993	administrative
New York	21	1,170,312	administrative
Wisconsin	1	6,358	administrative

Tribal Wilderness Designation

Traditionally, Tribes have not designated wilderness areas on Tribal lands. However, an exception and perhaps precedent was set by the Confederated Salish and Kootenai Tribes by enacting a Wilderness Ordinance that established the Mission Mountains Tribal Wilderness Area in Montana. The motivation for the 1982 ordinance emphasized wilderness value as a means to preserve Tribal culture and religion. In contrast, The Wilderness Act of 1964 focused on preserving the nation's last remaining undeveloped land.

14.4 Responsibilities and Requirements

All IHS program, facility and project managers should:

- Know about Federal and state wilderness areas near program or project areas.
- Ensure that programs or projects do not impact wilderness areas.
- Consult with appropriate land management agencies when wilderness areas are nearby.
- Take affirmative steps to protect wilderness values of nearby land.

14.5 Where to Go for Help

Bureau of Land Management

www.blm.gov/nhp/directory/index.htm

U.S. Fish and Wildlife Service

offices.fws.gov/

U.S. Forest Service

www.fs.fed.us/contactus/regions.shtml

National Park Service

www.nps.gov/legacy/regions.html

Wilderness.net

http://www.wilderness.net/index.cfm

State Programs

Alaska

www.dnr.state.ak.us/parks/

California

www.parks.ca.gov

Maryland

www.mdarchives.state.md.us/msa/mdmanual/01glance/html/wildl.html

Michigan

www.michigandnr.com/parksandtrails/parklist.asp

Missouri

www.mostateparks.com/statemap.htm

New York

www.dec.state.ny.us/website/dlf/

Wisconsin

www.dnr.state.wi.us/org/land/parks/

14.6 Definitions

Contiguous: Lands or legal subdivisions having a common boundary; lands having only a common corner are not contiguous.

Naturalness: Refers to an area that "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." (From Section 2(c), Wilderness Act of 1964.)

Outstanding: 1. Standing out among others of its kind; conspicuous; prominent. 2. superior to others of its kind; distinguished; excellent.

Primitive and unconfined recreation: Non-motorized and non-developed types of outdoor recreational activities.

Pristine: Refers to an area with little or no disturbance of its natural character; generally unaffected by civilization.

Public land(s): Any land and interest in land owned by the United States within the several States and administered through the Secretary of the Interior (BLM, NPI, USFWS) or the Secretary of Agriculture (USFS), without regard to how the United States acquired ownership, except:

- Lands located on the Outer Continental Shelf;

- Lands held in trust for the benefit of Indians, Aleuts, and Eskimos; and
- Lands where the United States retains the mineral rights, but the surface is privately owned.

Region: An area of land or grouping that is easily or frequently referred to by the public as separate and distinguishable from adjoining areas.

Roadless: Refers to the absence of roads which have been improved and maintained by mechanical means to insure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road.

Roadless area: That area bounded by a road, using the edge of the physical change that creates the road or the edge of the right-of-way, other ownership, or water, as a boundary. The boundary of a roadless area may be formed by one or more dead-end roads.

Solitude: 1. the state of being alone or remote from others; isolation. 2. a lonely or secluded place.

Wilderness: The definition contained in Section 2(c) of the Wilderness Act of 1964 (788 Stat. 891).

Wilderness area: An area formally designated by Congress as part of the National Wilderness Preservation System.

Wilderness inventory unit: A portion of public land evaluated to determine its roadless character and the presence of wilderness characteristics as defined in Section 2(c) of the Wilderness Act of 1964.

Wilderness program: A term used to describe all wilderness activities of the BLM, NPI, USFWS, and/or USFS, including identification, planning, management, and administrative functions.

Wilderness review: The term normally used to cover the entire wilderness inventory, planning, and reporting phases of a land management agency's wilderness program; may also refer to other types of programs involving various aspects of wilderness information gathering.

Wilderness study: The process of analyzing and planning for wilderness preservation opportunities, along with other resource opportunities, within a land management agency's planning system.

Wilderness Study Area (WSA): A roadless area or island that has been inventoried and found to have wilderness characteristics as described in Section 603 of the Federal Land Policy and Management Act (FLPMA) and Section 2(c) of the Wilderness Act of 1964 (78 Stat. 891), and that has been designated as a Wilderness Study Area.

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15.0 Important Farmland and Soils

15.1 Overview/Introduction

This section concentrates on important farmlands, which are statutorily protected. Soils are a key component of important farmlands as discussed in this section. Soils are also an important component of the natural (habitat) and physical environment (transport media for water and materials) and are considerations for Solid Waste (Section 8.0), Air Quality (Section 6.0), Hazardous Substances (Section 9.0), Threatened and Endangered Species (Section 2.0) and Water Resources (Section 3.0).

To protect important farmland, Congress passed the Farmland Protection Policy Act (FPPA) of 1981. The aim of the FPPA is to minimize Federal programs' (including technical or financial assistance) contribution to the conversion of important farmland to non-agricultural uses. The Act seeks to encourage possible alternatives that would lessen the adverse effects to important farmlands. The FPPA contains no lower threshold regarding acreage. Any Federal project that will impact important farmland must comply with the FPPA.

Important farmland is a broad category of lands that have been given special protection by the Federal government. Important farmland does not have to be currently used for cropland, but can be forestland, pastureland, cropland, or other land. This land category does not include water features such as lakes, ponds and wetlands, or urban built-up land. Important farmland requires special environmental consideration when it may be affected by Federal agencies. Important farmland is further divided into the following categories (see Figure 15-1):

- Prime Farmland;
- Unique Farmland;
- Farmlands of Statewide Importance;
- Farmland of Local Importance; and
- Prime Rangeland and Rangeland or Grassland of Statewide Importance.

According to the USDA, the 2000 Census results indicated that the number of American Indian farm operators identified totaled 42,304, and that most American Indian farm operators resided in Oklahoma (22 percent), followed by Arizona (12 percent), Texas (8 percent), New Mexico (7 percent) and California (5 percent). About 10 percent of the total American Indian farm operators lived on Indian reservations. According to the Census, there were a total of 11,815,397 farm acres located on reservation lands, of which 6,822,073 acres were operated by American Indians and Alaska Natives in the states of Montana, North Dakota, and South Dakota. More farm census data can be found at http://www.nass.usda.gov/Census_of_Agriculture/index.asp

15.2 Compliance Process

The prescribed process for analyzing farmland issues consists of the following four steps: (refer also to Figure 15-2):

1. Understand project requirements and farmland status.
2. Initiate early consultation with NRCS.
3. Determine potential direct, indirect, and cumulative effects.
4. Identify and implement appropriate best management practices to minimize negative impacts.

Step #1: Understand Project Requirements and Farmland Status

For important farmland analysis, it is critical that IHS program, facility and project managers have a thorough understanding of project or facility requirements and the level of soil disturbance. For example, if the project requires earth work, the program manager may ask the following:

- Will there be ongoing soil disturbance on-site (as with a landfill)?
- How much surface area will be impermeable?
- Will the project change or preclude other land uses?
- What percentage of the site will be affected?
- Will the site be mass graded?
- How much soil will be excavated?
- Will excavated soil be stored on site?
- Will the cut and fill be balanced or will there be excess soil removed from or brought into the site?
- Where will excess soil be disposed?

The IHS program, facility or project manager needs to determine if the land is important farmland. If the status of the land in the project is not known, the IHS program or project manager should contact the local Natural Resources Conservation Service (NRCS) office. If there are covered farmlands in the project area, the IHS project officer may have to complete one of two forms to assess a project's impact on important farmland. Form NRCS-CPA-106 is used when dealing with corridor projects. A corridor project is defined as "developments or projects that are designed to carry services or materials between two distant points and stream improvement or flood control projects that change farmland use." For example, a corridor project may be a water supply pipe or sewer main. Form AD-1006 applies to all other projects. Examples of the forms are at the end of this section.

Step #2: Initiate Early Consultation with the Natural Resources Conservation Service (NRCS)

If Step #1 shows an impact to farmland, the second step is to determine if there is any officially designated important farmland in the project area. At this point, the project manager should initiate consultation with local offices of the NRCS and/or State Soil Conservation District (SSCD) to seek detailed maps of important farmland in the project area.

The IHS project manager needs to fill out Parts I and III of either AD-1006 or NRCS-CPA-106 (corridor projects only). An original copy of the form must be sent to the NRCS local Field Office or USDA Service Center, together with appropriate scaled maps indicating the location(s) of the project site(s).

After NRCS receives the form, they will make a determination as to whether the site(s) of the proposed project contains important farmland. The NRCS is required by the FPPA to reply within 45 working days.

In cases where the NRCS fails to respond within 45 calendar days, the project can proceed as though the FPPA requirements did not apply. In these cases it is safe to assume that NRCS has determined that there will be no impacts to farmland as a result of the proposed action, and it is safe for IHS to proceed.

However, the project's documentation should identify the farmland impacts and mitigation measures, and summarize the coordination undertaken with the NRCS. The documentation should also include a statement that: (1) the NRCS failed to respond within 45 days; and (2) therefore, in accordance with NRCS regulation [7 CFR 658.4(a)(2)], FPPA does not apply.

Step #3: Determine Potential Direct, Indirect, and Cumulative Effects

NRCS will make a determination as to whether the site(s) of the proposed project contains important farmland. There are two possible determinations – the presence or not of important farmlands in the project area.

