

# Chapter 1.0

## JSC's safety and health program

### 1. JSC safety and health policy

The following is JSC's safety and health policy:

- a. All mishaps can be prevented.
- b. You must remove or control hazards at work.
- c. Management will help you maintain a safe workplace.
- d. Training employees to work safely is essential.
- e. Your continued employment depends on working safely and watching out for others.
- f. Working safely will result in the best possible performance.

### 2. JSC's safety and health program

JSC's safety and health program shall meet or exceed NASA, federal, and OSHA Voluntary Protection Program (VPP) requirements. JSC is a VPP Star site and continues to improve its program beyond minimum requirements. JSC's program is organized around the following four major elements:

- a. Management Leadership and Employee Involvement (Part 1 of JPR 1700.1)
- b. Worksite Analysis (Part 2 of JPR 1700.1)
- c. Hazard Prevention and Control (Part 3 of JPR 1700.1)
- d. Safety and Health Training (Part 4 of JPR 1700.1)

Each major element is divided into sub-elements as described in each chapter or Parts 1–4. Parts 5–11 of JPR 1700.1 provide requirements for working safely and healthfully.

### *Basic requirements and rights*

### 3. Basic requirements of JSC's safety and health program

The following requirements are basic to JSC's safety and health program:

- a. Management leadership and employee involvement from all line organizations is critical to the success of JSC's program. Without your commitment and participation, JSC's safety and health program cannot function to provide a safe and healthy workplace and reach our goal of zero injuries. Safety and health is an integral part of each manager's responsibilities and of each employee's job.
- b. JSC will continually strive to meet its goal of zero injuries. To remain in VPP, we need to maintain 3-year average rates for injuries and illnesses that are below the most recent national average for JSC's Standard Industrial Classification Code. The Bureau of Labor

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Statistics publishes these averages. Note: When the Bureau of Labor Statistics changes to the North American Industry Classification System (NAICS), JSC will compare its rates to the rates generated under NAICS.

- c. JSC shall take all practical steps to avoid loss of life, injury to personnel, property loss, mission failures, and test failures. Every JSC team member, full-time or part-time, is entitled to a safe and healthful workplace.
- d. Even though this is everyone's responsibility, personnel from the Safety and Mission Assurance Directorate and the Occupational Health Branch have authority to stop any operations that pose a clear, present, and unwarranted danger to any person or NASA property. Don't resume these operations until the danger is removed.
- e. We need to have open lines of communication between safety and health personnel and other disciplines, such as product and quality assurance, biomedical operations and research, life sciences projects, and human factors projects.
- f. JSC's safety and health program shall be proactive rather than reactive. This means preventing mishaps by finding and controlling hazards before mishaps occur.
- g. We need to thoroughly assess and reduce or accept risk to NASA personnel, equipment, and operations. At no time will we violate federal safety and health requirements in accepting risk. See paragraph 1.6 of NPR 8715.3.
- h. We need to pay special attention to facilities involving multiple organizations, contractors, and shifts. In these facilities:
  - 1. Clearly define safety and health responsibilities.
  - 2. Promptly communicate safety and health information to all people.
- i. We need to learn from our mistakes, constantly improve our program, and share our lessons with others.

### **4. Your rights under JSC's safety and health program**

At JSC you have the same rights under the Occupational Safety and Health Administration (OSHA) as you would at any workplace, including the right to contact OSHA with any safety or health concern you feel you cannot resolve at JSC. As a JSC employee or manager, you have the right to:

- a. Stop or refuse to do any task if you believe that:
  - 1. It will put you or your coworkers at risk of sudden death or serious injury.
  - 2. There is no time to resolve the matter through normal hazard reporting channels.
- b. Leave any area where imminent danger conditions exist as described in subparagraph a above.
- c. Report hazards and have your name kept confidential as described in Chapter 2.6 of this Handbook. This includes the right to contact OSHA about safety and health concerns.

