

# National Environmental Policy Act

Overview for NASA GSFC Program and Project Managers

# NEPA Background

- **Signed into law** in 1970.
- Requires federal agencies to **consider the environmental** effects of their proposed federal actions **prior to making decisions**.
  - A **federal action** is defined as **new and continuing activities**, entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies; new or revised agency rules, regulations, plans, policies, or procedures; legislative proposals.
  - NEPA applies to most proposed NASA actions (programs and projects) regardless of the complexity (e.g., construction, demolition, alteration, operations and maintenance, real property actions).



# NEPA Integrated Within Lifecycle of Projects

- NEPA requires NASA to incorporate environmental considerations into planning and decision-making.
- **The NEPA process needs to be included in program and project cost and schedule.**

## Lifecycle of Facilities and Real Property Asset Management



## NEPA Compliance



# Levels of NEPA Analyses/Documentation

**Categorical Exclusion (CatEx)** is a category of actions which do not individually or cumulatively have a significant effect on the human environment. NASA CatEx's are set forth in regulations at 14 CFR 1216.304 and most are documented using an environmental checklist or a Record of Environmental Consideration

**Environmental Assessment (EA)** is a concise public document which provides sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact

**Environmental Impact Statement (EIS)** is a detailed written statement which analyzes the environmental impacts of a NASA proposed action on the natural and physical environment and the relationship of humans with that environment

# Budget for NEPA Analyses and Determinations

| Analysis | Impact Determination/<br>Decision Document                                 | Typical Timeframe<br>to Complete | Rough Order of<br>Magnitude \$ |
|----------|--|----------------------------------|--------------------------------|
| CatEx    | Environmental Checklist/<br>Record of Environmental<br>Consideration (REC) | 30 days                          | Minimal                        |
| EA       | Finding of No Significant<br>Impact (FONSI)                                | 9 - 12 months                    | ~\$300K                        |
| EIS      | Record of Decision (ROD)   | 18 – 24 months                   | ~\$2M                          |