If NRCS has determined that there are no important farmlands in the project area, the requirements of the FPPA do not apply, and no further review is required. Though IHS is not required to continue consultation with NRCS, something similar to the following statement

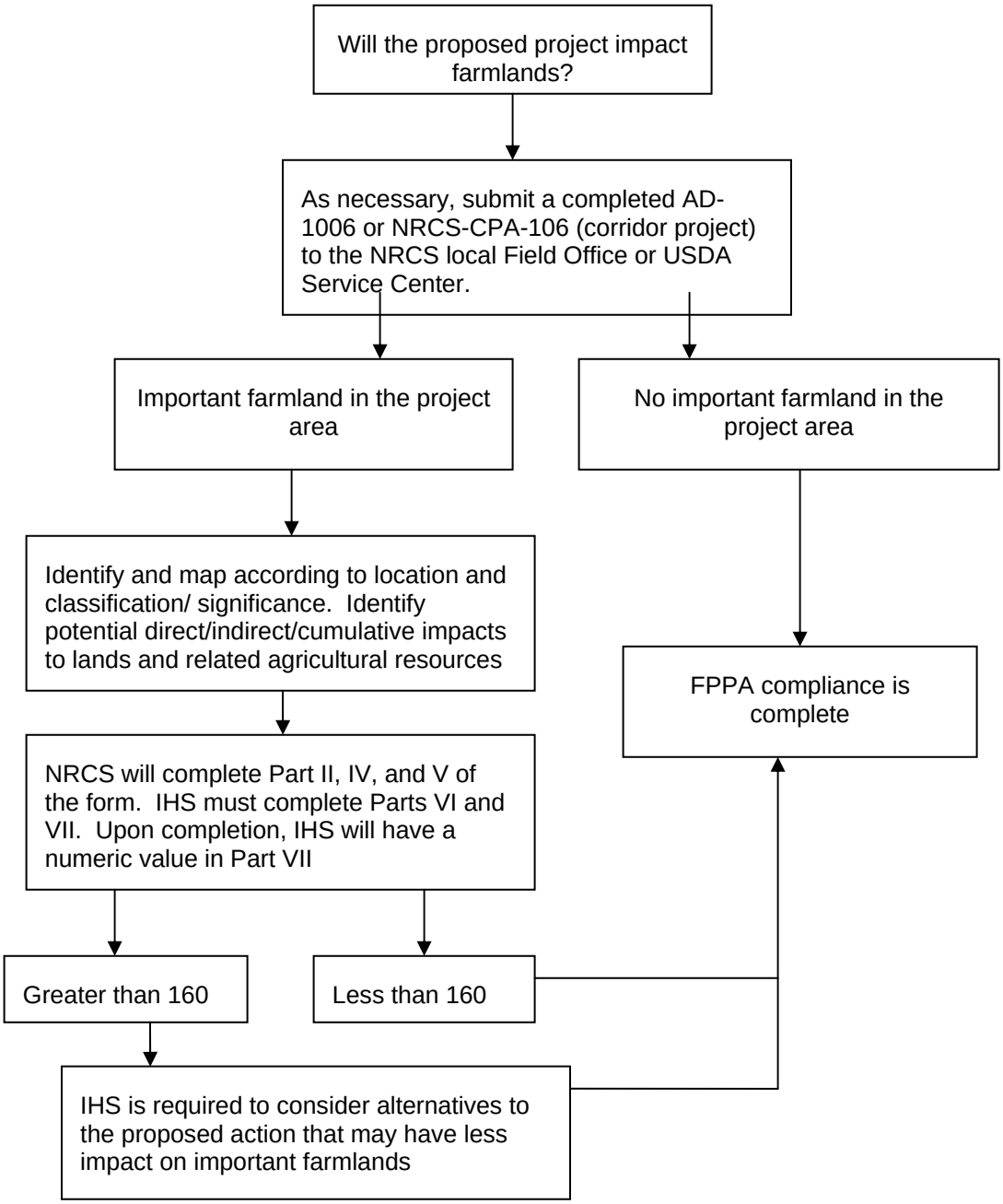

Figure 15-1. Evaluating for Important Farmland

should be included in the project's documentation:

> *<u>Farmland Conversion Impacts:</u> Although **XXXXX** acres of land currently being used for agricultural purposes will be converted as a result of this project, it is not considered to be prime, unique, or of statewide or local importance. Therefore, the requirements of the Farmland Protection Policy Act are not applicable. Completion of form AD-1006/CPA-106 is not required. No other alternatives other than those already discussed in this document will be considered without a re-evaluation of the project's potential impacts upon farmland. This project will not have a significant impact to farmland.*

If NRCS determines that there is important farmland in the project area that may be impacted by the project, these areas must be identified and mapped according to their location and classification/significance. Following identification of these lands, the project manager must assess potential direct and indirect impacts to the lands and related agricultural resources.

At this stage of the process, NRCS will complete Parts II, IV, and V of the form (see section 15.6) and return the original copy to IHS. NRCS uses a land evaluation and site assessment (LESA) system (or similar method) to assess impacts to the agricultural lands and resources. This assessment results in a numeric value (0-100, where a higher number is indicative of greater productivity). This number is included in Part V of the form and is used as an indicator for IHS to consider alternative sites if potential adverse impacts on the farmland exceed the recommended allowable level.

IHS must now complete Parts VI and VII of the form for each alternative. Upon completion, IHS will have another numeric value, recorded in Part VII, which represents the total points that have been assigned to the project (or project alternative) on the form. This number is critical in the important farmland compliance process.

<u>If the number is less than 160, IHS is finished with the FPPA compliance process</u>. A number less than 160 indicates that the project will have impacts of an acceptable level and IHS can proceed with the project. IHS can send a copy of the form back to NRCS for their records, but this is not specifically required.

However, this does not end the assessment of agricultural impacts, only the FPPA compliance issues. NEPA requirements must still address impacts to important farmland. For projects that show less than 160 points for Part VII, a statement such as the following may be included in the environmental document:

> *<u>Farmland Conversion Impacts:</u> As is required by the Farmland Protection Policy Act, IHS has consulted with NRCS and completed the Form AD-1006 (see pg. XXXX). Since this project received a total point value of less than 160 points, this site will receive no further consideration for farmland protection. No other alternatives other than those already discussed in this document will be considered without a re-evaluation of the project's potential impacts upon farmland. This project will not have a significant impact to farmland.*

<u>If the Part VII number is above 160, IHS is required to consider alternatives to the proposed action</u>. This consideration can best be documented by the form. While FPPA did not give NRCS the power to stop projects that score above 160, FPPA does require IHS to consider other alternatives that may have less impact on important farmland. These alternatives may have been part of the consultation process from the beginning (they were included on the form and might have Part VII numbers lower than 160) or they may need to be developed at this point.

In the end, however, it is up to IHS to decide which alternative to pursue, even if the selected alternative has a greater impact on important farmland, and whether the proposed conversion is consistent with the FPPA. This determination will be outlined on the form and IHS can then

return the form with the final selected site to the NRCS office.

This concludes FPPA compliance; however, this does not end the assessment of soils impacts. NEPA requirements must still be met regarding impacts from project soil disturbances.

Step #4: Identify and Implement Appropriate Best Management Practices to Minimize Negative Impacts

The project manager must summarize the process, and any documentation that resulted from the process. The document should discuss the alternatives considered in the FPPA-compliance process and the best management practices considered to reduce soil impacts, the selected alternative, and any mitigation measures proposed to reduce the impacts of the project.

Depending upon the ownership of the land and constructed facilities, mitigation examples include:

- Tap restrictions on sewer and water infrastructure projects that would permit the conversion of important farmland.
- Provision of access to farmland otherwise made inaccessible by the project.
- Restoration of land to original productivity where underground utilities are installed.
- For disposition of land, placing a perpetual easement on the land to ensure it is not developed or converted to non-farmland.
- Inclusion of agricultural production as a compatible use on “Farmland” placed in perpetual easements
- Providing for protection, replacement, or substitution of important farmland acres.

If indirect and cumulative effects are found, sound environmental planning suggests that the owner consider implementing appropriate best management practices.

While soil erosion on construction sites cannot be eliminated, it can be reduced to rates similar to pasture lands (or about 1.5 tons per acre per year). The basic principles of control for soil erosion are to:

- Keep disturbed areas as small as practicable.
- Stabilize and protect disturbed areas from splash erosion and runoff as soon as practicable.
- Keep runoff quantities and velocities low.
- Protect disturbed areas from runoff from adjacent areas.
- Retain sediment within the construction site.
- Reduce exposure time.

Many sediment control measures can be applied to accomplish these principles. Beware of the following types of erosion problems:

- Side-slope erosion can occur on cuts, fills, stockpiles, or cleared but not graded surfaces.
- Receiving waters need to be protected from increased runoff quantities, flow rates, and sediment loads from the construction site. Because of these potential impacts, the project may require a Section 401 certification (see Section 3 - Water Resources).
- Open drainage can contribute sediment if it is improperly designed, constructed, or maintained.
- Culverts and outfalls need to be protected to ensure that their entrances are not blocked, that they do not become filled with sediment, and that their outlets do not erode down slope or in downstream areas.
- Adjacent properties need to be protected from runoff and sediment load.

15.3 Legal Considerations

U.S. Department of Agriculture, Departmental Regulation 9500-3, Land Use Policy

Departmental Regulation 9500-3, “Land Use Policy”, assigned primary technical responsibility to the NRCS and established the four general categories of important farmland.

CEQ Memorandum regarding the Analysis of Impacts on Prime or Unique Agricultural Lands in Implementing NEPA

In 1980, the Council on Environmental Quality (CEQ) urged Federal agencies to assess the effects of their proposed actions on prime or unique agricultural land (Federal Register, Vol. 45 No. 175, Sept. 8, 1980, pg. 59189). It further urged that this assessment be an integral part of the environmental assessment process, and that it be a factor in deciding whether or not to prepare an environmental impact statement.

USDA—Secretary's Memorandum No. 1827, Supplement 1, Statement of Prime Farmland, Range, and Forest Land - June 21, 1976

This memorandum outlines USDA's concern for the conversion of prime agricultural lands to other irretrievable uses and sets forth six policy recommendations to guide the agency's actions. These policies place the USDA in an advocacy position concerning preservation of prime farmland, make the agency responsible for assuring that environmental documents and reviews adequately address the issue of prime farmlands, and place emphasis on both cooperative programs and agency programs to increase concern and interest for the retention of prime farmlands.

Farmland Protection Policy Act of 1981 (FPPA) (7 USC 4201 et seq)

In 1981, Congress passed the Agriculture and Food Act of 1981 (Public Law 97-98) containing the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549. The purpose of the FPPA is to minimize the extent to which Federal programs contribute (including technical or financial assistance) to the unnecessary and irreversible conversion of farmland to non-agricultural uses, and to assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with state and local governments and private programs and policies to protect farmland. The Act seeks to encourage alternatives, if possible, that would lessen the adverse effects to important farmlands.

Specifically, the FPPA outlines several measures to minimize the impacts of Federal programs on agricultural land, including:

- The USDA, in cooperation with other departments, agencies, and commissions, shall develop criteria for identifying the effects of Federal programs on the conversion of farmland to other uses.
- Federal agencies shall use the criteria established to identify and take into account the adverse effects of Federal programs, consider alternate actions and, as appropriate, lessen adverse impacts.
- Federal agencies shall develop proposals for action to bring programs, policies, and procedures into conformity with the purpose of the FPPA, wherever it is found to be necessary.