- d. Be a member of, or be represented on, safety and health committees.
- e. Participate in safety or health activities without having to take leave.
- f. Be trained about the hazards of your job and how to protect yourself.
- g. Have access to the following on request:
  - 1. Safety and health requirements that apply to your job
  - 2. Your medical exposure records and protection of your records under the Privacy Act of 1974
  - 3. JSC's Log and Summary of Occupational Injuries and Illnesses (OSHA Form 300)
  - 4. Results of inspections, hazard evaluations, and mishap investigations
- h. Have information about JSC's safety and health program.
- i. Comment on NASA and JSC occupational safety and health requirements.
- j. Be free from restraint, interference, coercion, discrimination, or reprisal for:
  - 1. Reporting hazards.
  - 2. Participating in safety and health activities.
  - 3. Exercising any other rights you have from this Handbook or federal law.

## **5. Recourse if your rights are denied**

You have the full protection of the law should your rights be denied or threatened. This includes freedom from reprisals. NASA will respond promptly and fully to alleged denials or reprisals. The following apply:

- a. If you are a civil service employee, you may file a complaint or grievance. Your Human Resources representative can help you with the details. There are two official venues for filing a complaint or grievance:
  - 1. Grievance procedures in the agreement between JSC and the American Federation of Government Employees (AFGE) or in agreements with other recognized labor organizations
  - 2. The NASA Office of the Inspector General
- b. "Reprisals," or punitive sanctions or actions taken against you by any individual or entity for participating in the JSC safety and health program in any way, are illegal and subject to personnel action and possible prosecution. The Coordination Safety and Health Committee and JSC Management Council (JMC) shall be told of any allegations of reprisal.
- c. JSC shall send findings on any investigations of reprisal to NASA Headquarters and OSHA.

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- d. If you are a contractor, contact your safety and health office, your bargaining unit, or the JSC Safety and Test Operations Division.

### **6. Public safety**

We shall take measures to protect the general public from injury or illness from JSC operations by eliminating or controlling risks to the public. This includes public events on NASA property. Protecting the public includes:

- a. Analyzing JSC operations for hazards to the public and eliminating the risk to the public or providing protective measures when the risk cannot be eliminated.
- b. Restricting access to hazardous areas at JSC.
- c. Working with the outside communities to make the public aware of hazards from JSC operations.
- d. Working with local officials on emergency planning and community safety activities.

### **7. Commercial Activities**

Commercial entities that utilize NASA facilities for other than NASA-sponsored activities shall, at a minimum, comply with all applicable Federal, State, local requirements and all applicable national consensus standards. Applicable standards used in lieu of NASA provisions are referenced in this handbook and other standards may also apply. As a minimum, the NASA hazard analysis and review processes (chapters 2.3, 2.4, 6.9, and 10.3) apply. A Use Readiness Review (chapter 10.3), Test Readiness Review (chapter 6.9), or equivalent review (chapter 2.3) shall determine which more stringent NASA requirements apply to specific operations. The NASA facility management organization shall use the NASA hazard analysis and review process to ensure that all commercial operations in NASA facilities will not adversely affect NASA personnel, NASA contractor personnel, NASA assets, and the public.

### **8. Safety and health records**

The safety and health records listed in this Handbook document that we are following our safety and health program. Some records are center-level and some are organizational. You shall follow the current versions of JPR 1440.3, "JSC Files and Records Management Procedures," for keeping, archiving, or destroying records. Appendix 1 of this Handbook contains a summary of center-level, contractor, and organizational records JSC is required to maintain.

## *Committees and responsibilities*

## 9. Safety and health committees

The following Safety and Health committees oversee JSC's safety and health program and provide avenues to resolve safety and health issues:

- a. The *JSC Management Council* is responsible for overseeing JSC's Safety and Health Program as a part of the overall management of the center.
- b. The *Safety and Health Coordination Committee* supports the JMC by working safety and health issues and recommending providing direction, policy, strategy, and goals related to safety and health. See Chapter 1.1 for more information.
- c. The *JSC Safety Action Team* is an employee-run committee where employees can actively participate in providing inputs to, and resolving, safety and health issues. See Chapter 1.9 for more information.
- d. The *Contractor Safety Forum* is a contractor-run committee to review and resolve contractor safety issues and to provide inputs to JSC's safety and health program. The Contractor Safety Forum will work with the other JSC committees to investigate and resolve safety issues.