# Process for NEPA Determination

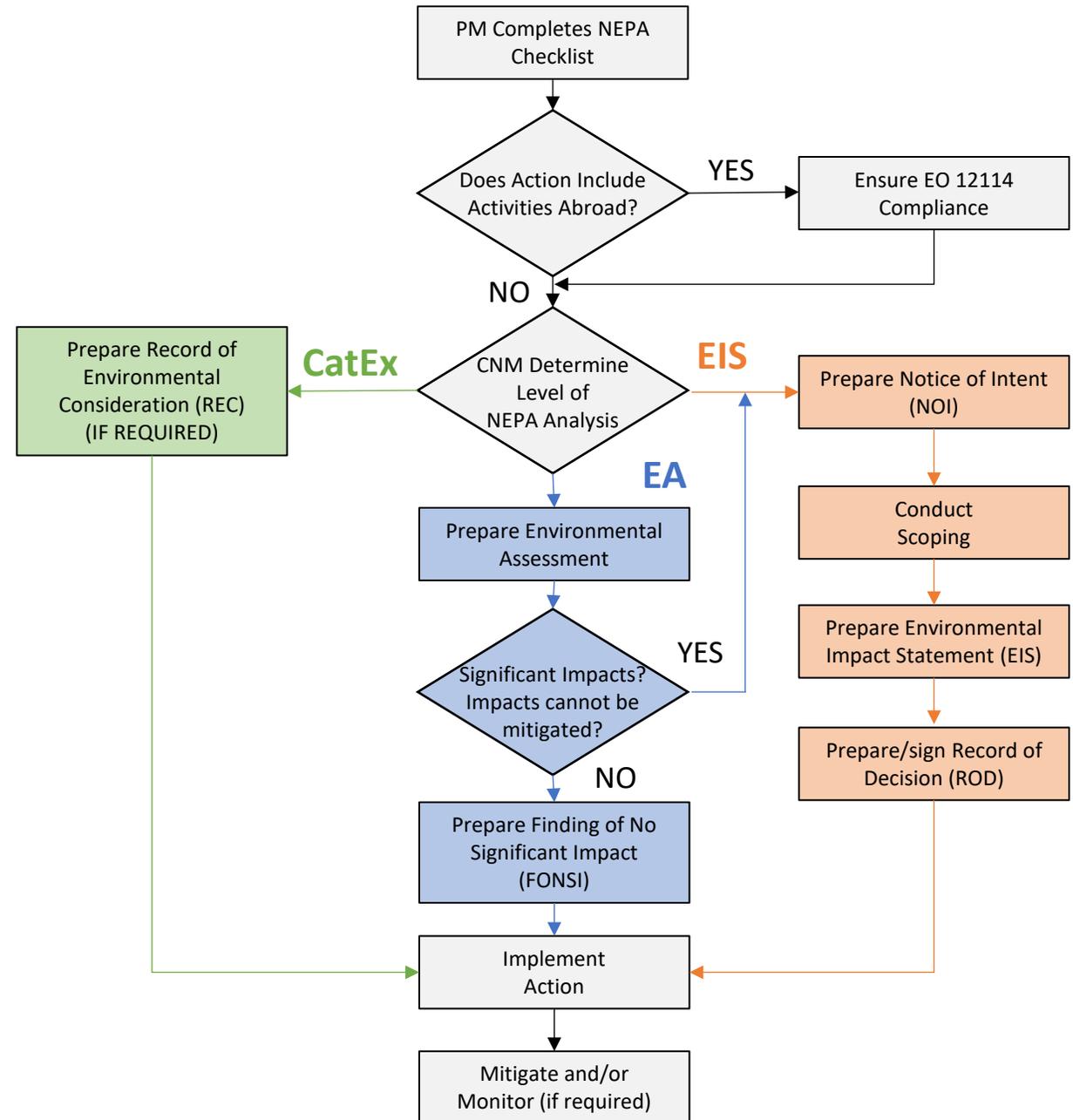
CNM = Center NEPA Manager

REC = Record of Environmental Consideration

EA = Environmental Assessment

EIS = Environmental Impact Statement

Source: NPR 8580.1A



# NEPA Checklist: Starts the NEPA Process

- The NEPA Checklist must be initiated for:
  - **Facility projects** including acquisition, design, construction, activation, operation, maintenance, renovation/modification, disposal/demolition, and installation of facilities, equipment, or processes (e.g., office build out, new clean tent, tree clearing);
  - Any **new or changes in existing projects**, activities, or processes that have environmental impacts (e.g., new process using toxic chemicals, installation of antenna);
  - **Acquisition** of property or leases (e.g., lease for new science site); and
- **What is excluded**:
  - Routine work that is performed using established processes with environmental controls in place (e.g., **ongoing O&M** activities);
  - **Minor modifications** that have low potential environmental impact (e.g., painting office, replacing ceiling tile); and
  - **Administrative activities**, (e.g., studies, etc.) that have low potential for environmental impacts.

# Categorical Exclusions (CatExs)

- CatExs are not **waivers** from the NEPA process
- NASA's NEPA regulations currently include **23 NASA CatExs** (14 CFR 1216.304).
- Most NEPA Checklists will result in a CatEx.
- CatExs apply to actions that (individually or cumulatively) do not have a significant effect on the quality of the human environment.
- NASA CatExs **provide NEPA coverage for most NASA actions** (~ 99%).
- Most proposed actions can be initiated following completion of a NEPA checklist.
- If, through the NEPA Checklist, the CNM determines a CatEx does not apply, the proposed action moves to the next step in the NEPA process.

# Common CatExs for Facilities and Real Property

1. 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, grounds, utilities, communication systems, and ground support systems, such as space tracking and data systems.
2. Installation or removal of equipment, including component parts, at existing government or private facilities.
3. 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. This assumes NASA has included any terms and conditions necessary to ensure protection of the environment and any required notices in the transfer documentation, as applicable.
4. 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 excluded in accordance with this section.
5. Transfer of real property administrative control to another Federal agency, including the return of public domain lands to the Department of the Interior (DOI) or other Federal agencies, and reporting of property as excess and surplus to the General Services Administration (GSA) for disposal.

# Environmental Assessment (EA)

- An EA is prepared when the proposed action falls **outside the scope of NASA's CatExs**.
- An EA is a **concise public document** which analyzes the environmental impacts of the proposed action and alternatives (including the No Action Alternative).
- The EA **informs the decisionmaker** of possible environmental impacts and determines if a more detailed study is needed.
- If the analysis in the EA supports the **conclusion that no significant impacts** would occur, or that anticipated impacts can be mitigated, a Finding of No Significant Impact (FONSI) is prepared, and the action can proceed.
- **If** analysis reveals that **significant impacts** which cannot be mitigated would occur from the proposed action, an Environmental Impact Statement (**EIS**) **must be prepared**.