USDA/NRCS—Farmland Protection Policy (7 CFR 658)

These final rules and regulations (published in the Federal Register on June 17, 1994) implement the criteria developed by the NRCS in accordance with and pursuant to the FPPA. The established criteria are to be used for identifying and considering the effects of Federal programs on the conversion of farmlands to non-agriculture uses. Also, the criteria provide the means of identifying technical assistance to agencies of local, state, and Federal governments by the NRCS.

Federal agencies are required to:

- Use the criteria to identify and address the adverse effects of their programs on the preservation of farmlands.
- Consider alternative actions that could lessen adverse effects.
- Ensure that their programs, to the extent practicable, are compatible with state, local, and private programs and policies to protect farmland.

Additional Legal Considerations

Additional legal considerations may include:

- Soil and Water Resources Conservation Act of 1977 (PL 85-182)
- Renewable Resources Extension Act of 1978 (PL 95-306)
- Federal Land Policy and Management Act of 1976 (PL 94-579)
- Executive Order 11514, Protection and Enhancement of Environmental Quality
- Farm Bill legislation

15.4 Responsibilities and Requirements

All involved IHS program and project managers should:

- Understand project requirements
- Identify important farmland nearby a project location
- Determine if a project will have impacts on important agricultural land
- Assess soil and groundwater conditions
- Determine level of soil disturbance
- Complete form AD-1006 or NRCS-CPA-106
- Consult with NRCS
- Determine potential indirect and cumulative effects
- Identify and implement appropriate best management practices
- Gather maps that delineate the important farmland nearby the project area

15.5 Where to go for Help

7 CFR 658

www.access.gpo.gov/nara/cfr/waisidx_03/7cfrv6_03.html#600

CEQ Memo on Prime and Unique Agricultural Lands

ceq.eh.doe.gov/nepa/regs/exec81180.html

Farmland Protection Policy Act

www.nrcs.usda.gov/programs/fppa/

AD-1006:
www.nrcs.usda.gov/programs/fppa/pdf_files/AD1006.PDF

NRCS-CPA-106:
www.nrcs.usda.gov/programs/fppa/pdf_files/CPA106.pdf

Farmland maps:
http://www.ncgc.nrcs.usda.gov/products/cartographic/farmland/contact.html

Keys to soil Taxonomy

soils.usda.gov/technical/classification/tax_keys/keysweb.pdf

Natural Resources Conservation Service

www.nrcs.usda.gov/technical/land/erosion.html

Regional and State NRCS Offices.

www.nrcs.usda.gov/about/organization/regions.html

Soil Survey manual

soils.usda.gov/technical/manual/

State soil surveys

soils.usda.gov/survey/printed_surveys/

15.6 Samples

This section includes the two forms used to assess a project's impact on unique farmland: AD-1006 and NRCS-CPA-106.

AD-1006

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*		Date Of Land Evaluation Request		
Name Of Project		Federal Agency Involved		
Proposed Land Use		County And State		
PART II *(To be completed by NRCS)*		Date Request Received By NRCS		
Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply -- do not complete additional parts of this form).*	Yes ☐ No ☐	Acres Irrigated	Average Farm Size	
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount Of Farmland As Defined in FPPA Acres: %		
Name Of Land Evaluation System Used	Name Of Local Site Assessment System	Date Land Evaluation Returned By NRCS		

PART III *(To be completed by Federal Agency)*	Alternative Site Rating Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site	0.0	0.0	0.0	0.0
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*	0	0	0	0

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points				
1. Area In Nonurban Use					
2. Perimeter In Nonurban Use					
3. Percent Of Site Being Farmed					
4. Protection Provided By State And Local Government					
5. Distance From Urban Builtup Area					
6. Distance To Urban Support Services					
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Nonfarmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments					
11. Effects Of Conversion On Farm Support Services					
12. Compatibility With Existing Agricultural Use					
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	0	0	0	0
Total Site Assessment *(From Part VI above or a local site assessment)*	160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	0	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☐

Reason For Selection:

For an editable online version of this form see:
www.nrcs.usda.gov/programs/fppa/pdf_files/AD1006.PDF

NRCS-CPA-106

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 3-02)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date Of Land Evaluation Request:	4. Sheet 1 of
1. Name of Project:	5. Federal Agency Involved:	
2. Proposed Land Use:	6. County and State:	
PART II *(To be completed by NRCS)*	1. Date Request Received By NRCS:	2. Person Completing Form:

3. Does the corridor contain prime, unique, statewide or local important farmland? YES ☐ NO ☐ *(If no, the FPPA does not apply - do not complete additional parts of this form)*		4. Acres Irrigated	Average Farm Size
5. Major Crop(s)	6. Farmable Land In Government Jurisdiction Acres: %	7. Amount of Farmland As Defined in FPPA Acres: %	
8. Name of Land Evaluation System Used	9. Name of State or Local Site Assessment System	10. Date Land Evaluation Returned by NRCS	

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor d
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site				
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide Important or Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)				

PART VI *(To be completed by Federal Agency)* Corridor Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b & c. For Non-Corridor project use form AD-1006)*	Maximum Points	Corridor A	Corridor B	Corridor C	Corridor D
1. Area In Non-urban Use	(15)				
2. Perimeter In Non-urban Use	(10)				
3. Percent Of Corridor Being Farmed	(20)				
4. Protection Provided By State and Local Government	(20)				
5. Size Of Present Farm Unit Compared To Average	(10)				
6. Creation Of Non-farmable Farmland	(25)				
7. Availability Of Farm Support Services	(5)				
8. On-Farm Investments	(20)				
9. Effects Of Conversion On Farm Support Services	(25)				
10. Compatibility With Existing Agricultural Use	(10)				
TOTAL CORRIDOR ASSESSMENT POINTS	160				
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100				
Total Corridor Assessment *(From Part VI above or local site assessment)*	160				
TOTAL POINTS *(Total of above 2 lines)*	260				

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES ☐ NO ☐

5. Reason For Selection:

Name of Federal agency representative completing this form:	Date:

NOTE: Complete one form for each segment with more than one Alternate Corridor

For a printable online version of this form see

http://www.nrcs.usda.gov/programs/fppa/pdf_files/CPA106.pdf

15.7 Definitions/Acronyms

Aquifer: A saturated, permeable geologic unit of soil or rock that can transmit significant quantities of water under hydraulic gradients.

Best Management Practices: Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include but are not limited to treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or wastewater disposal, or drainage from raw material storage.

CEQ: The Council on Environmental Quality

Corridor Projects/ Sites: Developments or projects that are designed to carry services or materials between two distant points and stream improvement or flood control projects that change farmland use.

Direct/ Indirect Impacts: Actions or projects that result in making land non-farmable. Action (building or construction) on a specific area results in a direct impact. Taking land adjacent to a specific impact area out of agricultural production.

Erosion: (i) The wearing away of the land surface by rain or irrigation water, wind, ice, or other natural or anthropogenic agents that abrade, detach and remove geologic parent material or soil from one point on the earth's surface and deposit it elsewhere, including such processes as gravitational creep and so-called tillage erosion; (ii) The detachment and movement of soil or rock by water, wind, ice, or gravity.

Farmable Land: Any land that has a Soil Potential Index greater than "0," as defined in the LESA Handbook.

FPPA: Farmland Protection Policy Act

Ground water: That portion of the water below the surface of the ground at a pressure equal to or greater than atmospheric. See also water table.

Impermeable: Not easily penetrated. The property of a material or soil that does not allow, or allows only with great difficulty, the movement or passage of water.

Important Farmland: In accordance with the FPPA, farmland includes all land that is defined as prime, unique, or statewide or locally important. Farmland does not have to be used currently for cropland. It can include cropland, pastureland, forestland, or other land. Water or water storage areas are not considered farmland, nor is urban land.

Local or State Important Farmland: Land other than prime or unique farmland that is of statewide importance for the production of food, feed, fiber, forage, and oil seed crops. Where applicable, local or state important farmland is determined to be important by the appropriate state, tribal, or unit of local government agency or agencies. Additional farmlands of local importance may include tracts of land that have been designated for agriculture by local ordinance. A local unit of government must designate farmland of local importance. Once this is accomplished, the NRCS State Conservationist must concur with this designation in order for it to apply to FPPA.

NEPA: The National Environmental Policy Act

NRCS: Natural Resources Conservation Service

Percolation: The movement of water downward and radially through suburface soil layers, usually continuing downward to ground water. Can also involve upward movement of water. Slow seepage of water through a filter.

Permeability: The rate at which liquids pass through soil or other materials in a specified direction.

Prime Farmland: Describes and that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and within allowable soil erosion tolerance (T) or excessive soil erosion, as determined by NRCS. Prime farmland is also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land, but not urban built-up land or water). Prime farmland soil lists are developed by

NRCS according to criteria in USDA Departmental Regulation 9500-3, dated March 22, 1983.

Prime Rangeland and Rangeland or Grassland of Statewide Importance: Prime rangeland means rangeland which, because of its soil, climate, topography, vegetation, and location, has the highest quality or value for grazing animals. The (potential) natural vegetation is palatable, nutritious, and available to the kinds of herbivores common to the area. Rangeland or grassland of statewide importance is land other than prime rangeland that is of high quality or value for grazing animals.

Rangeland or grassland of statewide importance, in addition to prime rangeland, has high quality or value for grazing animals. The state government, (State Secretary of Agriculture or higher office) must designate rangeland or grassland of statewide importance. Once this is accomplished, the NRCS State Conservationist must concur with this designation in order for it to apply to Federal farmland protection.

The prime rangeland designation is based on criteria outlined in the USDA Statement of Land Use Policy (DR 9500-3, March 22, 1983).

Private Programs: Private programs to protect farmland, as defined by FPPA, are consistent with state and local programs and:

- Operated by nonprofit corporations, foundations, associations, conservancies, districts, or other nonprofit organizations existing under State or Federal laws.
- Include acquiring and holding developing rights or conservation easements and facilitating the transfer of development rights.

Recharge areas: A land area in which water reaches the zone of saturation from surface infiltration, e.g., where rainwater soaks through the earth to reach an aquifer.

SCS: Soil Conservation Service, now the NRCS

Sedimentation: The process of sediment deposition.

