

Chapter 2.3

Pre-use analysis

1. Applicability of this chapter

You are required to follow this chapter if you are a line manager at any level.

2. Description of Sub-element 2.3

JSC shall analyze all newly acquired or altered facilities, processes, materials, equipment, or phases before use begins to identify safety and health hazards, environmental impacts, and the means to prevent or control them.

3. Requirements

JSC handles pre-use analyses as follows:

- a. For new or modified facilities and proposed programs or projects (such as Construction of Facilities, and lesser funding levels):
 1. Safety, health, and fire protection engineers shall review the drawings and participate in design reviews. All new or modified facilities require at least acceptance inspections and tests of fire protection systems. See Chapter 10.1 of this Handbook for more details.
 2. You shall make sure an environmental review is done during the planning phase as described in JPR 8550.1, “JSC Environmental Compliance Procedural Requirements.” The “environmental review” is required by the National Environmental Policy Act (NEPA) to identify and assess the potential environmental effects for proposed programs and projects. The Project Manager conducts the environmental review during the earliest planning stages, before the point when NASA’s ability to implement reasonable alternatives is precluded.
- b. Hazardous, unique, or critical facilities require an operational readiness inspection or use readiness review as described in Chapter 10.3 of this Handbook. Hazard analyses are included.
- c. Less hazardous facilities may have a less rigorous readiness review that uses Chapter 10.3 of this Handbook as a guide. Hazard analyses are included. The following checklists are available to document a review and may be customized to the situation:
 1. New equipment checklist at URL:
http://www6.jsc.nasa.gov/safety/Checklists/docs/New_Item_Cklist.docx.
 2. Configuration management checklist template at URL:
http://www6.jsc.nasa.gov/safety/Checklists/docs/Config_Change_Cklist.docx.

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- d. Ground tests that could pose hazards to test subjects or test personnel shall have a Test Readiness Review as described in Chapter 6.9 of this Handbook. Hazard analyses are included.
- e. Hazardous materials require a hazard analysis as described in Chapter 9.1 of this Handbook.
- f. Employees in potentially hazardous jobs shall have a Job Hazard Analysis as described in Chapter 2.4 of this Handbook.

4. Responsibilities

Responsibilities for pre-use analyses are as follows:

- a. As a *line manager*, you are responsible for:
 - 1. Making sure the analyses in paragraph 3 above are done as required.
 - 2. Making sure the Safety and Test Operations Division and the Clinical Services Branch are involved in evaluating any new facilities, equipment, materials, or processes and any changes to your facilities, equipment, materials, or processes.
- b. The *Center Operations Directorate* is responsible for:
 - 1. Notifying the Safety and Test Operations and Clinical Services Branch of plans for new or modified facilities, and providing drawings and notice of design reviews.
 - 2. Conducting environmental reviews according to JPR 8550.1.
- c. The *Safety and Test Operations Division* and the *Clinical Services Branch* are responsible for:
 - 1. Reviewing facility drawings for safety and health.
 - 2. Supporting design reviews, Test Readiness Reviews, and operational readiness inspections as needed.

5. Safety and health records

Records to document pre-use analyses may include:

- a. For new or modified facilities, center-level records include:
 - 1. Design review of documentation and acceptance test and inspection records kept by the Center Operations Directorate.
 - 2. Records of safety and health comments kept by the Safety and Test Operations Division or Clinical Services Branch.
 - 3. Records of the NEPA environmental reviews kept by the Environmental Office.

- b. If an operational readiness inspection is done on a facility, the organization that owns the facility shall keep a copy of the operational readiness inspection package as described in Chapter 10.3 of this Handbook.
- c. For less hazardous facilities, where a less rigorous readiness review was done, the organization that owns the facility shall keep a copy of the review package.
- d. Organizations that do hazardous ground testing that could pose hazards shall keep Test Readiness Review documentation.
- e. Hazard analysis, as described in Chapter 2.4 of this Handbook, also supports this sub-element.