



NASA Ames Research Center
Ames Environmental Procedural Requirements

Chapter 22 - NEPA Management

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22.1 Applicability

This instruction applies to all civil servant, contractor employees, resident agency personnel and partners who implement projects and programs at Ames Research Center (ARC), or Crows Landing Flight Facility.

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22.2 Purpose

This chapter establishes the minimum requirements to ensure ARC's environmental review of proposed actions complies with applicable Federal, state, and local regulations.

The National Environmental Policy Act (NEPA) is Federal legislation that establishes the environmental policy for the nation. The act requires Federal agencies to consider the environmental effects of their actions before beginning a project and to examine alternative actions that would reduce any threat or harm posed to the environment. NEPA is also an environmental disclosure statute. The act provides procedural requirements to ensure all Federal agencies comply with the law.

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22.3 Policy

It is the policy of ARC to comply with all applicable Federal, state, and local regulations.

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22.4 Authority

All relevant Federal, state, and local laws and regulations pertaining to the assessment of environmental impacts, but not limited to:

1. National Environmental Policy Act of 1969, as amended (42, USC 4321-4345)
2. Council on Environmental Quality Regulations (40 CFR Part 1500)
3. The Endangered Species Act of 1972, as amended (16 USC 1531-1544)
4. The National Historic Preservation Act of 1966, as amended (16 USC 470)
5. Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 and the Water Quality Act of 1987 (33 USC 1251 et seq.)
6. The Coastal Zone Management Act of 1972, as amended
7. Bay Conservation and Development Commission (BCDC) Bay Plan
8. NPR 8580.1 Procedural Requirements (NPR) for Implementing National Environmental Policy Act and Executive Order 12114
9. NASA NEPA regulations (14 CFR Part 1216)
10. Clean Air Act New Source Review and Conformity Determination Regulations
11. State and local noise guidelines and regulations

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22.5 Responsibilities

22.5.1 All Directorates

1. Identify research and development projects and programs, construction projects, and operational actions that may affect the environment.
2. Coordinate with Code QE early in the project or program development.
3. Prepare NEPA documentation as described in [section 22.9.1](#) (R&D Projects/Programs) and/or [section 22.9.2](#) (Facilities Projects) of this chapter. Complete a NEPA Checklist for all projects or programs, regardless of anticipated environmental impacts. Completion of additional NEPA (e.g., Environmental Assessments (EAs), Environmental Impact Statements (EISs), etc.) and associated technical studies (i.e., noise, cultural resources, natural resources, etc.) may be required.
4. Maintain environmental documentation in project file.
5. Notify Code QE continuously if the scope of the project changes.
6. Fund all EAs, EISs, and technical studies associated with Directorate projects.

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22.5.2 R&D Project or Program Initiator



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22.5.3 Facilities Project Initiator

1. Coordinate with the Environmental and Historic Preservation Office early in the project development.
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- [REDACTED]

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22.5.4 Environmental Services Office, Code QE