## 10. Top management responsibilities

Responsibility for safety and health begins with top management. The following is a list of general responsibilities for top management in addition to the general responsibilities of line managers in paragraph 11 of this chapter. Other chapters of this Handbook list responsibilities for specific elements or tasks:

- a. As the *Director, JSC*, you have the ultimate responsibility for providing a safe and healthful workplace at JSC and you responsible for:
  1. Delegating the day-to-day safety and health responsibility to the Designated Safety and Health Official.
  2. Approving variances to JSC safety and health requirements as described in Chapter 1.4.
- b. As the *Deputy Director, JSC*, you are the Designated Safety and Health Official for JSC. At each JSC field office, the office manager is the alternate designated safety and health official for that office. You are responsible for:
  1. Providing resources, guidance, and direction for implementing JSC's safety and health program.
  2. Making sure JSC's safety and health program is implemented per federal and NASA requirements.
  3. Making sure JSC has independent safety and health organizations to help, and ensuring that line organizations carry out JSC's safety and health program. These organizations include safety and health officials at appropriate levels and adequate

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personnel to carry out JSC's safety and health program. This includes Certified Safety Professionals and Certified Industrial Hygienists.

4. Making sure specialized expertise from other sources are available as necessary.
  5. Making sure all JSC organizations have adequate budgets to carry out JSC's safety and health program.
  6. Making sure JSC has requirements and procedures to carry out JSC's safety and health program.
  7. Making sure JSC has goals and objectives to reduce mishaps.
  8. Making sure JSC evaluates its safety and health program effectiveness.
  9. Setting priorities for correcting workplace hazards.
- c. As an **Organizational Director** (or a Manager of a Directorate-level Office), you are responsible for fulfilling the responsibilities of a line manager as described below and you are also responsible for:
1. Making sure JSC's safety and health program is implemented in your Directorate or Office. This includes developing and documenting a process to meet the requirements of paragraph 1.1.4 of this Handbook.
  2. Designating a representative for the Coordination Safety and Health Committee.

### 11. JSC team member responsibilities

You are a JSC team member if you do any work at JSC or JSC field sites. The term "team member" includes all civil service and contractor employees (full time, part time, and temporary), all levels of civil service and contractor management, and any other workers on JSC property. As a JSC team member, you are responsible for your own safety and health and for looking after the safety and health of other JSC team members. You are required to fulfill the responsibilities listed in other chapters of this Handbook that apply to your job. Your general responsibilities are:

- a. Following safety and health standards, rules, regulations, and guidelines issued by OSHA, NASA, and JSC.
- b. Correcting hazards yourself, if possible, use established procedures to report and correct hazards.
- c. Seeking prompt medical care if you suffer a job-related injury or illness.
- d. Promptly reporting mishaps (hardware, injuries, and illnesses) and close calls.
- e. Cooperating with safety and health personnel during inspections, surveys, and investigations.
- f. Using personal protective equipment when required to do so by safety and health standards, hazard evaluations, good work practices, or your supervisor.

- g. Being able to describe your individual responsibility for safety and health.
- h. Doing your job safely and responsibly.
- i. Making sure that visitors you escort are aware of the hazards in the areas they will visit and taking appropriate measures to protect themselves.
- j. Making sure that you are properly trained and qualified to safely perform your duties.

