

**MPR 8715.1
REVISION H**

**EFFECTIVE DATE: December 3, 2009
EXPIRATION DATE: December 3, 2014**

MARSHALL PROCEDURAL REQUIREMENTS

QD01

MARSHALL SAFETY, HEALTH, AND ENVIRONMENTAL (SHE) PROGRAM

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DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		7/10/00	The MSFC SHE Program describes the MSFC occupational safety, health, and environmental (SHE) program. Emphasis is placed on the industrial safety portion of the SHE Program, but pointers are provided to the health and environmental program documents.
Revision	A	8/23/01	This document has been rewritten in its entirety.
Revision	B	2/20/2004	Improve wording, general update, incorporate new SHE Committee arrangement, align format with OSHA's VPP elements, revise and expand goals and objectives, document requirement for including safety in personnel performance evaluations, clarify how employees are involved in SHE Program, clarify contractor SHE requirements, incorporate new SHetrak and SSWP processes, add organization SHE award program, add organization level self-assessment and SHE employee SHE survey requirements, add annual SHE Program assessment and planning process, add baseline assessment requirements, document mishap awareness process, add work hour limitation guidelines, add disciplinary system, , update building manager rules, and add revised guideline for storage on top of furniture.
Revision	C	10/29/2004	Revised to bring document in compliance with the HQ Rules Review Action (CAITS: 04-DA01-0387). Changes were also made to reflect S&MA organizational name changes (i.e., QS to QD). Revised safety and health goals and objectives.
Revision	D	1/17/2006	Clarify safety training requirements for non-contractor (grants, etc.) type employees. Clarify inspection requirements for offsite facilities. Incorporate changes to the SHE Committee program. Revised policy and objective to match metrics. Relocate Building Manager Program to another document. Revised policy to include support of mission. Added Vision and moved goals to the annual plan. Added requirement for S&MA audits of organizations and SHE programs. Added references and relationships to the new IMSB. Added reference to the new SHE Training Assessment process. Added a commitment statement to the four major elements of the NASA Safety Program. Added requirement for use of cargo containers. Updated numerous references and organizational names. Various clarifications.
Revision	E	10/10/2007	Revised numerous references and organization names. Revised reference to MESA agreement. Revised principles to the MSFC safety program. Revised environmental policy. Deleted requirements now in MWI 8715.12. Revised annual evaluation and annual plan into one document. Revised manual lifting rule. Revised variance process. Revised definitions.
Revision	F	4/16/2008	Revised 2. Applicability statement to address the applicability of this directive to the Michoud Assembly Facility (MAF). Added responsibilities for MAF in various sections. Changed safety department to safety branch. Changed appendices that contained requirements to chapters. Reflects minor editorial changes. [On 5/23/08, an administrative correction updated name change for MWI 8715.15.]

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Revision	G	12/01/2008	Expanded Table of Contents. Changed NASA MAF Safety Office to MSFC S&MA representative located at MSFC's MAF. Changed MAF Environmental Office to Center Operations representative located at MAF. Minor grammar changes to allow for a Table of Contents. Minor change to wording in Chapter 5 for variances. Added records for any required safety training. Added requirement for identifying controlled areas in Chapter 1 and Chapter 2.
Revision	H	12/03/2009	Deleted form letter 133. Provided more definition for comparison between MSFC SHE program and VPP elements in section 3. Made minor grammatical changes throughout. Added MWIs to applicability listing. Deleted Chapter 5 and rearranged order of section 2. Responsibilities. Added more details for work conducted at MAF. Added matrix for SHE to VPP requirements. Added acronyms

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PREFACE

P.1 PURPOSE

- a. To set forth the Marshall Space Flight Center (MSFC) safety, health, and environmental policies, responsibilities, and procedures intended to provide employees with a safe and healthful workplace. To define the implementation of an aggressive Safety, Health, and Environmental (SHE) Program that complies with current applicable Federal, State, NASA, and MSFC safety, health, and environmental regulations, requirements, and standards.

- b. This Marshall Procedural Requirements (MPR) does not specifically address MSFC’s Flight Safety Program. For information concerning that program, refer to the program-level documents (e.g., Space Shuttle Program (SSP) - 50021, “Safety Requirements Document,” and NASA Safety Technical Standard (NSTS) 5300.4, “Safety, Reliability, Maintainability, and Quality Provisions for the Space Shuttle Program”) or contact the MSFC Safety and Mission Assurance (S&MA) Directorate.

P.2 APPLICABILITY

- a. This MPR applies to Center personnel, programs, projects, including contractors and resident agencies to the extent specified in their respective contracts or agreements. (“Contractors,” for purposes of this paragraph, include contractors, grantees, Cooperative Agreement recipients, Space Act Agreement partners, or other agreement parties.)