Site: Means the locations identified by the proposed actions. In this case it would be the entire site, both farmable land and non-farmable land. As recorded in Part III of form AD-1006 or NRCS-CPA-106.

Sole Source Aquifer: EPA defines a designated sole or principal source aquifer as one which supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas can have no alternative drinking water source(s) which could physically, legally, and economically supply all those who depend upon the aquifer for drinking water. For convenience, all designated sole or principal source aquifers are referred to as "sole source aquifers" (SSAs).

SSCD: State Soil Conservation District

State or local policies to protect farmland: State and local policies to protect farmland include the following items:

- Zoning;
- Comprehensive land use planning;
- Purchase and/or acquisition of development rights;
- Purchase and/or acquisition of conservation easements;
- Procedures for assessing conversion viability of agricultural sites;
- Agricultural districting; and
- Capital investments to protect farmland.

Unique Farmland: Land other than prime farmland that is used for the production of specific high-value food and fiber crops, as determined by NRCS. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods. Examples include:

- Cranberries
- Citrus
- Tree nuts
- Olives
- Fruits
- Vegetables

- Other high value crops as determined by the State Conservationist

Unique farmland lists are created based on criteria outlined in USDA Departmental Regulation 9500-3, dated March 22, 1983.

Unit of Local Government: County, municipality, town, township, village, or other unit of general government below the state level, or a combination of units of local government acting through an area-wide agency under state law or an agreement for the formulation of regional development policies and plans.

Urban Development: Land with a density of 30 structures per 40-acre area. Farmland in urban development includes land identified as "urbanized areas" on the Census Bureau Map, or as urban area mapped with a "tint overprint" on the USGS topographical maps, or identified as "urban built-up" on the USDA Important Farmland Maps.

USDA: U.S. Department of Agriculture

16.0 Coastal Resources

16.1 Overview/Introduction

In response to intense pressure on coastal resources and because of the importance of coastal areas of the United States, Congress passed the Coastal Zone Management Act of 1972 (CZMA).

The CZMA declared that it would be national policy:

- To preserve, protect, develop, and where possible, to restore or enhance, the resources of the nation's coastal zone for this and succeeding generations.
- To encourage and assist the states to exercise effectively their responsibilities in the coastal zone through management programs to achieve wise use of the land and water resources of the coastal zone.
- Encourage the participation, cooperation, and coordination of the public, Federal, state, local, interstate and regional agencies, and governments affecting the coastal zone.

To facilitate this, the CZMA authorizes a unique Federal-state partnership that encourages coastal states and territories to develop comprehensive Coastal Management Programs (CMPs). Prior to implementation, all CMPs must be approved by the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management (NOAA-OCRM).

The CZMA's "Federal consistency" provision requires that, to the maximum extent practicable, any Federal action that affects any land/water use or resource within a coastal zone be consistent with the enforceable policies of a Federally approved CMP.

Federal actions subject to CZMA consistency requirements can either be direct (actions on the ground) or indirect (activities requiring Federal permits, approval, or financial assistance). <u>However, only the *effect* of an action (not its location) determines the need for consistency with a CMP</u>.

Furthermore, the CZMA (16 U.S.C. § 1453[1]) states:

"Excluded from the coastal zone are lands the use of which is by law subject solely to the discretion of or which is held in trust by the Federal Government, its officers, or agents".

This exclusion does not remove the requirement to comply with Federal consistency provisions for IHS actions located on trust land which affect the coastal zone. The effect of the action (not the location of the action) determines the need to comply with the Coastal Zone Act.

What is a coastal zone?

The CZMA defines the coastal zone as:

- Coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states, and includes islands, transitional and intertidal areas, salt marshes, wetlands, and beaches.
- The zone extends, in Great Lakes waters, to the international boundary between the United States and Canada and, in other areas, seaward to the outer limit of state title and ownership that has been conferred through various Federal laws.
- The zone extends inland from the shorelines only to the extent necessary to control shorelands, the uses of which have a direct and significant impact on the coastal waters, and to control those geographical areas that are likely to be affected by or vulnerable to sea level rise.

The CZMA specifies that "transitional" and intertidal areas, such as salt marshes, freshwater wetlands, and beaches, are included in the coastal zone. Also included are the connecting and adjacent waters, harbors, and estuarine areas, including bays, sounds, lagoons, bayous, ponds, shallows, and marshes, as well as the estuaries themselves.

Within these areas, the CZMA defines "coastal resources of national significance" as a coastal wetland, beach, dune, barrier, island, reef, estuary, or fish/wildlife habitat that is

determined to be of substantial biological or natural storm protective value."

If you suspect that your project might affect a land/water use or resource within a coastal zone, contact the state agency responsible for coastal zone management. They will help you determine if you are in a coastal zone and guide you through the CZMA compliance process.

16.2 Compliance Process

The CZMA compliance process follows the two steps outlined below (see Figure 16-1):

1. Determine if the proposed action falls within, or could potentially affect, a coastal zone.
2. Prepare a Federal consistency determination.

Step #1: Determine if the Proposed Action Falls Within, or Could Potentially Affect, a Coastal Zone

The first step is determining if the project is within the coastal zone of one of the 34 states and territories that have Federally approved CMPs. Remember that projects outside of coastal states may still have effects that are carried into regulated coastal zones. You will need to consider these effects prior to action.

CMP contact information can be found at: http://www.ocrm.nos.noaa.gov/czm/czmsitelist.html.

Potential effects to coastal zones should be considered next. Effects within coastal zones are determined by looking at reasonably foreseeable direct and indirect effects on any coastal land/water use or resource. An action that may appear to have only minimal or no environmental effects may still have a cumulative effect on coastal uses (e.g., effects on public access or recreational opportunities) or resources (e.g., estuarine health). If a Federal action initiates an event or series of events where coastal effects are reasonably foreseeable, that action is subject to CZMA consistency requirements.

Once IHS determines that the project is within a coastal zone and/or could affect coastal land/water uses or resources protected by a Federally approved CMP, it must prepare a Federal consistency determination

Step #2: Prepare a Federal Consistency Determination/Documentation

The CZMA requires that any Federal agency conducting or supporting activities affecting the coastal zone conduct or support those activities in a manner consistent with Federally approved CMPs. This process is known as "Federal consistency" and is the central compliance requirement of the CZMA. The process is facilitated at the state level by CMPs and at the Federal level by NOAA-OCRM.

Since Federally approved CMPs take into consideration the many Federal laws and programs designed to protect ocean and coastal resources, demonstrating consistency with enforceable CMP policies facilitates IHS compliance with other applicable laws (discussed in Section 16.3).

Consistency Documentation

IHS should initiate early coordination and regular consultation with state CMP personnel and the public. IHS must then provide a Federal Consistency Determination, along with all supporting information required by the state to determine the project's consistency with the CMP's enforceable policies. This information must be provided 90 days prior to the start of the proposed action.

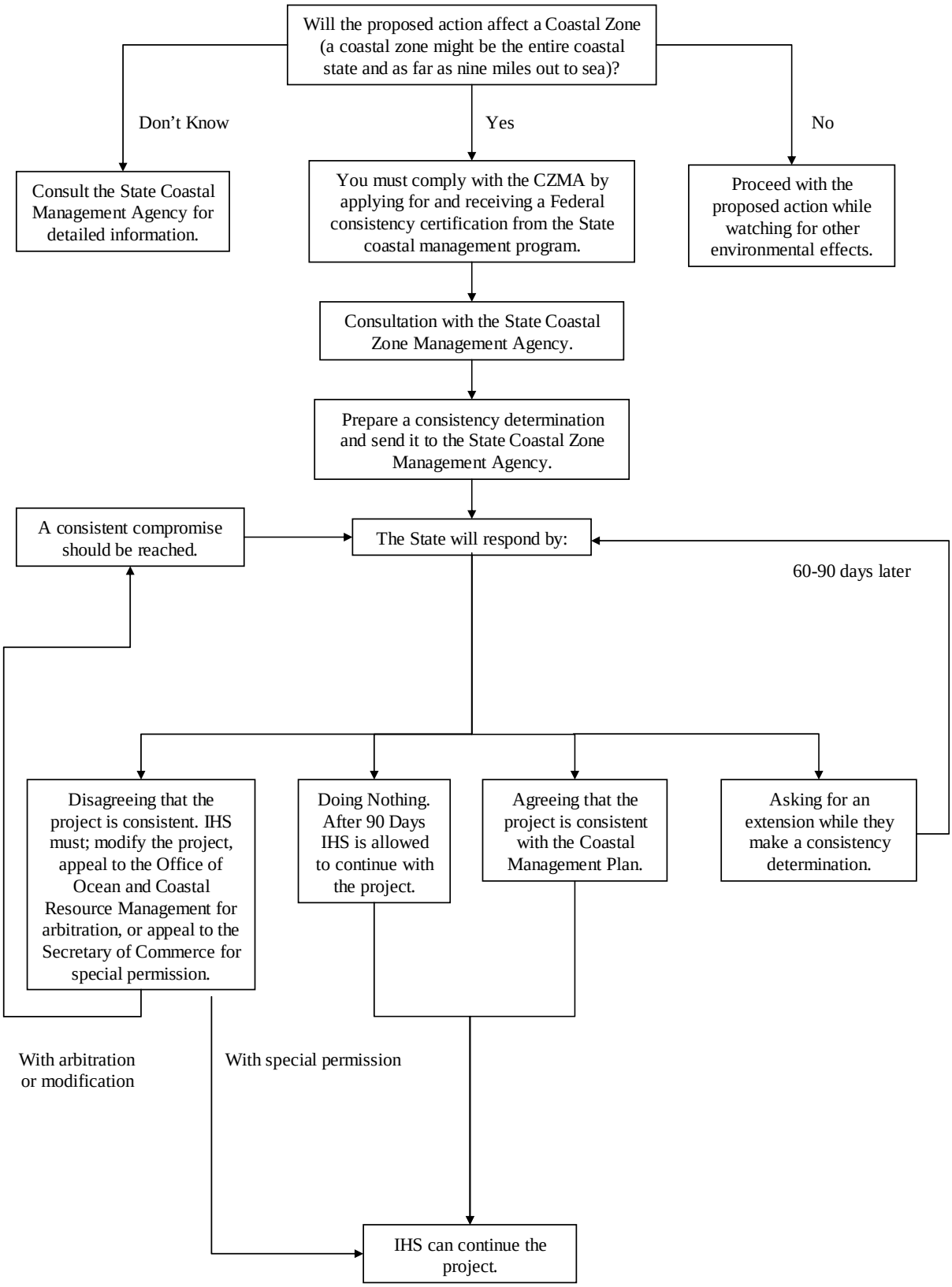

Figure 16-1. Flowchart for Coastal Zone Compliance.