# Example Facilities Action EA

**White Sands Test Facility 300 Area Altitude Capability Demolition Project EA:** NASA proposes to significantly modify the propulsion testing capability within the 300 Area, a highly specialized rocket and spacecraft engine propulsion testing area that can provide engine testing at both altitude and ambient conditions. NASA proposes to demolish, repair, and potentially replace several properties and related infrastructure within the footprint of the 300 Area which would remove all altitude testing capabilities and convert the area to an ambient-only testing capability. Additionally, portions of the facilities and equipment may be reconditioned and consolidated within the 400 Area propulsion test capability.

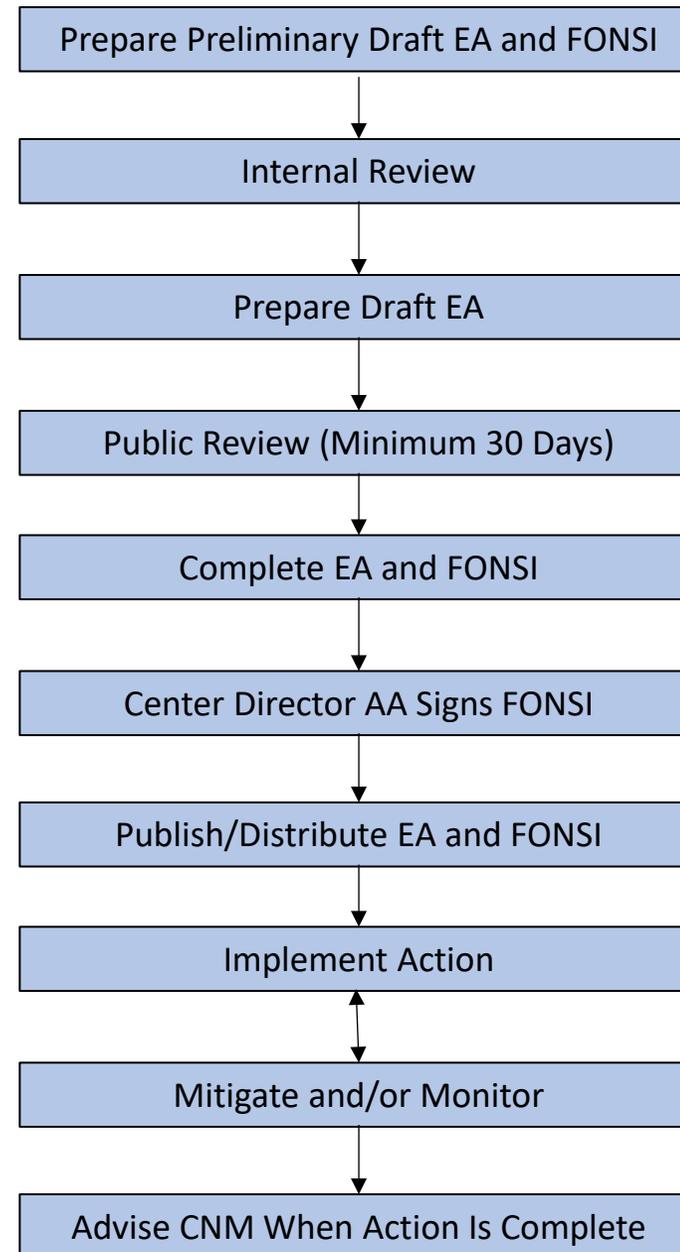


# EA Process

(assumes a FONSI)

Multi-centered, multi-enterprise or controversial EAs are prepared in consultation with Headquarters' Environmental Management Division (EMD).

Source: NPR 8580.1A



# Environmental Impact Statement (EIS)

- An EIS documents the most detailed and rigorous level of NEPA analysis and is used as a planning and decision-making tool **when significant adverse environmental impacts are likely**.
- The EIS process is more complicated than an EA and involves more interaction with Headquarters, the public, and other government agencies.
- NASA actions normally requiring an EIS include:
  - 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.
  - 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.