- b. This MPR applies to the Michoud Assembly Facility (MAF).

P.3 AUTHORITY

- a. Public Law 29 U.S.C. § 651 et seq., “Occupational Safety and Health Act of 1970”

- b. 29 CFR Part 1903, “Inspections, Citations, Proposed Penalties”

- c. 29 CFR Part 1910, “Occupational Safety and Health Standards”

- d. 29 CFR Part 1960, “Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters”

- e. 40 CFR Parts 1-1068, “Protection of the Environment”

- f. Louisiana Administrative Code, Title 33, Environmental Regulations (applicable only to MAF)

- g. Louisiana Administrative Code, Title 7, Part XXIII, Pesticide Program (applicable only to MAF)

- h. Louisiana Sanitary Code 48:5, Chapter 73 (applicable only to MAF)

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- i. EO 12196, dated February 26, 1980, “Occupational Safety and Health Programs for Federal Employees”
- j. NPD 1800.2, “NASA Occupational Health Program”
- k. NPD 8500.1, “NASA Environmental Management”
- l. NPD 8700.1, “NASA Policy for Safety and Mission Success”
- m. NPR 1800.1, “NASA Occupational Health Program Procedures”
- n. NPR 8621.1, “NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping”
- o. NPR 8715.1, “NASA Occupational Safety and Health Programs”
- p. NPR 8715.2, “NASA Emergency Preparedness Plan Procedural Requirements”
- q. NPR 8715.3, “NASA General Safety Program Requirements”

P.4 APPLICABLE DOCUMENTS

MSFC complies with all applicable local, State, Federal, and consensus codes and standards.

- a. Public Law 7 U.S.C. § 135, Federal Insecticide, Fungicide, and Rodenticide Act (applicable only to MAF)
- b. Public Law 15 U.S.C. (C. 53) 2601-2692, Toxic Substance Control Act (applicable only to MAF)
- c. 29 CFR Part 1904, “Recording and Reporting Occupational Injuries and Illness”
- d. 29 CFR Part 1926, “Safety and Health Regulations for Construction”
- e. Alabama Department of Environmental Management (ADEM) Code R.335-6-7, “Qualified Credentialed Professional (QCP)”
- f. American National Standards Institute (ANSI) - All Standards as applicable
- g. Louisiana Department of Environmental Quality (LDEQ), Title 33 Environmental Regulatory Code (applicable only to MAF)
- h. Louisiana Department of Health and Hospitals, Drinking Water Distribution Systems and Wastewater Collections Systems Operator Certification Program (applicable only to MAF)

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- i. Louisiana Department of Agriculture and Forestry, Pesticide Laws and Regulations, as applicable (applicable only to MAF)
- j. National Fire Protection Association (NFPA) Codes
- k. NASA FAR Supplement (NFS) 1823.70, “Safety and Health”
- l. NPR 1441.1, “NASA Records Retention Schedules (NRRS)”
- m. NPR 7120.5, “NASA Program and Project Management Processes and Requirements”
- n. NPR 8831.2, “Facilities Maintenance and Operations Management”
- o. NASA-STD-8719.7, “Facility System Safety Guidebook”
- p. NASA-STD-8719.9, “Standard for Lifting Devices and Equipment”
- q. NASA-STD-8719.11, “Safety Standard for Fire Protection”
- r. MPD 1040.3, “MSFC Emergency Program”
- s. MPD 1150.1, “Establishment of Councils, Boards, and Committees,” MC-12
- t. MPD 1800.1, “MSFC Smoking Policy”
- u. MPD 1840.1, “MSFC Environmental Health Program”
- v. MPD 1840.2, “MSFC Hearing Conservation Program”
- w. MPD 1840.3, “MSFC Respiratory Protection Program”
- x. MPD 1860.2, “Radiation Safety Program”
- y. MPD 8500.1, “MSFC Environmental Management Policy”
- z. MPD 8570.1, “MSFC Energy Management Program”
- aa. MPR 1040.3, “MSFC Emergency Plan”
- bb. MPR 1280.6, “Management Systems Internal Audits”
- cc. MPR 1410.2, “Marshall Management Directives System”
- dd. MPR 1440.2, “MSFC Records Management Program”