NOAA-OCRM has outlined three types of consistency determinations. These include:

- General consistency determinations: These are prepared in cases where Federal agencies will be performing repeated activity other than a development project (e.g., ongoing maintenance, waste disposal) that cumulatively has an effect upon any coastal land/water use or resource.
- Phased consistency determinations: These are prepared in cases where the Federal agency has sufficient information to determine the consistency of an entire proposed development project or other activity from planning to completion.
- National or regional consistency determinations: These are prepared in cases where Federal agency activities are national or regional in scope (e.g., rulemaking, national plans), and affect coastal land/water uses or resources in more than one state.

Response from State CMP

After receiving IHS's consistency determination, the state CMP reviews the proposal to determine if the proposed action will be consistent with the CMP's enforceable policies. There are four outcomes possible during the Federal consistency review process:

1. The state provides IHS with Federal consistency concurrence, allowing the project to continue.
2. The state provides IHS with a Federal consistency objection. The state will respond with its reasons for disagreeing, along with supporting documentation, and recommend alternatives that can be undertaken to allow the activity to proceed in a manner consistent with the CMP. If this occurs, IHS can either modify the action so that it will receive consistency concurrence or appeal the decision to NOAA-OCRM.
3. The state can elect to do nothing. If the state does not respond in writing within 60 to 90 days, depending on the project type, the Federal action is presumed to be consistent with the CMP and IHS can continue with the proposed action.
4. The state can ask for an extension while they make a consistency determination. Extensions last 60 to 90 days, depending on the type of project. After an extension has been granted, the state has 60 to 90 days, depending on the project type, to make a consistency determination.

IHS should maintain adequate documentation and correspondence throughout this entire process, especially when time limits have been reached and the state has not responded. It should never be assumed that a consistency determination is granted.

Timelines

For compliance with CZMA Federal consistency requirements, NOAA outlined the following timelines in 15 CFR § 930:

- Provide a consistency determination to the state at least 90 days before final approval of the activity.
- If the state does not respond to the submitted consistency determination within 60 to 90 days, state concurrence is presumed.
- State concurrence shall not be presumed in cases where the state requests an extension to review the matter. IHS shall approve one request for an extension period of 15 days or less.
- If a state agency objects to the consistency determination, asserting that coastal effects are reasonably foreseeable, consider revising the proposed action and submitting another consistency determination to the state. Otherwise, IHS should attempt to resolve any disagreement within the remainder of the 90-day period.
- If IHS agrees that coastal effects are reasonably foreseeable, it should attempt to accommodate the recommendations provided in the state's consistency review

within the 90-day period or consider an alternative schedule pursuant to 15 CFR § 930.36(b)(1).

- If IHS and the state cannot reach agreement on CMP consistency within the 90-day period, IHS should consider postponing final action until the situation has been resolved.

Note: IHS must also consult with the National Marine Fisheries Service (NMFS) (NOAA Fisheries), regarding any action or proposed action that may adversely affect Essential Fish Habitats (EFH). EFHs are areas identified as being vital for sustaining marine or anadromous fish populations. They include the waters and substrate necessary to fish for spawning, breeding, feeding, or growing to maturity.

16.3 Legal Considerations

Federal Laws

Clean Water Act (CWA), Section 320

This Act (33 U.S.C. § 1330) establishes the National Estuary Program (NEP) to identify, restore, and protect estuaries along the U.S. coast. The U.S. Environmental Protection Agency (USEPA) administers the NEP, but decisions are carried out by teams of local, state, and Federal officials, as well as representatives of industry, academia, and the general public. Policies developed by a NEP Comprehensive Conservation and Management Plan (CCMP) may be adopted and enforced by a state CMP.

Coastal Barrier Resources Act (CBRA)

This Act (16 U.S.C. §§ 3501-3510) protects undeveloped coastal barriers and related areas by prohibiting direct or indirect Federal funding of various projects in these areas that might support development. Limited exceptions are allowed, such as funding for fish and wildlife research.

The purpose of the Act is to minimize the loss of human life, wasteful expenditure of Federal funds, and damage to fish, wildlife and other natural resources of the coastal barriers by:

- Restricting future Federal financial assistance for development of these areas
- Establishing a Coastal Barrier Resources System
- Considering ways in which long-term conservation of these resources may be achieved

Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA)

This Act (16 U.S.C. §§ 3951-3956) engages the Fish and Wildlife Service in interagency wetlands restoration and conservation planning in every coastal state. It also expands the administration of Federal grants to acquire, restore, and enhance wetlands of coastal states and the Trust Territories.

Coastal Zone Management Act (CZMA)

This Act (16 U.S.C. §§ 1451-1465) establishes a national policy to preserve, protect, develop, and where possible, restore or enhance, the resources of the Nation's coastal zone. The CZMA authorizes a unique Federal-state partnership to to encourage coastal states and territories to develop comprehensive CMPs. The CZMA's "Federal consistency" provision requires that any Federal action that affects land/water uses or natural resources in designated coastal zones to be consistent, to the maximum extent practicable, with the enforceable policies of Federally approved CMPs.

Section 303 provides guidance on specific national objectives that warrant consideration during the development, approval, and implementation of state CMPs.

Section 306 provides that the state is eligible for annual grants to implement their CMP after the state receives Federal approval.

Section 307 contains the Federal consistency provisions to ensure that Federal actions are consistent with the enforceable policies of state CMPs. Federal regulations implementing Section 307 are found in 15 CFR § 930.

Section 309 establishes a coastal enhancement grant program. This section provides that a portion of Section 306 funds are available to states to develop program changes that

strengthen their CZM program's ability to address particular coastal issues.

Section 312 directs the Secretary of Commerce to evaluate the performance of state CMPs on a continuing basis. NOAA-OCRM formally reviews the implementation of each CMP on a three-year cycle.

Section 315 establishes a National Estuarine Research Reserve (NERR) system to preserve representative estuarine areas for long-term scientific and educational purposes.

Endangered Species Act

Section 7 requires that all Federal agencies shall consult with either the USFWS and/or NMFS to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a Federally listed species or result in the destruction or adverse modification of designated critical habitat.

Estuaries and Clean Waters Act

This recently passed Act (33 U.S.C. §§ 2901-2909) encourages the restoration of estuary habitat through more efficient project financing and enhanced coordination of Federal and non-Federal restoration programs. The Law also establishes an Estuary Habitat Restoration Collaborative Council and directs this Council to develop an estuary habitat restoration strategy to ensure a comprehensive approach to the selection and prioritization of estuary habitat restoration projects and the coordination of Federal and non-Federal activities related to such restoration.

Executive Order 13158

On May 26, 2000, President Clinton signed Executive Order 13158 on Marine Protected Areas (MPAs) to strengthen the protection of U.S. ocean and coastal resources. This E.O. directs the Departments of Commerce and the Interior, and other Federal agencies, to strengthen and expand a national system of MPAs by working closely with state, territorial, local, Tribal, and other stakeholders. OCRM is assisting in the development of the national list of MPAs in U.S. waters. Candidate sites for the list are drawn from existing Federal, tribal, state and local protected-areas programs, including CMPs.

Magnuson-Stevens Fishery Conservation and Management Act

This Act (16 U.S.C. 1801-1883) calls for direct actions to stop or reverse the continued loss of fish habitats. It directs NMFS and the eight regional Fishery Management Councils to describe and identify EFH in each fishery management plan (FMP); minimize, to the extent practicable, the adverse effects of fishing on EFH; and identify other actions to encourage EFH conservation. EFH is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.

Section 305(b) requires Federal agencies to consult with NMFS before taking any action that could adversely affect EFH.

Marine Mammal Protection Act

This Act (16 U.S.C. §§ 1361-1421) establishes a moratorium, with certain exceptions, on the “take” of marine mammals in U.S. waters and by U.S. citizens on the high seas, and on the importing of marine mammals and marine mammal products into the United States.

Section 3 defines “take” as “harass, hunt, capture, kill, or attempt to harass, hunt, capture, or kill any marine mammal.” Section 3 also requires Federal agencies to consult with NMFS if a proposed action will result in avoidable effects on marine mammals.

National Marine Sanctuaries Act

This Act (16 U.S.C. 1431-1445a) authorizes the Secretary of Commerce to designate and manage areas of the marine environment with nationally significant aesthetic, ecological, historical, or recreational values as National Marine Sanctuaries (NMSs). The primary objective of this law is to protect marine resources, such as coral reefs, sunken historical vessels, or unique habitats, while facilitating all "compatible" public and private uses of those resources. Sanctuaries, which are frequently called underwater parks, are managed according to comprehensive plans prepared by the National Marine Sanctuary Program (NMSP). The

NMSP is administered by NOAA's National Ocean Service (NOS).

Oceans Act of 2000

This Act (Public Law 106-256) established a commission to make recommendations for coordinated and comprehensive national ocean policy. The policy issues addressed will include coastal hazards, stewardship, marine pollution prevention, enhancing marine-related commerce and transportation, research and education, the use of technology to address coastal issues, agency cooperation, and ensuring that the United States remain a leader in ocean and coastal activities.

16.4 Responsibilities and Requirements

IHS' responsibilities regarding coastal zone protection include:

- Determining if the proposed action will be in a coastal zone or may affect a coastal zone (i.e., coastal waters, Great Lakes, or the adjacent shorelands—including islands, transitional and intertidal areas, salt marshes, wetlands, and beaches).
- Obtaining the State Coastal Zone Management Plan and/or consulting with the State Coastal Management Program personnel
- Considering the effect that your action will have on the entire coastal zone, including effects to public access, recreational opportunities, land use and zoning, or historic property in the coastal zone.
- If necessary, assisting in the Federal consistency program.
- Securing CZMA consistency determination.

