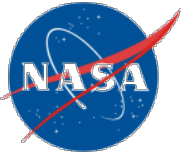


NEPA Overview: NASA GSFC

MAY 2021





NEPA Overview

Wallops Contact:

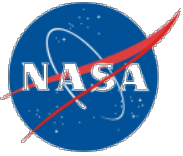
- Shari Miller, Center NEPA Manager
shari.a.miller@nasa.gov
757-824-2327

Greenbelt Contact:

- Beth Montgomery, Center NEPA Manager
lizabeth.r.montgomery@nasa.gov
301.286.0469

HQ Contact:

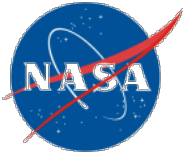
- Tina Norwood, NASA NEPA Manager
tina.norwood@nasa.gov
202-358-7324



NEPA Overview

Objectives:

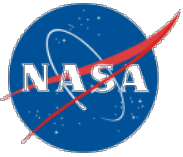
- Become aware of the National Environmental Policy Act (NEPA) requirements
- Role of the PM, Facility Planner, and Engineers in implementing NEPA
- Importance of not avoiding the requirements
- Know who to contact for help



NEPA Overview

Why was NEPA enacted?

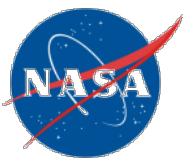
- Due to public concern over damage to the environment.
- To require federal agencies to consider environmental effects when program and project decisions are planned.



NEPA Overview

Two major objectives of NEPA:

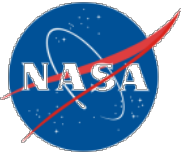
- Ensure agencies consider environmental effects of proposed action prior to a decision to implement action.
- Sustainable within the environment—
prevent, minimize or mitigate environmental damage.



NEPA Overview

When does NEPA apply?

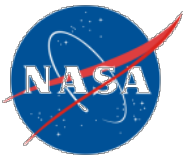
- *Federal actions* are defined as “projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by Federal agencies; new or revised agency rules, regulations, plans, policies, or procedures; and legislative proposals.”



NEPA Overview

Managers Must Ensure:

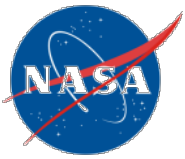
- Appropriate NEPA documentation is prepared
- Documentation is completed in a timely manner
- No final action is taken until NEPA action is complete
- Environmental commitments are implemented



NEPA Overview

NPRs that Apply:

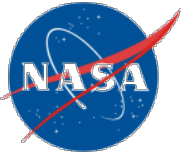
- NPR 8580.1 indicates who is responsible, and it is, for all intents and purposes, you.
- NPR 7120.5E, NASA Program and Project Management Processes and Requirements
- NPR 7120.8, NASA Research and Technology Program and Project Management Requirements
- NPR 8820.2F, Facility Project Implementation Guide.