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- ee. MPR 1600.1, “MSFC Security Procedural Requirements”
- ff. MPR 1800.1, “Bloodborne Pathogens”
- gg. MPR 1800.2, “MSFC Ergonomics Program”
- hh. MPR 1800.3, MSFC Sanitation Program”
- ii. MPR 1810.1, “MSFC Occupational Medicine”
- jj. MPR 1840.1, “MSFC Confined Space Entries”
- kk. MPR 1840.2, “MSFC Hazard Communication Program”
- ll. MPR 1840.3, “MSFC Hazardous Chemicals in Laboratories Protection Program”
- mm. MPR 1840.4, “MSFC Asbestos Program”
- nn. MPR 1860.1, “MSFC Radiation Safety Procedural Requirements”
- oo. MPR 1860.2, “Nonionizing Radiation Safety”
- pp. MPR 3410.1, “Training”
- qq. MPR 6410.1, “Handling, Storage, Packaging, Preservation, and Delivery (HSPPD)”
- rr. MPR 6700.1, “MSFC Vehicle and Motor Pool Operations”
- ss. MPR 8500.1, “MSFC Environmental Management Program”
- tt. MPR 8500.2, “MSFC Environmental Management System (EMS) Manual”
- uu. MPR 8823.2, “Pressure System Safety and Certification Requirements”
- vv. MWI 1700.3, “NASA Safety Reporting System Corrective Action Process”
- xx. MWI 1280.5, “MSFC Alert Processing”
- yy. MWI 1810.1, “Automated External Defibrillator (AED) Program”
- zz. MWI 3410.1, “Personnel Certification Program”
- aaa. MWI 6430.1, “Lifting Equipment and Operations”

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- bbb. MWI 8540.2, “Green Purchasing Program”
- ccc. MWI 8550.1, “Waste Management”
- ddd. MWI 8550.2, “Storm Water Management”
- eee. MWI 8550.3, “Wastewater Compliance”
- fff. MWI 8550.4, “Air Emissions Compliance”
- ggg. MWI 8550.5, “Chemical Management”
- hhh. MWI 8621.1, “Mishap and Close Call Reporting and Investigation Program”
- iii. MWI 8715.1, “Electrical Safety Program”
- jjj. MWI 8715.2, “Lockout/Tagout Program”
- kkk. MWI 8715.3, “Hazard Identification and Warning System”
- lll. MWI 8715.4, “Personal Protective Equipment (PPE) and Systems”
- mmm. MWI 8715.5, “Area/Building Manager Program”
- nnn. MWI 8715.9, “Occupational Safety Requirements for MSFC Contractors”
- ooo. MWI 8715.10, “Explosives, Propellants, and Pyrotechnics Program”
- ppp. MWI 8715.11, “Fire Safety Program”
- qqq. MWI 8715.12, “Safety, Health and Environmental-Finding Tracking System (SHEtrak)”
- rrr. MWI 8715.13, “Safety Concerns Reporting System (SCRS)”
- sss. MWI 8715.15, “Operational Safety Assessment Program”
- ttt. MWI 8715.16, “Supervisor Safety, Health and Environmental (SHE) Visits”
- uuu. Data Requirement Document (DRD) STD/SA-SHP
- vvv. Data Requirement Document (DRD) STD/SA-SHEWA
- www. Agreement between George C. Marshall Space Flight Center and Marshall Engineers and Scientists Association (MESA) Article 19, Safety and Health

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xxx. Agreement between George c. Marshall Space Flight Center and the American Federation of Government Employees (AFGE)

NOTE: The MPDs/MPRs/MWIs listed above are only applicable to MAF if stated as applicable in the MPD/MPR/MWI Applicability Statement.

P.5 REFERENCES

None.

P.6 CANCELLATION

MPR 8715.1G, dated December 1, 2008.

Original signed by

Robert M. Lightfoot
Director

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DOCUMENT CONTENT

1. DEFINITIONS

The terms defined below represent the most common safety terms used throughout the safety program. Additional definitions are provided in the applicable safety and health Center-wide instructions (e.g., Marshall Work Instructions (MWIs) and MPRs).

1.1 Area Manager (AM). Individual responsible for a given area of MSFC-controlled real property, who ensures a Building Manager (BM) is appointed for buildings in their area.

1.2 Assessment. Review or audit process, using predetermined methods, that evaluates hardware, software, procedures, technical and programmatic documents, and the adequacy of their implementation.

1.3 Assistant BM (ABM). Individual assigned responsibility to aid the BM in ensuring that their assigned buildings and surrounding areas are safe, healthful, and in compliance with environmental and housekeeping rules.

1.4 BM. Individual assigned by and responsible to the respective area manager to ensure that their assigned buildings and surrounding areas are safe, healthful, and in compliance with environmental and housekeeping rules. This is normally a collateral duty. If possible, the BM is selected from employees located in the assigned building.

1.5 Buddy System. An arrangement where personnel work in pairs to render emergency assistance if needed.

1.6 Close Call. An occurrence in which there is no injury, no equipment/property damage equal to or greater than \$1,000, and no significant interruption of productive work, but which possesses a high-severity potential for any of the mishaps defined as Types A, B, or C Mishaps, Mission Failure, or Incident.