16.5 Where to Go for Help

Marine Protected Areas (MPAs)

http://mpa.gov/

MPAs listed by state

http://www.mpa.gov/mpa_programs/state_programs.html

National Oceanic and Atmospheric Administration (NOAA)

http://www.noaa.gov/

NOAA-OCRM, Celebrating 30 Years of the Coastal Zone Management Act

http://www.ocrm.nos.noaa.gov/czm

NOAA-OCRM, Federal Consistency Workbook

http://coastalmanagement.noaa.gov/czm/fedcon_workbook.html

NOAA-OCRM, State Coastal Management Programs (CMPs)

www.ocrm.nos.noaa.gov/czm/czmsitelist.html

National Estuarine Research Reserve System (NERRs)

http://nerrs.noaa.gov/

National Marine Sanctuary Program (NMSP)

http://www.sanctuaries.nos.noaa.gov/

National Marine Fisheries Service (NMFS)

http://www.nmfs.noaa.gov/

National Park System (NPS)

http://www.nps.gov/

U.S. Fish and Wildlife Service (USFWS)

http://www.fws.gov/

National Wildlife Refuges (NWRs)

http://refuges.fws.gov/

16.6 Samples

Sample Federal Consistency Certification from Massachusetts

Jane W. Mead
Sr. Project Review Coordinator
Massachusetts Office of Coastal Zone Management
251 Causeway Street, Suite 900
Boston, MA 02114

Re: Maintenance Dredging Project; Cape Cod Canal

Dear Ms. Mead;

The Massachusetts Department of Environmental Management (DEM), Office of Waterways, requests that your office review the proposed Cape Cod Canal Dredging Project for consistency with the Coastal Zone Management (CZM) Program. The authorized Federal navigation project provides for dredging at both ends of the 17.5-mile Canal; the depth of the Canal is 32 feet below Mean Low Water (MLW), including the mooring basins at each end. The Cape Cod Canal is an open, toll-free waterway that allows vessels to avoid the hazardous route around Cape Cod. The mooring basins are available at no cost to commercial traffic for safe refuge during adverse weather conditions or in the event of problems during vessel passage.

The proposed work involves the mechanical dredging of a total of about 150,000 cubic yards of material from the East and West Mooring Basins and several areas of the main channel, and disposal of these materials at the Cape Cod Disposal Site and the Buzzards Bay Disposal Site.

DEM Waterways believes that the proposed maintenance dredging in the authorized navigation project is consistent with the program policies established as a result of the Coastal Zone Management Act of 1972. The dredging operations will be conducted in a manner that is consistent with the CZM Management Plan.

The proposed project complies with the following CZM policies:

COASTAL HAZARDS POLICY #2: Ensure construction in water bodies and contiguous land areas will minimize interference with water circulation and sediment transport. The proposed dredging activities will not interfere with water circulation in the Canal. No permanent structures are proposed in the body of water. Proposed dredging may increase circulation, if only slightly.

COASTAL HAZARDS POLICY #3: Ensure that State and Federally funded public works projects proposed for location in the coastal zone will not exacerbate existing hazards or damage natural buffers or other natural resources and will not promote growth and development in hazard-prone or buffer areas. The proposed dredging will improve navigation and safe mooring of vessels in the Canal by removing sediment build up which is causing a navigation hazard.

PORTS POLICY #1: Ensure that dredging and disposal of dredged material minimizes adverse effects on water quality, physical processes, marine productivity, and public health. The material proposed for dredging is within acceptable parameters for disposal in open waters and also for beach nourishment. The project is timed to minimize fisheries impacts. While dredging, the project will comply with the requirements of the State's surface water quality standards.

PORTS POLICY #2: Promote the widest possible public benefit from channel dredging. Ensure that dredging is consistent with marine environmental policies. The proposed dredging will improve safe navigation in the Canal and mooring area.

If you have any questions, please contact me at the number above.

Very truly yours,

DEM Waterways

16.7 Definitions

Anadromous: Fish that return from the sea to the rivers where they were born in order to breed; e.g., salmon

CBRA: Coastal Barrier Resources Act

CHA: Critical Habitat Area

CMP: Coastal Management Program

Coastal resource of national significance: Any coastal wetland, beach, dune, barrier island, reef, estuary, or fish and wildlife habitat, if any such area is determined by a coastal state to be of substantial biological or natural storm protective value.

Coastal State: A state bordering on the Atlantic, Pacific or Arctic Ocean, the Gulf of Mexico, Long Island Sound or the Great Lakes.

Coastal State: Astate of the United States in, or bordering on, the Atlantic, Pacific, or Arctic Ocean, the Gulf of Mexico, Long Island Sound, or one or more of the Great Lakes. For the purposes of this title, the term also includes Puerto Rico, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and the Trust Territories of the Pacific Islands, and American Samoa.

Coastal waters: (A) in the Great Lakes area, the waters within the territorial jurisdiction of the United States consisting of the Great Lakes, their connecting waters, harbors, roadsteads, and estuary-type areas such as bays, shallows, and marshes and (B) in other areas, those waters, adjacent to the shorelines, which contain a measurable quantity or percentage of sea water, including, but not limited to, sounds, bays, lagoons, bayous, ponds, and estuaries.

Coastal wetlands conservation project: The obtaining of a real property interest in coastal lands or waters, and the restoration, management or enhancement of coastal wetlands ecosystems, for the long-term conservation of the lands, waters, hydrology, water quality, and dependent fish and wildlife.

Coastal wetlands restoration project: Any technically feasible activity to create, restore, protect or enhance coastal wetlands through sediment and freshwater diversion, water management or other measures.

Coastal zone: The coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states, and includes islands, transitional and intertidal areas, salt marshes, wetlands, and beaches. The zone extends, in Great Lakes waters, to the international boundary between the United States and Canada and, in other areas, seaward to the outer limit of state title and ownership under the Submerged Lands Act (43 U.S.C. 1301 et seq.), the Act of March 2, 1917 (48 U.S.C. 749), the Covenant to Establish a Commonwealth of the Northern Mariana Islands in Political Union with the United States of America, as approved by the Act of March 24, 1976 (48 U.S.C. 1681 note), or section 1 of the Act of November 20, 1963 (48 U.S.C. 1705), as applicable. The zone extends inland from the shorelines only to the extent necessary to control shorelands, the uses of which have a direct and significant effect on the coastal waters, and to control those geographical areas which are likely to be affected by or vulnerable to sea level rise. Excluded from the coastal zone are lands the use of which is by law subject solely to the discretion of or which is held in trust by the Federal Government, its officers or agents.

CPD: Coastal Programs Division of NOAA

CZMA: Coastal Zone Management Act of 1972

CZMP: Coastal Zone Management Plan

Enforceable policy: State policies that are legally binding through constitutional provisions, laws, regulations, land use plans, ordinances, or judicial or administrative decisions, by which a state exerts control over private and public land and water uses and natural resources in the coastal zone.

ESA: Endangered Species Act

Estuarine sanctuary: A research area that may include any part or all of an estuary and any island, transitional area, and upland in, adjoining, or adjacent to such estuary, and which constitutes to the extent feasible a natural unit,

set aside to provide scientists and students the opportunity to examine over a period of time the ecological relationships within the area.

Estuary: That part of a river or stream or other body of water having unimpaired connection with the open sea, where the sea water is measurably diluted with fresh water derived from land drainage. The term includes estuary-type areas of the Great Lakes.

Land use: Activities that are conducted in, or on the shorelands within, the coastal zone, subject to the requirements outlined in section 307(g) [16 USC § 1456(g)].

Local government: Any political subdivison of, or any special entity created by, any coastal state that (in whole or part) is located in, or has authority over, such state's coastal zone and that (A) has authority to levy taxes, or to establish and collect user fees, or (B) provides any public facility or public service that is financed in whole or part by taxes or user fees. The term includes, but is not limited to, any school district, fire district, transportation authority, and any other special purpose district or authority.

MMPA: Marine Mammal Protection Act of 1972

MPA: Marine Protected Areas

MPRSA: Marine Protection, Research and Sanctuaries Act of 1972

MSFCMA: Magnuson-Stevens Fishery Conservation and Management Act

NERR: National Estuarine Research Reserve

NM: National Monument

NMFS: National Marine Fisheries Service

NMS: National Marine Sanctuary

NMSA: National Marine Sanctuaries Act in 1992.

NMSP: National Marine Sanctuary Program

NP: National Park

NPS: National Park System

NRA: National Recreation Area

NS: National Seashore

NWRS: National Wildlife Refuge System

NWRSAA: National Wildlife Refuge System Administration Act

OCRM: Office of Ocean and Coastal Resource Management of NOAA

Person: Any individual; corporation, partnership, association, or other entity organized or existing under the laws of any state; the Federal government; any state, regional, or local government; or any entity of any such Federal, state, regional, or local government.

Public facilities and public services: Facilities or services that are financed, in whole or in part, by any state or political subdivision thereof, including, but not limited to, highways and secondary roads, parking, mass transit, docks, navigation aids, fire and police protection, water supply, waste collection and treatment (including drainage), schools and education, and hospitals and health care. Such term may also include any other facility or service so financed that the Secretary finds will support increased population.

Special area management plan: A comprehensive plan providing for natural resource protection and reasonable coastal-dependent economic growth containing a detailed and comprehensive statement of policies; standards, and criteria to guide public and private uses of lands and waters; and mechanisms for timely implementation in specific geographic areas within the coastal zone.

Undeveloped coastal barrier: A depositional geologic feature that is subject to wave, tidal, and wind energies, and protects landward aquatic habitats from direct wave attack, and all associated aquatic habitats, including adjacent wetlands, marshes, estuaries, inlets, and nearshore waters, but only if there are few manmade structures and human activities do not significantly impede geomorphic and ecological processes.

USFWS: U.S. Fish and Wildlife Service

Water use: A use, activity, or project conducted in or on waters within the coastal zone.

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17.0 Wild & Scenic Rivers

17.1 Overview/Introduction

In order to protect the nation's valuable rivers and their immediate environments for benefit of present and future generations, Congress passed the Wild and Scenic Rivers Act (WSRA). The designation of a river under the Act provides legal protection from adverse development and provides a mechanism for management of the river's resources. A Wild and Scenic River is a free-flowing river or river-segment that has outstanding aesthetic, archaeological, scenic, recreational, geologic, fish-and-wildlife, historic, scientific, cultural, or other similar values. National wild and scenic rivers are designated by act of Congress or by the Secretary of the Interior at the request of a governor.