1. Assist the project/program initiator as needed.
2. Serve as the focal point for all required off-center coordination (NASA Headquarters, other Federal agencies, state and local agencies, public organizations, etc.)
3. Review and concur on appropriate environmental analysis including NEPA documentation and technical studies.
4. Prepare REC (see Appendix C, [section 22.9.3](#)).
5. Prepare an annual Environmental Monitoring Report that contains the environmental documentation for a given fiscal year.
6. Process Findings of No Significant Impact (FONSI) and EAs in accordance with NHB 8800.11 to include the following actions:
 - Review Draft EA (DEA) for adequacy.
 - Prepare FONSI.
 - Coordinate approval with ARC Center Director and approving officials at NASA Headquarters Code JE.
 - Publish notices in local papers. Coordinate the distribution of the FONSI with other Federal, state, and local agencies, as well as with organizations and individuals.
 - Maintain mailing lists.
 - Respond to public comments.
 - The FONSI on actions that are state or local in scope shall be published in a regional or local newspaper. The FONSI on actions that are national in scope shall also be published in the Federal Register. The public shall be allowed 30 days to comment on the finding, and supporting information shall be readily available on request.
7. Process EISs in accordance with NPR 8580.1, Implementing The National Environmental Policy Act And Executive Order 12114 to include the following actions:
 - Prepare Notice of Intent (NOI) to prepare an EIS.
 - Coordinate approval with NASA Headquarters Code JE for publication of NOI in the *Federal Register*.
 - Publish notices in local papers.
 - Organize public scoping meetings.
 - Assist in scoping and review of technical studies as needed.
 - Assist in developing DEIS and FIES.
 - Participate in internal review of the Draft EIS (DEIS) and plan for coordination with other Federal, state, and local agencies, organizations, and individuals.
 - Maintain mailing lists.
 - Submit DEIS to the EPA, through NASA Headquarters Code JE. Subsequent to NASA Headquarters Code JE approval the public shall have a minimum of 45 days from the date the EPA's public notice of availability of the DEIS is published in the *Federal Register*.
 - Publish NASA's Notice of Availability of DEIS in the *Federal Register* and/or local news media.
 - Coordinate review of the DEIS and Final EIS (FEIS) by other Federal, state, and local agencies, as well as by organizations and interested parties.
 - Hold public comment meetings, as needed.
 - Prepare or review responses to comments on both the DEIS and FEIS.
 - Provide for public noticing and availability of the DEIS.
 - Prepare, coordinate, and approve the Record of Decision (ROD) with Headquarters Code JE, following the completion of the FEIS. Specific criteria contained in NPG 8580.1, Chapter 6.4 section 6.4.7.1 (f) pertaining to ROD's shall be followed.

8. Maintain and update the ARC Environmental Resources Document (ERD) as needed.
9. Track mitigation measures.

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22.6 Definitions

22.6.1 Categorical Exclusion (CatEx)

An exclusion from NEPA that is granted to project actions that do not individually or cumulatively have a significant effect on the environment. Specific NASA actions that normally can be covered by a CatEx include:

1. Research and development activities in:
 - Space science (other than specific spacecraft development and flight projects).
 - Space and terrestrial applications (other than specific spacecraft development and flight projects).
 - Aeronautics and space technology and energy technology applications (other than experimental projects that have the potential for substantial environmental impacts).
 - Space transportation systems engineering and scientific and technical support operations, routine transportation operations, and advanced studies.
 - Space tracking and data systems.
2. Facility planning and design (funding).
3. Minor construction of new facilities including rehabilitation, modification, and repair.
4. Continuing operations of a NASA installation at a level-of-effort, or altered operations, provided the alterations induce only social or economic results but no (or minimal) natural or physical environmental effects.

Note: Even though an action may be categorically excluded from the need for a formal EA or EIS, the action is not excluded from the requirement for an environmental analysis during the earliest planning phases. If the analysis shows that the action deviates from the criteria for exclusion and a review of the analysis concludes that there may be significant environmental consequences, an EA must be carried out. Based upon that assessment, a determination must then be made whether or not to prepare an EIS.

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22.6.2 Cooperating Agency

A Federal agency, other than the lead agency, that has legal jurisdiction or special expertise to comment on the project actions of a lead agency.

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22.6.3 Cumulative Effects

Effects resulting from incremental consequences of an action, when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (Federal or non-Federal) or person undertakes such actions.

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22.6.4 Environmental Assessment (EA)

A concise public document that:

1. Provides brief but sufficient evidence and analysis to determine whether an EIS needs to be prepared.
2. Aids an agency's compliance with NEPA when an EIS is not necessary.
3. Facilitates preparation of an EIS when necessary.
4. Specific NASA actions that normally require an EA include, but are not limited to:
 - Specific spacecraft development and flight projects in space science.
 - Specific spacecraft development and flight projects in space and terrestrial applications.
 - Specific experimental projects in aeronautics and space technology and energy technology applications which may have a substantial effect on the human environment.
 - Development and operation of new space transportation systems and advanced development of new space transportation and spacecraft systems.
 - Reimbursable launches of non-NASA spacecraft or payloads.
 - Major Construction of Facilities projects.
 - Actions to alter ongoing operations at NASA installations that could lead, either directly or indirectly, to natural or physical environmental consequences (a substantial increase in noise from wind tunnels or flight line, substantial increase in traffic, substantial increase in air emissions).

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22.6.5 Environmental Impact Statement (EIS)

A report that provides a full and fair discussion of significant environmental impacts and informs decision-makers and the public of the reasonable alternatives that would avoid or minimize adverse consequences or enhance the quality of the human environment. An EIS is an action-forcing device to insure that the policies and goals of NEPA are integrated into NASA programs and actions.