1.7 Deviation. A written authorization requested in advance during the formulation/planning/design stages of a program/project operation that grants temporarily relief from a specific requirement(s).

1.8 Employee. Any person (civil servant or contractor) that works on MSFC-controlled property or any civil servant that works for MSFC at any location.

1.9 Exception. A written authorization for permanent relief from a specific requirement(s) that can be requested at any time during the life cycle of a program/project and typically addresses a situation where a requirement(s) does not apply to a portion of the program/project.

1.10 Green Products. Products that have a lesser or reduced effect on human health and the

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environment when compared with competing products that serve the same purpose. Products made with recycled material.

1.11 Hazard. A state or a set of conditions, internal or external to a system that has the potential to cause injury, illness, or death, or that could result in damage to property or loss of equipment, or impact to the environment or have the potential to result in an undesired outcome.

1.12 Hazard Analysis. A comprehensive and systematic method of assessing risk and selecting the means to eliminate or control them.

1.13 Hazardous Facility/Operation. Any facility/operation that, without implementation of proper hazard control measures, has a high potential to result in loss of life, serious injury to personnel or public, or damage to property due to the material or equipment involved or the nature of the facility/operation itself.

1.14 Incident Reporting Information System (IRIS). A NASA-wide database for recording and tracking mishap information.

1.15 Infrastructure. Systems, services, facilities and equipment necessary to sustain MSFC or MAF daily activities such as power, water, pressure, electrical, and other systems necessary to properly maintain a building's operation.

1.16 Integrated Management Systems Council (IMSC). A management-level board with membership consisting of the Center's Associate Director as chairperson and the Center Director's direct reports as members. It is responsible for the management of the Center's mission support. This includes ensuring the safety and health of the MSFC organization and its personnel.

1.17 Job Hazard Analysis (JHA). A type of hazard analysis used for specific jobs or tasks to identify hazards or potential accidents associated with each step that contain credible hazards, and develop solutions that eliminate, nullify, or prevent such hazards or accidents. Safety Performance Assessment and Safe Plan of Action are equivalent forms of a JHA and serve the same purpose.

1.18 Marshall Team Meeting (MTM). A monthly meeting of top-level Center managers and support contractor managers where SHE metrics, issues, and initiatives and other Center-wide topics are discussed. The meeting is chaired by the Center Director.

1.19 Mishap. An unexpected occurrence, event, or sequence of events that results in injury or death to employees or visitors or damage to NASA equipment or property. See MWI 8621.1, "Mishap and Close Call and Investigation Program," for detailed definitions of the mishap classifications.

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1.20 Occupational Safety and Health Administration (OSHA). The organization established under the U.S. Department of Labor to administer the Occupational Safety and Health Act as documented in Part 29 of the Code of Federal Regulations (CFR).

1.21 Operation. A process or series of acts involved in a particular form of work, job or task. It can involve personnel, equipment, and all or a section of a facility.

1.22 Real Property. Land and anything erected thereon or affixed or appurtenant thereto (e.g., buildings, structures, utility systems, and improvements).

1.23 Risk. The combination of (1) the probability (qualitative or quantitative) of experiencing an undesired event; (2) the consequences, impact, or severity that would occur if the undesired event were to occur; and (3) the uncertainties associated with the probability and consequences.

1.24 Safety, Health and Environmental (SHE) Committee. A committee formed by employees and managers to help promote and improve the MSFC SHE programs.

1.25 Safety, Health and Environmental Finding Tracking System (SHEtrak). A Web-based electronic database maintained by S&MA for the purpose of documenting and tracking to closure hazards that are identified in the workplace.

1.26 Shall. The word “shall” indicates that the rule is mandatory. Noncompliance with a “shall” statement requires approval of a variance.

1.27 Supervisor. The person assigned responsibility for the daily oversight functions of employees performing the job or task (e.g., organizational line manager, foreman, branch chief or team lead).

1.28 Variance. A written authorization for relief from a specific requirement(s) and can be a deviation, exception or waiver.

1.29 Visitor. A person who has a temporary stay at MSFC and is not badged as a permanent employee.

1.30 Waiver. A written authorization requested after the fact that grants temporary relief from a specific requirement(s) and is requested during the implementation of a project or operation to address situations that were unforeseen during design or advance planning.

2. RESPONSIBILITIES

2.1 NASA Administrator

2.1.1 The NASA Administrator is the senior person responsible for Agency-wide safety and health. NPR 8715.1, “NASA Occupational Safety and Health Programs” establishes the NASA-

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Designated Safety and Health Official (DASHO) pursuant to EO 12196, “Occupational Safety and Health Programs for Federal Employees” section 1-102, to serve as the coordinator of the Occupational Safety and Health Programs.