The principal effect of the Act is to preclude or to severely limit projects that might affect the free-flowing character of the river or adversely affect the values for which a river was designated. Management is provided by the agencies that manage the land adjacent to the river and is codified in a Comprehensive River Management Plan. The BIA is the Federal land management agency for Indian Reservations. Other Federal agencies with jurisdiction include the National Park Service (NPS), U.S. Forest Service (USFS), Bureau of Land Management (BLM), U.S. Army Corps of Engineers (USACE), and U.S. Fish and Wildlife Service (USFWS). In addition, projects could impact land managed by state land management agencies.

Protected rivers are classified as wild, scenic, or recreational, based on the following definitions:

Wild rivers: Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Scenic rivers: Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

Recreational rivers: Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

All agencies are required to consult with NPS prior to taking actions that could effectively foreclose wild, scenic, or recreational status for rivers on the Nationwide Rivers Inventory.

17.1 Compliance Process

Various environmental laws protecting the nation's rivers require the IHS program, as part of its planning and environmental review process, to avoid or mitigate adverse effects on rivers designated as Wild and Scenic, or as listed in the Nationwide Rivers Inventory (NRI). Specifically, the WSRA states that ". . . no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration." (16 USC Sec. 1278; Section 7 of the WSRA) Unlike certain other laws, the WSRA does not allow projects that unavoidably have adverse effects to proceed, absent congressional intervention.

The compliance process involves these steps (Figure 17-1):

1. Determine if the proposed action is near a protected river.
2. Determine if the proposed action will affect a protected river.
3. Consult with the administering agency.
4. Incorporate avoidance/mitigation measures into the proposed action.
5. Prepare documentation.

Step #1: Determine if the Proposed Action Is Near a Protected River

When reviewing the specific location where the proposed action will take place, IHS must then determine if a protected river is "nearby"—the protected river is within the area likely to be directly impacted by the proposed action—or near enough to a protected river that indirect impacts may occur (impacts to a stream adjacent to a project area that feeds a Wild and Scenic river downstream). Determining if a proposed action is near a protected river is accomplished by checking:

- The Nationwide Rivers Inventory www.nps.gov/ncrc/programs/rtca/nri/index.html

AND

- The list of designated Wild and Scenic Rivers (www.nps.gov/rivers/)

AND

- Any state agency with authority over rivers

If there are no protected rivers likely to be impacted by the project as described above, IHS meets the requirements of the Wild and Scenic Rivers Act by documenting these findings and continuing with its environmental review.

If there is a protected river near the project, IHS must proceed with Step #2.

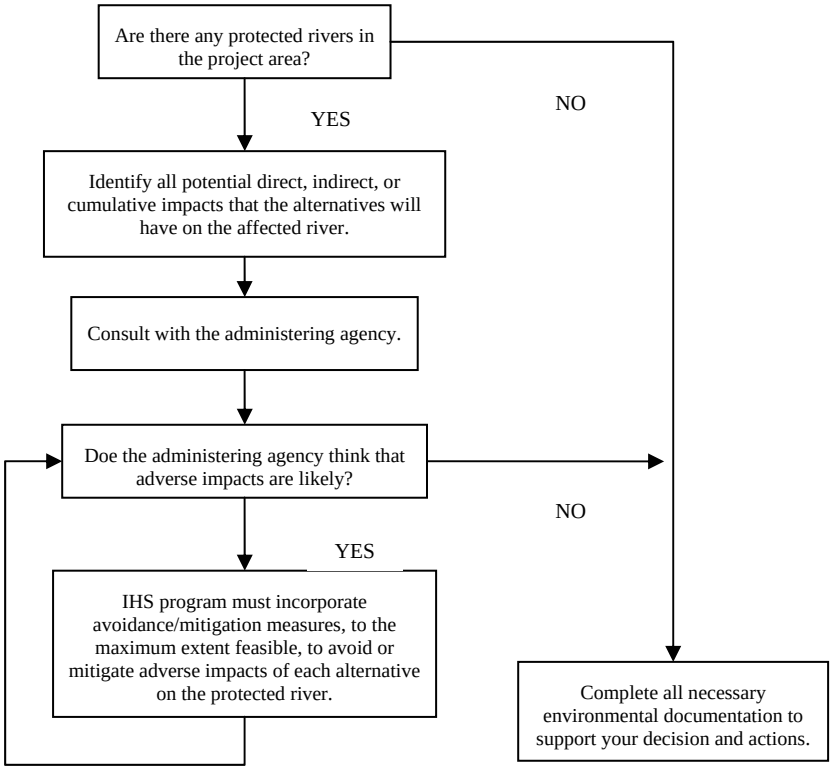


Figure 17-1. Compliance Process for Wild and Scenic Rivers.

Step #2: Determine if the Proposed Action Will Affect a Protected River

If the project has the potential to affect a protected river, the IHS program must identify all potential direct, indirect, or cumulative impacts that the proposed action may have on the protected river. IHS should assess the action in light of the eligibility and classification criteria of the Wild and Scenic Rivers Act.

For rivers designated as Wild and Scenic, the river's management plan identifies the types of land uses and developments that are considered compatible or incompatible with the river's wild and scenic values. NRI rivers also have a detailed analysis available from NPS to aid in determining whether your proposed action will have an adverse impact.

Generally, adverse effects on inventoried rivers may occur under conditions that include:

- Destruction or alteration of all or part of the free-flowing nature of the river.
- Introduction of visual, audible, or other sensory intrusions that are out of character with the river or alter its setting.
- Deterioration of water quality.
- Transfer or sale of property adjacent to an inventoried river without adequate conditions or restrictions for protecting the river and its surrounding environment.

In some cases, impacts of a proposed action could be severe enough to lower the classification. If the proposed undertaking could effectively downgrade any portion of the protected river, the impact is considered adverse.

The following examples of development would generally have the potential for adverse effects on the values of a potential wild, scenic, or recreational river:

Bank stabilization	Channelization
Quarry	Dredging or filling
Road or bridge	Radio tower
Change in flow	Pipeline/transmission line
Reservoir	Irrigation canal
Recreation area	Building
Impoundment	Dump or junkyard
Major highway	Landfill
Housing development	Sewage treatment plant

After IHS has considered the potential for adverse impacts as a result of the proposed action, IHS must consult with the agency that administers the protected river.

If you are UNSURE if the proposed action will have an adverse effect, contact the administering agency.

Step #3: Consult with the Administering Agency

The IHS program must notify the agency that administers the protected river and make them aware of IHS's intentions at least 60 days prior to implementing the proposed action. Send copies of project documentation with the notification.

The administering agency will either consent to the proposal or deny it based on anticipated effects. While IHS' determination from Step #2 will be considered, the agency makes its own determination and IHS must comply. Any disagreements must be resolved prior to implementation. Disagreements should be resolved through consultation and incorporation of avoidance/mitigation measures.

If the proposed action WILL NOT have an adverse effect

If the administering agency determines that the proposed action will not have an adverse effect, IHS is free to implement the project and consultation is complete. IHS must document these findings and continue with its environmental review (Step #5).

If the proposed action WILL have an adverse effect

If the agency determines that the proposed action will have an adverse effect, IHS cannot proceed until the administering agency has consented with an appropriate plan. No proposal can proceed without the consent of the administering agency. Also, no structures affecting the free-flowing nature of a designated Wild and Scenic river can be constructed without the express consent of Congress.

Step #4: Incorporate Avoidance/Mitigation Measures into the Proposed Action

If consent is denied and an adverse effect is expected, the administering agency may recommend measures to eliminate adverse effects. IHS must incorporate these or other avoidance/mitigation measures to the maximum extent feasible before IHS will be allowed to begin the proposed action. Any changes to the proposed action require IHS to resubmit the revised plans for consideration.

After appropriate avoidance/mitigation measures have been considered, IHS must return to Step #3 and get the agency's consent.

Step #5: Prepare Documentation

The project's environmental review must include the potential to impact protected rivers. The discussion will generally fit into one of two categories, discussed below.

There IS NOT a protected river likely to be impacted by the proposed action

Include a small discussion to illustrate that protected rivers were properly considered. For example:

> *As required by the Presidential Directive of August 2, 1979, and the Wild and Scenic Rivers Act of 1968, IHS conducted a protected rivers assessment to assess the impacts that the proposed action may have on protected rivers in the area. After contacting the appropriate agencies, it was determined that the project area is not near any rivers designated as Wild and Scenic or listed in the Nationwide Rivers Inventory, and the proposed action does not have the potential to affect any protected rivers. Further consideration of protected rivers is outside the scope of this document.*

There IS a protected river likely to be impacted by the proposed action

The environmental document should include, at a minimum, the following information:

- River information—Detailed maps, studies, and reports documenting the project scope and surrounding areas including scenic, recreational, geological, fish and wildlife, cultural, historic, or special areas
- Designation information—when and why was the river protected
- Administrating agency—which agency (DOI, USDA) administers the river and must consent to the project before it can proceed
- Impacts that are associated with the proposed action

Where no impacts to protected rivers are expected, summarize how IHS determined that the proposed action would not impact nearby protected rivers. Also summarize the consultation that has taken place with the administering agency and that the agency has consented to the project.

After summarizing the items discussed above, include a paragraph similar to the following:

> *As required by the Presidential Directive of August 2, 1979, and the Wild and Scenic Rivers Act of 1968, a protected rivers assessment was undertaken to assess the impacts that the proposed action may have on protected river in the area. While the assessment revealed that the project is nearby a protected river, namely the (insert name of river and administering agency), a determination was reached that the proposed action would have no effect on the river's*

aesthetic, scenic, historic, archaeological, or scientific features. This determination was reached (describe how the determination was reached–e.g. looking at detailed maps, contacting NPS, etc.). As a result of this determination, further consideration of protected rivers is deemed outside the scope of this document.

Where adverse impacts to protected rivers were expected, but were avoided or mitigated in order to receive the administering agency's consent, the document should summarize how IHS determined that the proposed action would not impact nearby protected rivers after avoidance/mitigation. The document should also summarize the consultation that took place with the administering agency, and include a statement that the agency has consented to the project.