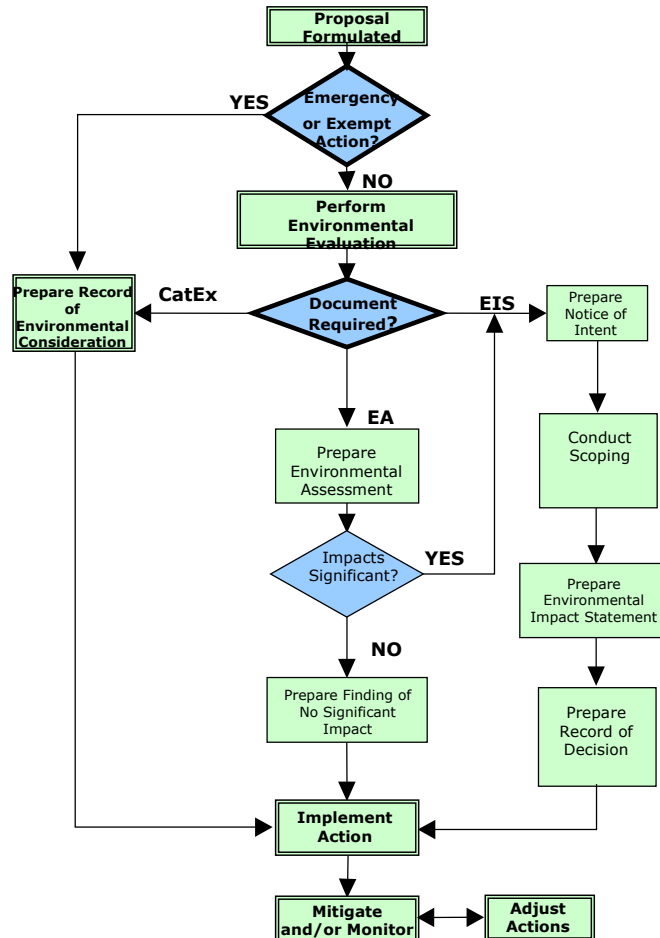
NEPA Overview

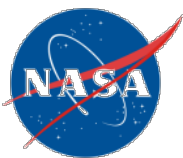
When to Start?

- During program or project formulation.
- Avoiding or delaying NEPA compliance can (and has) impacted NASA's mission schedule and cost.
 - Outrigger Telescopes, Cassini, Brown Univ.
- Litigation risk if the project avoids NEPA compliance.



NEPA Overview





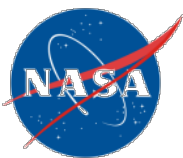
NEPA Overview

MOSI Environmental & Safety Review

- Provide background information so that Environmental and Safety can complete a review. Once complete, documents a CATEX.

<https://mosi.ndc.nasa.gov/EnvironmentalSafetyReview/index.xhtml>

A screenshot of the "Environmental and Safety Review" web application. The page has a dark blue header with the title "Environmental and Safety Review". Below the header is a navigation bar with buttons for "Home", "My Projects", "Greenbelt", "Wallops", and "Search". To the right of the navigation bar are two buttons: "Submit New Project" and "Role Management". The main content area is divided into two sections: "General" and "Training". The "General" section contains a welcome message: "Welcome to the GSFC Environmental & Safety Project Review System. This web application will walk you through gathering the data needed for the GSFC Environmental & Safety Office to review your proposed project and ensure compliance with multiple environmental and safety regulations. After submission, you will be able to access your submittal to view comments and the status. You will be notified via email once the review is complete." The "Training" section contains contact information: "The GSFC Environmental & Safety Office is happy to provide training in the use of this web application. Please do not hesitate to contact Lizabeth Montgomery (301.286.0469) and Robert Smith (301.286.0340) at Greenbelt and Shari Miller (757.824.2327) or Michelle Leimbach (757.824.2156) at Wallops."



NEPA Overview

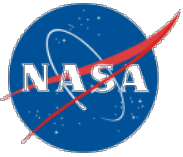
Environmental and Safety Review

[Submit New Project](#) [Role Management](#)

[Home](#) [My Projects](#) [Greenbelt](#) [Wallops](#) [Search](#)

[Under Review](#) [Open](#)

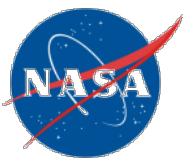
Projects under review						
Project#	Project Title	Submit Date	Type	Location	Review Due	Start Date
2020-141	Temp heat at Building E-109	7/01/2020	Repair/Renovation/Replacement	Wallops On-site	7/11/2020	8/01/2020
2020-147	B.H100 Chillers Condenser Coils Replacement	7/14/2020	Repair/Renovation/Replacement	Wallops On-site	7/24/2020	9/30/2020
2020-148	HELIOS	7/20/2020	Scientific Research and Testing (lab, field)	Wallops On-site	7/30/2020	1/04/2021
2020-149	B.F-7 Cleanroom Pressurization	7/21/2020	Installation of Equipment	Wallops On-site	7/31/2020	9/01/2020
2020-153	B.A-41 HVAC System Replacement	8/03/2020	Repair/Renovation/Replacement	Wallops On-site	8/13/2020	9/21/2020
2020-155	B.F-7 Divide Room 110	8/10/2020	New Construction	Wallops On-site	8/20/2020	9/07/2020
2020-158	B.Y-15 Install Remote Fire Department Connection	8/24/2020	Repair/Renovation/Replacement	Wallops On-site	9/03/2020	11/02/2020
2020-159	Lease with Village of Ft Sumner	8/28/2020	Real Property Transactions (transfer, acquisition, disposal, leases)	Other Location	9/07/2020	8/29/2020