2.1.2 The NASA-DASHO is the Chief Health and Medical Officer.

2.1.3 The NASA safety function is managed by the Office of Safety and Mission Assurance.

2.1.4 The NASA health function is managed by the Office of the Chief Health and Medical Officer.

2.1.5 The DASHO and the Chief Safety and Mission Assurance Officer, as members of the NASA Operations Management Council, provide for senior management involvement and oversight of NASA’s Occupational Safety and Health Program.

2.2 The Center Director (CD) shall:

2.2.1 Have the final authority and responsibility for ensuring the NASA occupational safety and health programs are effectively implemented and operated at MSFC and MAF.

2.2.2 Promote safety by setting a positive example by following the rules, wearing any required personal protective equipment, reporting hazards, reporting injuries and illnesses, and basically doing anything that they expect employees to do.

2.2.3 Guide and direct the safety program for MSFC.

2.2.4 Establish, publicize, and monitor progress in achieving Center SHE goals and objectives. These goals are documented in the Annual SHE Program Plan.

2.2.5 Address SHE issues/concerns to MSFC and MAF employees as needed.

2.2.6 Conduct monthly SHE meetings with employees who report directly to them, and ensure supervisors at all levels conduct monthly safety meetings with their employees.

2.2.7 Conduct walk-through SHE visits of activity areas and ensure supervisors, at all levels conduct SHE visits of their respective areas in accordance with the requirements described in MWI 8715.16, “Supervisor Safety, Health and Environmental (SHE) Visits.”

2.2.8 Ensure controls for SHE issues and concerns are integrated into the total MSFC management system.

2.2.9 Evaluate the SHE performance of employees who report directly to them, using the performance appraisal process.

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2.2.10 Approve and sign the Annual SHE Program Plan.

2.3 Directorate/Office Directors shall:

2.3.1 Promote safety by setting a positive example by following the rules, wearing any required personal protective equipment, reporting hazards, reporting injuries and illnesses, and basically doing anything that they expect employees to do.

2.3.2 Be responsible for the safety of personnel and property under their control, with timely monitoring, surveillance, and support provided by S&MA as necessary.

2.3.3 Apply the SHE Program to assigned areas of functional responsibility.

2.3.4 Support achievement of the Center's SHE goals and objectives.

2.3.5 Conduct monthly SHE meetings with employees (direct reports).

2.3.6 Conduct walk-through SHE visits of work areas within their area of responsibility in accordance with the requirements described in MWI 8715.16, "Supervisor Safety, Health and Environmental (SHE) Visits."

2.3.7 Support the SHE Committee, including providing a designated representative.

2.3.8 Evaluate SHE performance of employees (direct reports) using the performance appraisal system.

2.3.9 Ensure reporting and investigation of mishaps in accordance with the requirements described in MWI 8621.1, "Mishap and Close Call and Investigation Program."

2.3.10 Ensure all personnel, including visitors, contractors, and researchers working in their area of functional responsibility, comply with the requirements described in this MPR.

2.3.11 Ensure that facilities are operated in accordance with all applicable requirements, the intended design, and the requirements described in this MPR.

2.3.12 Ensure facilities/operations are assessed for hazardous conditions and that the facility's/operation's safety integrity is not compromised with non-approved facility/operation additions or modifications and receive the necessary level of readiness review prior to initial startup and restart in accordance with all applicable requirements and the requirements described in NASA-STD-8719.7, "Facilities System Safety Guidebook" and MWI 8715.15, "Operational Safety Assessment Program."

2.3.13 Ensure all lifting operations are conducted in accordance with the requirements described in NASA-STD-8719.9, "Standard for Lifting Devices and Equipment" and MWI 6430.1,

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“Lifting Equipment and Operations.”

2.3.14 Ensure actions identified in Annual SHE Program Plan are appropriately implemented within their respective organization.

2.3.15 Ensure SHE issues and actions in responsible area are corrected.

2.3.16 Ensure a process is in place to assess jobs/tasks performed by employees to identify potential hazards prior to the job/task being performed by the employee. Any hazards that are identified are eliminated or actions (engineering or administrative) are taken to control the hazards and put in place prior to the job/task being performed.

2.3.17 Ensure a process is in place that establishes a line of communication with employees for them to have reasonable access to management in order to identify safety, health and environmental concerns within the organization.

2.4 Managers of Program/Project Offices shall:

2.4.1 Promote safety by setting a positive example by following the rules, wearing any required personal protective equipment, reporting hazards, reporting injuries and illnesses, and basically doing anything that they expect employees to do.

2.4.2 Be responsible for the safety of personnel and property under their control, with timely monitoring, surveillance, and support provided by S&MA as necessary.

2.4.3 Develop program/project safety requirements in accordance with the requirements described in NPR 7120.5C, “NASA Program and Project Management Processes and Requirements.”