After summarizing the items discussed above, the following items should be included in the environmental document:

- A reference to the Presidential Directive of August 2, 1979, and the Wild and Scenic Rivers Act of 1968, and their influence on the protected rivers assessment process.
- Description of the final determination and why/how that determination was reached.
- Detailed map(s) of the project area showing protected rivers and the proximity of the project alternatives to these rivers.
- Documentation of compliance and consistency with Federal, state, tribal, county and local floodplain programs, requirements, and plans.
- Documentation of any Public Notices, public meetings, or coordination with other agencies.
- Impacts that were expected on natural, cultural, and recreational values prior to the incorporation of avoidance/ mitigation measures into the project design.
- Avoidance/mitigation measures taken to minimize harm to the protected river. For each impact to the protected river by each of the alternatives, specify what mitigation measures are proposed to minimize or eliminate the impact. Indicate steps taken to insure that any alternatives that would eliminate or minimize impacts to the protected river have been considered and adequately studied.

17.3 Legal Considerations

Presidential Directive of August 2, 1979

This directive, titled *Memorandum for the Heads of Departments and Agencies*, requires each Federal agency, as part of its normal planning and environmental review processes, to take care to avoid or mitigate adverse effects on rivers identified in the Nationwide Rivers Inventory. Further, all agencies are required to consult with the National Park Service prior to taking actions which could effectively foreclose wild, scenic or recreational status for rivers on the inventory.

Outdoor Recreation Act

The Outdoor Recreation Act of 1963, Public Law 88-29, authorizes the Secretary of the Interior to: prepare and maintain a continuing inventory and evaluation of outdoor recreation needs and resources including rivers; provide technical assistance; encourage interstate and regional cooperation in the planning, acquisition and development of outdoor recreation resources; sponsor and engage in research and education; cooperate with and provide technical assistance to Federal departments and agencies; and promote coordination of Federal plans and activities generally relating to outdoor recreation resources including rivers and associated trail corridors. These responsibilities are also assigned to the National Center for Recreation and Conservation of the National Park Service.

Wild and Scenic Rivers Act

Public Law 90-542, approved October 2, 1968, (16 USC 1271-1287; 82 Stat. 906)

Activities affecting wild and scenic rivers should also comply with all applicable statutes and executive orders, which may include:

- National Environmental Policy Act (Pub. L. 91-190)
- National Historic Preservation Act (Pub. L. 89-665)
- Endangered Species Act (Pub. L. 93-205)
- Fish and Wildlife Coordination Act (Pub. L. 85-264)
- Water Resources Planning Act (Pub. L. 89-80)
- Floodplain and Wetlands Executive Orders (E.O. 11988 and E.O. 11990)
- National Forest Management Act of 1976 (Pub. L. 94-588)
- Federal Land Policy and Management Act of 1976 (Pub. L. 94-579)
- Federal Power Act (Pub. L. 74-333)
- Clean Water Act (Sections 401, 402, 404) (Pub. L. 95- 217). A CWA Section 404 permit from the USACE will require a Section 7 determination by the river-administering agency when the proposal occurs in a designated river or congressionally authorized study river and is a water resources project, i.e., affects the river's free-flowing condition. The USACE process requires a written determination from the river-administering agency for such projects. It is very important for river administrators to develop close working relationships with regional and district ACOE staff to participate in the review and evaluation process.

17.4 Responsibilities and Requirements

IHS' responsibilities regarding wild and scenic river protection include:

- Identifying protected river(s) in the project area
- Determining whether the proposed action will affect a wild and scenic/NRI river(s)
- Contacting the appropriate administering agency
- Implementing avoidance/mitigation measures, to the maximum extent feasible, to avoid or mitigate adverse impacts of each alternative on the protected river
- Preparing the appropriate environmental document

17.5 Where to Go for Help

Wild and Scenic Rivers Act (WSRA), 1968

www.nps.gov/rivers/wsract.html

16 U.S.C. 1271-1287

Fish and Wildlife Service

refuges.fws.gov/habitats/index.html

Forest Service

www.fs.fed.us/

National Park Service

www.nps.gov/rivers/

www.nps.gov/rivers/publications.html

www.nps.gov/ncrc/programs/rtca/nri/index.html

www.access.gpo.gov/nara/cfr/waisidx_01/36cfr297_01.html

Wild and Scenic Rivers Guidelines

http://www.nps.gov/rivers/guidelines.html

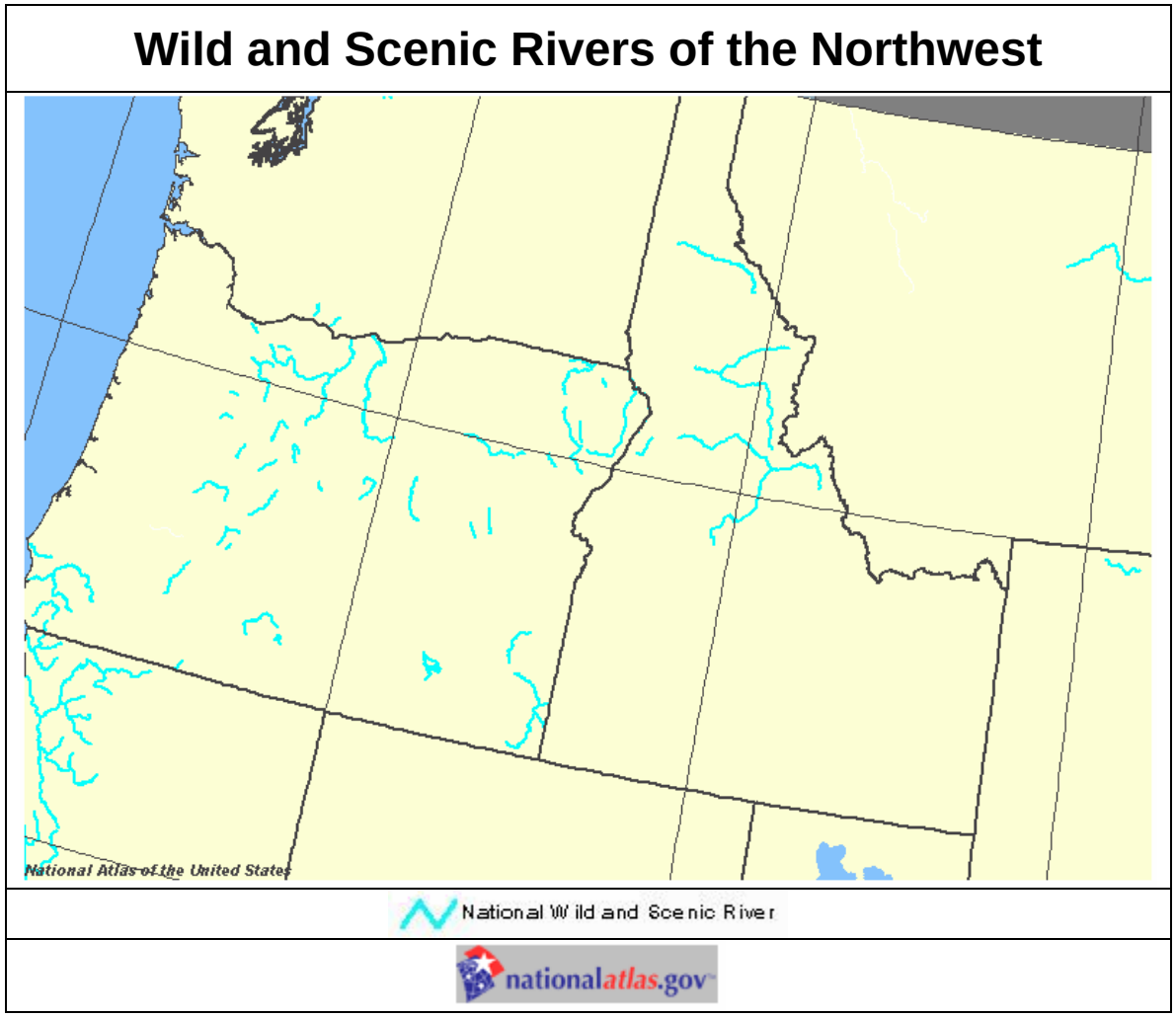
Bureau of Land Management

http://www.blm.gov/nlcs/rivers.htm

National Atlas Website

1. Go to http://www.nationalatlas.gov
2. Click on "Click Here to Make Maps."
3. In the upper right frame, scroll down to "Transportation."
4. Put a check next to "Parkways and Scenic Rivers."
5. In the left frame, select the state of interest from the drop-down list, then click on "Identify" (there are other options like selecting all 50 states). Then click on the river for GIS information.
6. Scroll to the bottom of the upper right frame and select other options like the topographic map reference.
7. To get to a description of the map layers, click directly on "Parkways and Scenic Rivers."
8. To download the shape files from the National Atlas site, click on the Map Layers button at the top of the upper right frame. In the resulting pop-up window, scroll down to "Parkways and Scenic Rivers." Just click on the link.

17.6 Samples



17.7 Definitions

Classification criteria: Criteria specified in Section 2(b) of the Act for determining the classification (wild, scenic, or recreational) of eligible river segments.

Classification: The process of determining which of the classes outlined in section 2(b) of the Act (wild, scenic, or recreational) best fit the river or its various segments.

Designation: Inclusion of a river area in the national system either by act of Congress or by authority of the Secretary of the Interior.

Development: Any manmade structure or modification of the natural or existing river environment.

Eligibility: Qualification of a river for inclusion in the national system through determination that it is free-flowing and with its adjacent land area possesses at least one outstandingly remarkable value.

Flow: The volume of water in a river passing a given point in a given period of time, usually expressed in terms of cubic feet per second or cubic meters per second.

Free-flowing: A river or section of a river, existing or flowing in natural conditions without

impoundment, diversion, straightening, rip-rapping or other modification of the waterway.

Impoundment: A body of water formed by any manmade structure.

Management plan: The detailed development plan required under section 3(b) of the Act that states the boundaries and classification of the river area and presents a plan for its public use, development and administration.

Nationwide Rivers Inventory (NRI): A register of river segments that potentially qualify as national wild, scenic, or recreational river areas. The NRI is prepared by the National Park Service's Rivers, Trails & Conservation Assistance Program in the Department of the Interior. A river segment may be listed on the NRI if it is free-flowing and has one or more "outstandingly remarkable values."

Recreational River areas: Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

River area: For a river study, that portion of a river authorized by Congress for study and its immediate environment comprising an area extending at least one-quarter mile from each bank. For designated rivers, the river and adjacent land within the authorized boundaries.

River: A flowing body of water or estuary, or a section, portion or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes.

Scenic River areas: Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

Water resources project: Any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act (41 Stat. 1063), as amended, or other construction of developments which would affect the free-flowing characteristics of a Wild and Scenic River or Study River.

Wild River areas: Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

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