# EIS Key Elements

- Scoping meetings may be held at the start of the EIS to refine the proposed action and alternatives.
- The draft document is made available for a 45-day public review and comment period.
- The decision document is a Record of Decision (ROD), and the proposed action cannot proceed until a ROD is signed.
- There is a 30-day period between the Notice of Availability (NOA) for the Final EIS and issuing the ROD.
- The signed EIS and ROD are posted on NASA's Public NEPA website.

# Example Real Property Action EIS

**Navy Pacific Missile Range Facility and NASA Kōkeʻe Park Geophysical Observatory Real Estate EIS:** The Navy proposes to retain the use of 8,172 acres of state lands on Kauaʻi, Hawaiʻi, for operational continuity and sustainment, in support of continued military training, testing, and facility operations at the Pacific Missile Range Facility (PMRF). NASA Goddard Space Flight Center proposes to retain the use of 23 acres of state lands on Kauaʻi, Hawaiʻi, in support of continued operations including measurements of the Earth's rotation and local land motion at Kōkeʻe Park Geophysical Observatory (KPGO).



<https://pmrf-kpgo-eis.com/>

# EIS Process

(Assumes a ROD)

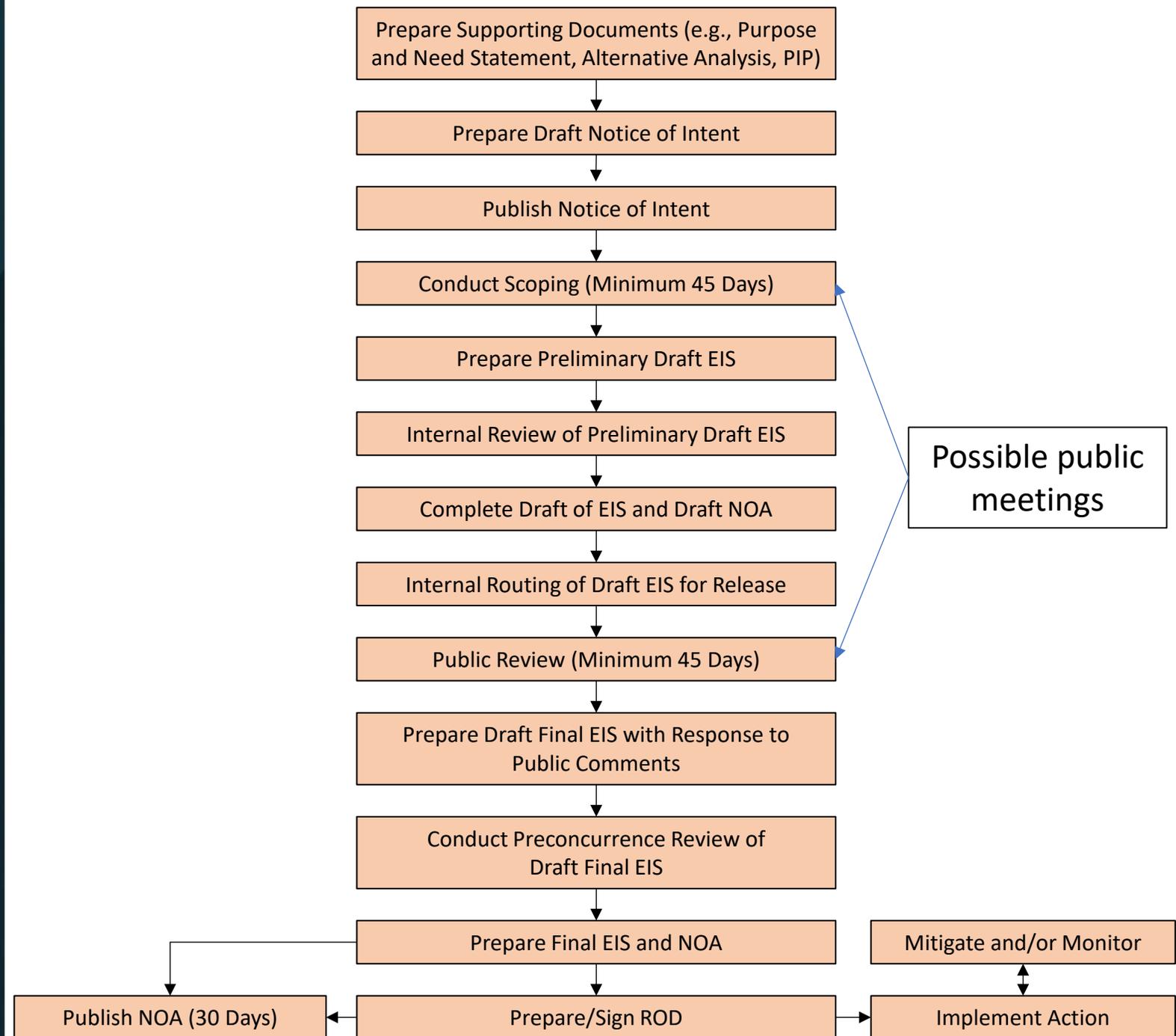
Includes coordination with Headquarters EMD.