2.4.4 Support the MSFC SHE goals and objectives.

2.4.5 Include SHE requirements in contracts as in accordance with the requirements described in MWI 8715.9, “Occupational Safety Requirements for MSFC Contractors,” and NFS Subpart 1823.70, “Safety and Health.”

2.4.6 Coordinate with technical disciplines to ensure adequate review of program/project SHE-related activities during the planning, construction, testing and operation phases of new and modified facilities, equipment and processes.

2.4.7 Allocate adequate resources and delegate authority to ensure an effective SHE Program for their respective program/project.

2.5 Department/Office Managers/Branch Chief (Supervisor).

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2.5.1 Promote safety by setting a positive example by following the rules, wearing any required personal protective equipment, reporting hazards, reporting injuries and illnesses, and basically doing anything that they expect employees to do.

2.5.2 Be responsible for the safety of personnel and property under their control, with timely monitoring, surveillance, and support provided by S&MA as necessary.

2.5.3 Department/Office Managers/Branch Chief (Supervisor) responsibilities are described in Chapter 1, "Supervisor General SHE Responsibilities."

2.6 S&MA

2.6.1 Director, S&MA shall:

2.6.1.1 Serve as the Safety Official for MSFC and MAF as designated by the CD.

2.6.1.2 Promote safety by setting a positive example by following the rules, wearing any required personal protective equipment, reporting hazards, reporting injuries and illnesses, and basically doing anything that they expect employees to do.

2.6.1.3 Serve as the designated MSFC Authority Having Jurisdiction (AHJ) for safety (NASA-STD 8719.11, "Safety Standard for Fire Protection," paragraph 102.6(11)).

2.6.1.4 Implement the MSFC Industrial Safety Program in compliance with applicable Federal, NASA, and MSFC safety policies, regulations, and standards.

2.6.1.5 Ensure an independent assessment of safety issues and concerns is provided.

2.6.1.6 Ensure safety policies, standards, and procedures to implement OSHA and NASA requirements are developed and implemented.

2.6.1.7 Ensure safety standards, instructions, and requirements applicable to MSFC operations are established and maintained; and make them available for employees to review.

2.6.1.8 Ensure technical assistance to line and staff managers to assist in accomplishing safety-related goals and objectives (including appropriate reference material sources), is provided.

2.6.1.9 Ensure records of safety trends and general status of the MSFC Industrial Safety Program are measured, analyzed, and maintained.

2.6.1.10 Support SHE Committee.

2.6.1.11 Ensure employee representatives are consulted in the implementation of the MSFC

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Safety Program (29 CFR Part 1960.12, “Dissemination of Occupational Safety and Health Program Information”).

2.6.1.12 Ensure records are maintained of all occupational injuries and illnesses, submit reports to OSHA, and post annual summaries (29 CFR Part 1960, Subpart I, “Recordkeeping and Reporting Requirements”).

2.6.1.13 Ensure safety and health program information is posted (29 CFR Part 1960.12, “Dissemination of Occupational Safety and Health Program Information”).

2.6.1.14 Ensure evaluations of safety programs are performed for MSFC basic organizations and contractors.

2.6.1.15 Ensure overview and surveillance are provided for potentially-hazardous activities at the Center.

2.6.1.16 Ensure reports of unsafe or unhealthful working conditions are received and evaluated, and maintain a log of these reports (29 CFR Part 1960.28, “Employee reports of unsafe and unhealthful working conditions”).

2.6.1.17 Ensure a plan for industrial safety and fire prevention training is provided and implemented for managers, supervisors, employees, employee representatives, and safety and collateral duty safety personnel.

2.6.1.18 Ensure safety plans, written hazardous operations procedures, hazard assessments, and other safety-sensitive documents and drawings are reviewed and approved.

2.6.1.19 Ensure OSHA, NFPA, NASA, and MSFC compliance inspections of all Marshall facilities located onsite, and all facilities owned or leased by MSFC or occupied by MSFC Civil Service Employees within the Huntsville, Alabama area are performed. Other sites owned or operated by MSFC or occupied by MSFC civil service employees (e.g., resident offices, MAF) are inspected by that site’s local safety authority. S&MA ensures that equivalent inspections are performed at these other sites by reviewing the annual inspection reports. This includes construction sites.

2.6.1.20 Ensure facility safety tasks are performed at each phase of the facility life cycle, including concept development, design, procurement, construction, activation, operation, and disposal is implemented in accordance with the requirements described in NASA STD-8719.7, “Facility System Safety Guidebook” and NPR 8715.3, “NASA General Safety Program Requirements.”