Specific NASA actions that are expected to significantly affect the human environment (and therefore normally require an EIS) include, but are not limited to:

- Development and operation of new launch vehicles.
- Development and operation of space vehicles likely to release substantial amounts of foreign materials into Earth's atmosphere or space.
- Development and operation of nuclear systems, including nuclear reactors and thermal devices used for propulsion and power generation, or both.
- Significant increase in noise exposure to the community from wind tunnels or flight line, significant increase in traffic, significant increase in noise, significant increase in air emissions).

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22.6.6 Environmental Resources Document (ERD)

A succinct centerwide report that characterizes all aspects of the installation's environment at the time of report preparation and describes the environmental consequences of the installation's existing operations. The ERD is used to assess the significance of subsequent proposed actions on the environment.

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22.6.7 Finding of No Significant Impact (FONSI)

A public document that reflects the agency's final decision and briefly presents the reasons why an action will not harm the human environment. A FONSI explains why the preparation of an EIS is unnecessary.

A FONSI on actions that are state or local in scope shall be published in a regional or local newspaper. The FONSI on actions that are national in scope shall also be published in the *Federal Register*. The public shall be allowed 30 days to comment on the finding, and supporting information should be readily available upon request.

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22.6.8 Indirect Effects

Effects (caused by an action) that occur later or at another location, but that are reasonably foreseeable.

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22.6.9 National Environmental Policy Act (NEPA)

Federal legislation that establishes environmental policy for the nation. NEPA requires that Federal agencies take the environmental consequences of their actions into consideration before beginning a project and that agencies consider less harmful alternatives to their proposed activities. NEPA is also an environmental disclosure statute, providing procedural requirements to ensure all Federal agencies are in compliance.

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22.6.10 Notice of Availability

A written notice published in the *Federal Register* and/or local news media that announces the availability of a draft or final EIS for public review.

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22.6.11 Notice of Intent (NOI)

The first formal step in the EIS process. The NOI consists of a public notice with the following information: a description of the proposed action and alternatives; a description of the agency's proposed scoping process, including scoping meetings; and the names and addresses of the persons to contact within the lead agency about the EIS.

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22.6.12 Record of Decision (ROD)

A public document that reflects the agency's final decision, rationale behind that decision, and commitments to monitoring and mitigation. The ROD is signed by the ARC Center Director and Headquarters Code JE, kept in the program's official files, and made available on request. The ROD is not published in the *Federal Register*.

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22.6.13 Record of Environmental Consideration (REC)

A document that specifies whether a proposed action qualifies for a CatEx, requires an EA, or requires an EIS.

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22.7 NEPA Management

22.7.1 Required Actions

1. Offices initiating actions must prepare an Environmental Checklist and, as applicable, an EA or EIS in accordance with the requirements of NPG 8580.1, Implementing The National Environmental Policy Act And Executive Order 12114 and other relevant environmental laws, regulations, and Executive Orders. Early involvement enables agencies to efficiently address issues that may arise during the NEPA process. A copy of the Environmental Decision Points is included in this chapter (see Appendix F, section 22.9.6).
2. The Environmental Office (Code QE) monitors on-going activities to ensure compliance with the NEPA.

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22.7.2 Project Implementation

No construction or implementation of any Federal action requiring NEPA review may commence prior to finalization of NEPA documentation. This includes the mandatory 30-day public review period following finalization of a FONSI for an EA or ROD for an EIS.

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22.8 Metrics

- a. Percent of Programs & Projects with NEPA documentation, thus avoiding project impacts (e.g., Mars Rover).
Goal: 100%.
- b. Percent of NEPA documents reviewed within project schedule.
Goal: 100%.
- c. Percent of activities requiring public participation receiving public outreach from ARC.
Goal: 100%.
- d. Percent of projects with environmental requirements identified during the planning phase.
Goal: 100%.

22.9 Sources of Additional Information or Assistance

1. Environmental Services Office [REDACTED]
2. NPG 8580.1, Implementing The National Environmental Policy Act And Executive Order 12114
3. Environmental Resources Document, available by contacting the Environmental Services Office

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22.10 Appendices

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