NEPA Overview

Levels of Environmental Documentation:

- I. Categorical Exclusion (CATEX) → Record of Environmental Consideration (REC)
- II. Environmental Assessment (EA) → Finding of No Significant Impact (FONSI)
- III. Environmental Impact Statement (EIS) → Record of Decision (ROD)



NEPA Overview

Categorical Exclusion

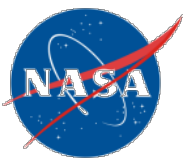
- Not an exclusion from the NEPA process
- Covers types of actions which in NASA's experience do not individually or cumulatively have a significant impact on the human environment
- Listed in NASA's NEPA Regulations
- Extraordinary circumstances may require a more detailed NEPA analysis; also listed in NEPA regulations



NEPA Overview

NASA's Approved Categorical Exclusions:

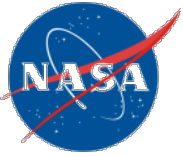
- (1) Administrative Activities (8 categories)
- (2) Operations & Maintenance (5 categories)
- (3) Research & Development (3 categories)
- (4) Real & Personal Property (5 categories)
- (5) Aircraft (2 categories)



NEPA Overview

If CatEx cannot be applied, Shari can assist you incorporating the EA/EIS process into your planning.

A FONSI needs to be published during the design phase (PDR/ KDP-C) (7120.5 and 7120.8).



NEPA Overview

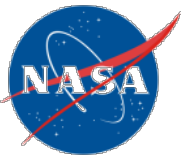
Environmental Assessment

Purpose is to inform decision maker and determine if a more detailed study is needed

Decision document is either:

- Finding of No Significant Impact (FONSI)
- Notice of Intent (NOI) to prepare an Environmental Impact Statement

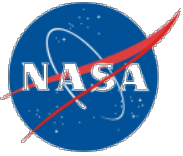
The Government produces around 50,000 EAs/FONSIs a year



NEPA Overview

Actions Requiring Environmental Assessments:

- (1) Specific spacecraft development and space flight projects/programs.
- (2) Actions altering the ongoing operations at a NASA Center which could lead directly, indirectly, or cumulatively to substantial natural or physical environmental impacts.
- (3) Construction or modifications of facilities which are not minor.
- (4) Proposed actions that are expected to result in significant changes to established land use.
- (5) A space flight project/program that would return extraterrestrial samples to Earth from solar system bodies (such as asteroids, comets, planets, dwarf planets, and planetary moons), which would likely receive an Unrestricted Earth Return categorization.



NEPA Overview

National Aeronautics and
Space Administration



Final Environmental Assessment

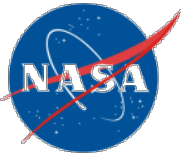
NASA Wallops Flight Facility
Shoreline Enhancement and Restoration Project

June 2019

*In Cooperation with:
Bureau of Ocean Energy Management
U.S. Army Corps of Engineers*