2.6.1.21 Ensure compliance with applicable OSHA, NFPA, NASA, and MSFC safety policies, regulations, and standards.

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2.6.1.22 Ensure facilities/operations are assessed and receive the necessary level of readiness review prior to initial startup and restart in accordance with the requirements described in MWI 8715.15, “Operational Safety Assessment Program.”

2.6.1.23 Ensure any activity/operation where there is potential to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment exists is halted or suspended. Notify the area supervisor of these conditions, and do not allow the activity/operation to resume until the condition has been corrected. Contact Contracting Officer if the condition involves contractor activities/operations if determined necessary.

2.7 EEOH Office shall:

2.7.1 Provide an Occupational Health Officer to serve as the Health Official for MSFC and MAF as designated by the CD.

2.7.2 Implement the Occupational Health Services Program in accordance with the requirements described in MPR 1810.1, “MSFC Occupational Medicine,” and MPD 1840.1, “MSFC Environmental Health Program.”

2.7.3 Ensure compliance with applicable occupational health policies, regulations, and standards.

2.7.4 Implement the MSFC Environmental Program in accordance with the requirements described in MPR 8500.1, “MSFC Environmental Management Program.”

2.7.5 Ensure compliance with applicable environmental policies, regulations, and standards.

2.7.6 Ensure any activity/operation where there is potential to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment exists is halted or suspended. Notify the area supervisor of these conditions, and do not allow the activity/operation to resume until the condition has been corrected. Contact Contracting Officer if the condition involves contractor activities/operations if determined necessary.

2.8 FMO shall:

2.8.1 Ensure that facilities are designed, constructed, operated, and maintained in accordance with the applicable documents, National standards, including ANSI, NFPA, and international standards as applicable. Where conflicting requirements exist, the most stringent are used.

2.8.2 If needed, obtain waivers/variances to code requirement in accordance with the process specified in paragraph 3.1.12 of this document.

2.8.3 Ensure that construction work is performed in accordance with OSHA, 29 CFR Part 1926, “Safety and Health Regulations for Construction,” and Alabama Department of Environmental

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Management (ADEM) Code R.335-6-7, “Qualified Credentialed Professional (QCP),” and Louisiana Department of Environmental Quality (LDEQ) for MAF.

2.8.4 Ensure that facilities are maintained in accordance with the applicable codes and standards and the requirements of this MPR.

2.9 ODEO shall:

2.9.1 Assist supervisors and the Industrial Safety Branch (ISB) in identifying personnel that have special safety and health needs due to a physical disability.

2.10 MAF

2.10.1 The MSFC S&MA representative located at MAF shall:

2.10.1.1 Serve as the MAF Safety Official as delegated by the Director, S&MA.

2.10.1.2 Serve as the MAF Health Official as delegated by EEOH.

2.10.1.3 Ensure all the functions and activities identified in section 2.6 are performed and oversee their performance.

2.10.1.4 Ensure the MSFC SHE Program requirements are implemented at MAF and comply with the applicable MPD/MPR/MWI that defines the requirement.

2.10.1.5 Ensure all of the functions and activities listed in this MPR for S&MA and ISB are performed. These functions and activities can be performed by the appropriate group of the Manufacturing Support and Facility Operations Contractor (MSFOC) if delegated by the MSFC S&MA representative.

2.10.1.6 Serve as the Point of Contact (POC) for S&MA at MAF.

2.10.1.7 Serve as the POC for EEOH at MAF for health-related issues.

2.10.1.8 Provide day-to-day support to MAF employees and residents for tasks listed in 2.6.

2.10.1.9 Provide day-to-day support to MAF employees and residents for tasks listed in 2.7 applicable to health-related activities.

2.10.1.10 Provide input to MSFC S&MA on the status of the implementation of the MSFC SHE Program at MAF requested.

2.10.1.11 Ensure an annual MAF SHE Program Plan is developed and approved by the MAF Chief Operating Officer.

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2.10.1.12 Provide the annual MAF SHE Program Plan to MSFC S&MA for inclusion into the annual SHE Program Plan as requested.

2.10.1.13 Assist the MSFC Office of Center Operations representative ensure activities conducted at MAF comply with the MSFC SHE Program requirements.

2.10.1.14 Provide oversight, direction and assistance to the MSFOC in the day-to-day performance of activities and programs identified in sections 3.1 (CPR 1), 3.2 (CPR 2), 3.3 (CPR 3), 3.4 (CPR 4), and 3.5 (CPR 5).

2.10.2 The MSFC Office of Center Operations representative shall:

2.10.2.1 Ensure all of the functions and activities listed in this MPR for FMO and EEOH are performed. These functions and activities can be performed by the appropriate MSFOC group if delegated by the MSFC Office of Center Operations representative.

2.10.2.2 Serve as the POC for FMO and EEOH in implementing the facility-related and environmental compliance responsibilities of the MSFC SHE Program at MAF.