EIS = Environmental Impact Statement

NOA = Notice of Availability

PIP = Public Involvement Plan

Source: NPR 8580.1A



# Programmatic NEPA Documents

- Programmatic NEPA documents address broad actions that may include several phases or involve common elements such as groups of geographically related projects, and/or projects with relevant similarities (e.g., common timing, impacts, alternatives, methods of implementation, subject matter, or affected media).
- **Key Elements of a Programmatic NEPA document:**
  - avoids segmenting environmental analyses of common concerns by analyzing them in the entire program or suite of related or similar actions.
  - simplifies preparation of subsequent “tiered” NEPA documents addressing sub-elements of the broad action previously analyzed in a programmatic NEPA document.
  - programmatic analyses may take the form of a REC, EA, or EIS.
- The CNM must be consulted before initiating a Programmatic NEPA document.

# NASA Programmatic NEPA Documents

Before assuming you need to prepare an EA or EIS, check with your Center NEPA Manager to see if your mission or Construction of Facilities (CoF) project fits within an existing programmatic NEPA document.

Examples of NASA Programmatic NEPA Documents include:

Center Master Plan Implementation Programmatic NEPA Documents (EA or EIS)

WFF Shoreline Restoration and Infrastructure Protection Program (SRIPP) Programmatic EIS

Space Shuttle Program Transition and Program Property Disposition Programmatic EA

# Supplemental NEPA Documents

After preparing an EA or EIS for a project, NASA may need to prepare a Supplemental EA or EIS when:

- NASA makes substantial changes to the proposed action that are relevant to environmental concerns; or
- There are significant new circumstances or information (e.g., changed baseline conditions or new analytical methodologies) relevant to environmental concerns and bearing on the proposed action or its impacts

NASA NEPA guidance recommends agencies re-examine NEPA documents that are more than five years old to ensure the environmental analysis is still valid.

- Preparing an EA or EIS within five years of the planned start date (e.g., groundbreaking) may help avoid the need to prepare Supplemental EAs or EISs.
- Notify your Center NEPA Manager of changes to your project that are being considered. They can assist you in determining if a supplemental analysis is needed.

# NASA Supplemental NEPA Documents

**Johnson Space Center Building 24 Combined Heat and Power (CHP):** NASA prepared a Supplemental EA for revisions to the design and facility layout for the CHP facility previously described in the 2014 EA. The Proposed Action in the SEA relocated the CHP equipment from being entirely contained within a two-story expansion of the existing Building 24 to outside of the building and included construction of an additional small building and parking lot expansion.



# NEPA Commitments

- During the NEPA process, commitments (through permits or regulations) may be agreed-upon to lessen or mitigate (restore, enhance, avoid, minimize, and/or replace) environmental impacts from the action.
- Failure to comply and/or follow-through with these commitments can result in fines, project delays, and criminal charges against individuals associated with the action.
- Environmental commitments can require implementation at any point in the project development process and during ongoing O&M.
- Environmental commitments can be as simple as a requirement for seasonal work restrictions or as complex as a treatment plan for cultural resources.
- Environmental commitments made during the NEPA process must be integrated into project/program cost and schedule.



For more information, visit the  
NASA NEPA website at  
<https://www.nasa.gov/emd/>

and the NASA NEPA SharePoint at  
[https://nasa.sharepoint.com/sites/  
EME-NEPA/](https://nasa.sharepoint.com/sites/EME-NEPA/)

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