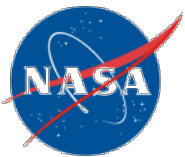
www.nasa.gov



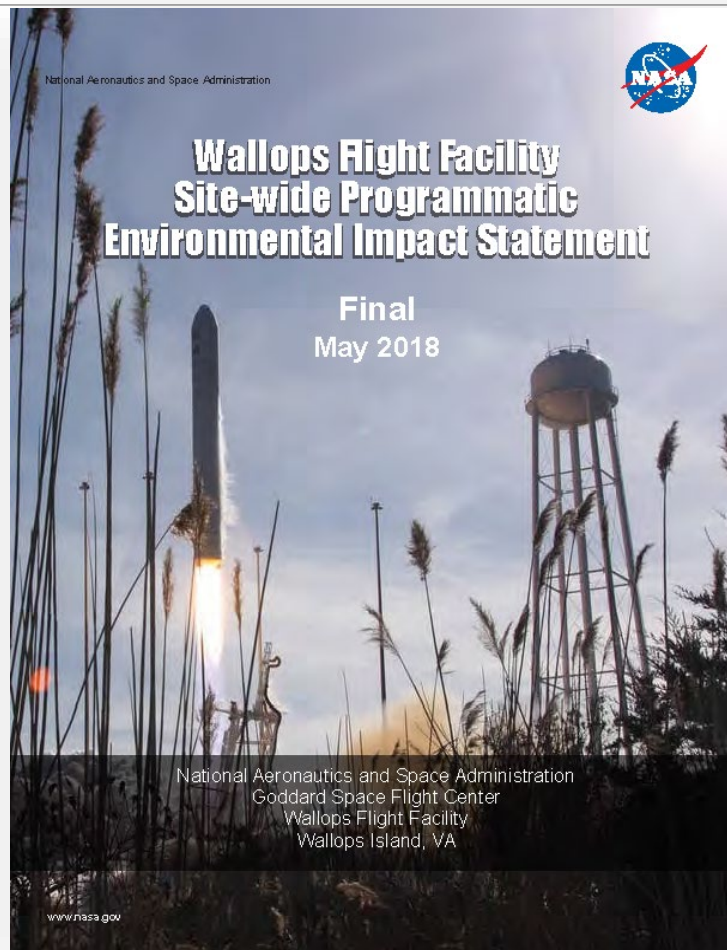
NEPA Overview

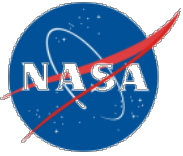
Environmental Impact Statement (EIS)

- (1) Development and operation of new launch vehicles or space transportation systems.
- (2) Development and operation of a space flight project/program which would launch and operate a nuclear reactor or radioisotope power systems and devices using a total quantity of radioactive material greater than the quantity for which the NASA Nuclear Flight Safety Assurance Manager may grant nuclear safety launch approval.
- (3) Development and operation of a space flight project/program which would return samples to Earth from solar system bodies (such as asteroids, comets, planets, dwarf planets, and planetary moons), which would likely receive a Restricted Earth Return categorization
- (4) Substantial modification of a NASA facility's master plan in a manner expected to result in significant effect(s) on the quality of the human environment.
- (5) Substantial construction projects expected to result in significant effect(s) on the quality of the human environment, when such construction and its effects are not within the scope of an existing master plan and EIS.



NEPA Overview

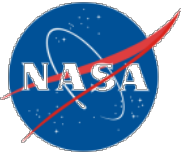




NEPA Overview

EO 12114: Environmental Effects Abroad of Major Federal Actions

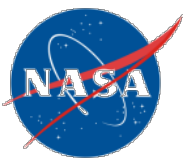
- Requires agencies to conduct environmental analyses for some actions taken abroad
- Ensures environmental analysis of those actions, or portions of actions, taken abroad where required by the EO



NEPA Overview

Cooperating Agencies

- Council on Environmental Quality's (CEQ) NEPA guidelines (specifically 40 CFR Part 1501.6) and CEQ's 2003 guidance on cooperating agencies
- A Cooperating Agency, as defined in 40 CFR §1508.5, is “any Federal agency other than a lead agency which has **jurisdiction by law** or **special expertise** with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment. A state or local agency of similar qualifications... may by agreement with the lead agency become a Cooperating Agency.”
 - **Jurisdiction by law** – authorize permits for the action
 - **Special expertise** – e.g., mission/technology, land-owners, subject matter expert



NEPA Overview

What You Need to Know

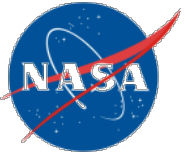
*Cost and schedule both depend on level of documentation triggered, as well as complexity of the action (i.e., potential environmental impact or public controversy).

	Cost	Schedule*	Public
CatEx	\$0	< 1 month	No
EA/FONSI	\$100K- \$400K	12-18 months	Yes
EIS/ROD	<\$2M	<2 yrs	Yes



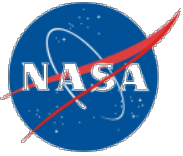
NEPA Overview

Questions?