## 12. Line manager responsibilities

You are a line manager if you have any leadership responsibilities over employees, projects, or work areas. Line managers include all levels of management from the Director, JSC, to Team leads or equivalent contractor levels. You are required to fulfill the JSC team member responsibilities listed in paragraph 10 above and the responsibilities listed in other chapters of this Handbook that apply to your job. Your general responsibilities are:

- a. Setting an example of good safety and health practices by:
  - 1. Showing an interest in safety and health.
  - 2. Being involved in safety and health activities.
  - 3. Having strong personal safety and health awareness.
- b. Providing visible leadership in safety and health by:
  - 1. Showing your commitment to safety and health.
  - 2. Following up on safety and health matters.
  - 3. Attending safety meetings within your organization and including safety and health agenda items in your meetings.
- c. Providing a safe and healthful workplace by:
  - 1. Protecting your employees in imminent danger situations.
  - 2. Identifying hazards through hazard analyses, inspections, or other methods and controlling identified hazards as your resources allow. This includes hazards to the public.
  - 3. Making sure your employees follow the safety and health requirements that apply to their jobs.
  - 4. Making sure your employees immediately report hazards and mishaps to you.
  - 5. Making sure your employees receive appropriate medical care when injured at work.
  - 6. Making sure your employees and visitors to your work areas know the hazards in their workplace and duties, and what precautions they need to take to protect themselves (e.g., safety devices, caution and warning devices, and personal protective equipment).

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7. Enforcing safe practices. Reprimand employees for unsafe behavior, if necessary. Reward employees for excellent safety and health performance.
- d. Making sure your employees know about:
  1. JSC's safety and health program and the protection it gives them.
  2. Their rights and responsibilities from this chapter and federal law (e.g., Executive Order 12196, 29 CFR 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters," and 29 CFR 1977, "Discrimination Against Employees Exercising Rights Under the Williams-Steiger Occupational Safety and Health Act of 1970").
  3. How they can participate in safety and health activities.
  4. Disciplinary actions they can face for unsafe behavior.
  5. What to do in all emergencies.
- e. Reporting lessons you learn about safety and health to the Safety and Test Operations Division, Occupational Health Branch, and other organizations that may benefit.
- f. Making sure that you have a budget for such things as correcting hazards in your work areas and buying required safety equipment.
- g. Cooperating with and helping safety and health personnel.

### **13. Facility manager responsibilities**

As a facility manager, you are responsible for safety and health in your facility as well as fulfilling other facility responsibilities your management may assign. For more information, see the Facility Manager's Support Page at <http://www6.jsc.nasa.gov/ja/fmod/facilitymanagers.cfm>. You are required to fulfill the JSC team member responsibilities listed in paragraph 10 above and responsibilities listed in other chapters of this Handbook that apply to your job. Your general responsibilities are:

- a. Coordinating safety and health in your facility, including areas between organizational lines.
- b. Making sure that your facility and all operations in your facility follow federal, NASA, and JSC requirements.
- c. Coordinating with building occupants and the Center Operations Directorate, as necessary, to resolve facility-related safety and health issues.
- d. Making sure your building has a poster that tells you about NASA's and JSC's safety and health program. The Safety and Test Operations Division will provide a poster that meets 29 CFR 1960.12(c), "Dissemination of Occupational Safety and Health Program Information."
- e. Posting safety and health information and reports in your facility as necessary.

## 14. Contractor responsibilities

Contractors are a major part of JSC's workforce. All contractor employees and managers are JSC team members. Chapter 1.8 of this Handbook covers the process of selecting and overseeing safe contractors. Companies with JSC contracts are responsible for developing and maintaining safety and health programs that:

- a. Follow all requirements that apply to private sector employers, such as OSHA, state, and local requirements as well as NASA or JSC requirements imposed by contract.
- b. Flow appropriate safety and health requirements to their subcontractors.
- c. Protect other JSC team members who may be impacted by their operations.

## 15. Visitor and guest researcher responsibilities

As a visitor or guest researcher, you are responsible for:

- a. Making sure your work doesn't interfere with JSC facilities or operations.
- b. Knowing and following all safety and health requirements for the area where you are working. This includes using any required personal protective equipment.
- c. Being trained and certified for any hazardous operations you will be doing.
- d. Completing other occupational health and safety training, as necessary, to meet OSHA, NASA, and JSC requirements; e.g., hazard communication, lockout/tagout, and laser safety.
- e. Ensuring you get approval before bringing hazardous materials, radioactive materials, or biological agents on site.
- f. Before beginning work, getting any required reviews and approvals for the type of work you will do, especially where there are impacts to JSC operations (e.g., hot work or work with radiation or radioactive materials, chemicals, or biological agents).

## 16. Safety and Test Operations Division (NS) responsibilities

The Safety and Test Operations Division is responsible for:

- a. Overseeing safety at JSC.
- b. Supporting the line organizations as they implement JSC's safety and health program.
- c. Developing and maintaining selected center-wide safety processes such as mishap and close-call reporting.
- d. Providing safety training for JSC employees.
- e. Making sure NASA Safety Reporting System posters are posted in major buildings.
- f. Developing and maintaining a management system for tracking and advancing JSC's safety goals.

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### **17. Occupational Health Branch (SD3) responsibilities**

The Occupational Health Branch is responsible for:

- a. Overseeing occupational medicine and health at JSC.
- b. Supporting the line organizations in their occupational health responsibilities.
- c. Developing and maintaining selected center-wide health processes and programs such as hearing conservation, respiratory protection, ergonomics, hazard communication, hazardous materials, and confined space entry.
- d. Providing occupational health training for JSC employees.
- e. Evaluating work areas for health hazards, and communicating results to management and employees.
- f. Developing and maintaining a management system for tracking and advancing JSC's health goals.
- g. Communicating risk to management.

### *Handbook information*

### **18. Conflicts between this Handbook and the safety or health requirements of your organization**

This Handbook takes precedence over all other JSC documentation in safety and health, except for more stringent requirements that individual JSC organizations develop. The following requirements apply:

- a. If your organization has more stringent requirements than are in this Handbook, you shall follow them.
- b. In the case of differences between the requirements of this Handbook and other NASA, federal, state, or local requirements, you shall follow the more stringent requirements.
- c. If you find any less stringent JSC requirements than are in this Handbook, or any differences between the requirements of this Handbook and other NASA, federal, state, or local requirements, bring them to the immediate attention of the JSC Director, the Safety and Mission Assurance Directorate, or the Space Life Sciences Directorate.

### **19. How to use this Handbook**

You don't need to read this entire Handbook. You need to be familiar with the elements of JSC's safety and health program, and the requirements that apply to your job. Use the Handbook to find specific requirements, as you need them. This Handbook contains several features to help you find the requirements you need:

- a. Table of contents and index

- b. Subject index
- c. Chapter titles
- d. Chapter introductions that tell you who has to follow that chapter

**20. Which parts of this Handbook you need to follow**

You need to be familiar with all elements of JSC's safety and health program in Parts 1–4, You are required to follow any part of this Handbook that applies to your job. The table below tells you which parts apply to what job. You will find a similar table in the first chapter of each part.

<i>If your job or facility operations involve . . .</i>	<i>Then you shall follow . . .</i>
Any work at JSC or JSC field sites	Part 5, Safety and health practices for everyone
Working with batteries	Part 6, Safety and health requirements for certain hazardous tasks
Working with lasers	
Working in warehouses	
Preparing or serving food	
Working with cryogenic liquids or gases	
Handling new or unique hardware	
Working in chemical or research laboratories	
Doing test operations	
Entering confined spaces	
Working with compressed gases	
Working in noisy areas	Part 7, Health protection practices
Wearing a respirator	
Working with ionizing or nonionizing radiation	
Coming in contact with biohazards, blood, or body fluids	
Working in machine shops	Part 8, Safety and health practices for manufacturing, installation, repair, and maintenance
Working with electricity	
Welding, cutting, or brazing	
Lifting materials	
Working with hand or power tools	
Working on ladders, scaffolds, or elevated platforms	Part 9, Safety and health practices for hazardous materials
Working with or transporting hazardous materials	
Designing or constructing JSC facilities	Part 10, Safety and health practices for JSC facilities and facility systems
Operating hazardous or complex facilities	
Overseeing contracts or grants at JSC	Part 11, Safety and health requirements for JSC contracts and purchases
Participating on a Source Evaluation Board	

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<i>If your job or facility operations involve . . .</i>	<i>Then you shall follow . . .</i>
Working near or with asbestos-containing materials	Part 12, Asbestos Control Requirements

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