NEPA Overview

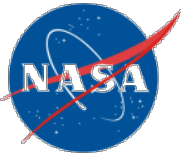
Background Material



NEPA Overview

(1) Administrative Actions:

- (i) Personnel actions
- (ii) Issuance of rules
- (iii) Program budget proposals
- (iv) Preparation of documents
- (v) Informational-gathering exercises
- (vi) Preparation and dissemination of information
- (vii) Software development
- (viii) Contract amendments

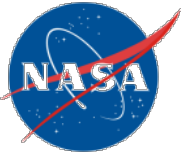


NEPA Overview

(2) Operations and Management Activities:

- (i) Routine maintenance, minor construction or rehabilitation, minor demolition, minor modification, minor repair, and continuing or altered operations at, or of, existing NASA or NASA-funded or – approved facilities and equipment, such as buildings, roads, etc.
- (ii) Installation or removal or equipment.
- (iii) Contribution of equipment, software, technical advice, exchange of data, and consultation to other agencies.
- (iv) Routine packaging, labeling, storage, and transportation of hazardous materials and wastes, in accordance with law.

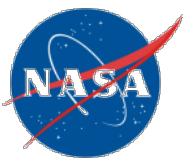
§1216.304



NEPA Overview

(3) R&D Activities:

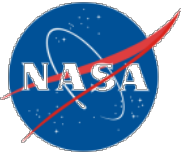
- (i) Research, development and testing in compliance with laws.
- (ii) Use of small quantities of radioactive material in a laboratory or field.
- (iii) Use of lasers for research and development (applies lasers in spacecraft, aircraft, laboratories).



NEPA Overview

(4) Real and Personal Property Activities:

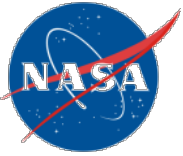
- (i) Acquisition, transfer, or disposal of any personal property, or personal property rights or interests.
- (ii) Granting or acceptance of easements, leases, licenses, rights-of-entry, and permits to use NASA-controlled property, or any other real property, for activities which, if conducted by NASA, would be categorically excluded in accordance with this section.
- (iii) Transfer or disposal of real property or real property rights or interests if the change in use is one which, if conducted by NASA, would be categorically.
- (iv) Transfer of real property administrative control to another Federal agency and reporting of property as excess to GSA. Acquisition of real property (including facilities) where the land use will not change substantially.



NEPA Overview

(5) Aircraft and Airfield Activities:

- (i) Periodic aircraft flight activities, including training and research and development, which are routine and comply with applicable Federal, federally recognized Indian tribe, State, and/or local law or requirements, and Executive orders.
- (ii) Relocation of similar aircraft not resulting in a substantial increase in total flying hours, number of aircraft operations, operational parameters (e.g., noise), or permanent personnel or logistics support requirements at the receiving installation.



NEPA Overview

Extraordinary Circumstances

- (1) Has a reasonable likelihood of having (individually or cumulatively) significant impacts on public health, safety, or the environment.
- (2) Imposes uncertain or unique environmental risks.
- (3) Is of significantly greater scope or size than is normal for this category of action.
- (4) Has a reasonable likelihood of violating Federal, federally recognized Indian tribe, State, and/or local law or requirements imposed for the protection of the environment.
- (5) Involves impacts on the quality of the environment that are likely to be environmentally controversial.
- (6) May adversely affect environmentally sensitive resources, such as, but not limited to, federally listed threatened or endangered species, their designated critical habitat, wilderness areas, floodplains, wetlands, aquifer recharge areas, coastal zones, wild and scenic rivers, and significant fish or wildlife habitat, unless the impact has been resolved through another environmental review process; e.g., the Clean Water Act (CWA), the Coastal Zone Management Act (CZMA).
- (7) May adversely affect known national natural landmarks, or cultural or historic resources, including, but not limited to, property listed on or eligible for the National Register of Historic Places, unless the impact has been resolved through another environmental review process; e.g., the National Historic Preservation Act (NHPA).