2.10.2.3 Provide day-to-day support to MAF employees and residents for tasks listed in 2.7 and 2.8.

2.10.2.4 Provide input to MSFC Center Operations Office or NASA HQ on the status of MAF facilities and Environmental Compliance Program data as requested.

2.10.2.5 Assist the MSFC S&MA representative to ensure activities conducted at MAF comply with the MSFC SHE Program requirements.

2.10.2.6 Provide oversight, direction and assistance to the MSFOC in the day-to-day performance of activities and programs identified in sections 3.1 (CPR 1), 3.2 (CPR 2), 3.3 (CPR 3), 3.4 (CPR 4), and 3.5 (CPR 5).

2.10.3 The MSFOC shall:

2.10.3.1 Perform the day-to-day activities and programs identified in sections 3.1 (CPR 1), 3.2 (CPR 2), 3.3 (CPR 3), 3.4 (CPR 4), and 3.5 (CPR 5) as directed by the MSFC S&MA representative and/or MSFC Office of Center Operations representative.

2.10.3.2 Obtain assistance from the MSFC S&MA representative and/or MSFC Office of Center Operations representative as needed.

2.11 SHE Committee

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2.11.1 SHE Committee responsibilities are described in the Committee’s Charter, MPD 1150.1, “Establishment of Councils, Boards, and Committees,” MC-12.

2.11.2 MAF SHE Committee shall:

2.11.2.1 Serve as the MAF site-wide SHE Committee in developing and implementing MSFC SHE policies and procedures at MAF.

2.11.2.2 Serve as a subcommittee to the SHE Committee and report MAF SHE Program status/issues to the SHE Committee in accordance with the process described in MC-12.

2.11.2.3 Be chaired by the MSFC S&MA representative and/or the MSFC Office of Center Operations representative.

2.11.2.4 Consist of membership that includes SHE representatives from each agency/contractor/tenant located at MAF as applicable. This membership can also include senior executives from each agency/contractor/tenant.

2.12 AM/BM.

2.12.1 AM/BM responsibilities are described in MWI 8715.5, “Area/Building Manager Program.”

2.13 Contractors and Other Noncivil Service Personnel

2.13.1 Contractors and other noncivil service personnel are considered part of the MSFC Team and play a critical role in the MSFC SHE Program. At a minimum, they shall follow the same SHE rules and regulations as MSFC civil service employees as described in Chapter 2, “Employee General SHE Responsibilities.”

2.13.2 Contractor management and employee responsibilities shall be similar to the civil service team responsibilities above, and documented in the contractor’s SHE Plan approved by MSFC. Their companies may impose additional rules.

2.13.3 Contractors discovered not following SHE rules shall be reported to the Contracting Officer (CO) and subject to the disciplinary system described in their respective company policies or the MSFC disciplinary program as determined by the CO and the respective company.

2.13.4 Contractor employees shall be provided a method/process to report hazardous conditions in their work areas to their management. They can elect to use and follow the process described in MWI 8715.13, “Safety Concerns Reporting System (SCRS).”

2.13.5 Contractors shall report safety matrix information to S&MA as required by their contract.

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2.13.6 Contractors shall provide employee training and certification as required by their contract.

2.14 Employees.

2.14.1 Employee responsibilities are described in Chapter 2, “Employee General SHE Responsibilities.”

2.15 Personnel Who Are Not Contractors.

2.15.1 Personnel who are not contractors, yet allowed access to MSFC facilities to conduct individual research or other activities under grants or other auspices, shall comply with all the requirements of the MSFC SHE Program including:

2.15.1.1 Completing the SHE training identified as required by the SHE Training Assessment. This training is identified by the supervisor or designee by completing the SHE Training Assessment located on the Supervisor Safety Web page (SSWP). The SSWP can be accessed from the MSFC SHE Web page. Access to the SSWP is password protected. For access contact ISB.

2.15.1.2 Obtaining MSFC SHE certifications in accordance with the requirements described in MWI 3410.1, “Personnel Certification Program” when performing jobs or tasks that require an MSFC or MAF certification.

2.15.1.3 Submitting a written SHE Plan in accordance with Data Requirement Document Standard/Safety-Safety & Health Plan (DRD STD/SA-SHP) or Data Requirement Document Standard/Safety-Safety, Health & Environmental Work Agreement (DRD STD/SA-SHEWA) to S&MA for approval prior to starting work, if their activities are potentially hazardous to personnel or property. These DRDs are available via the MSFC Integrated Document Library or from the Office of Procurement.

2.15.1.4 Reporting mishaps and other safety data in accordance with the requirements described in MWI 8621.1, “Mishap and Close Call and Investigation Program.”

3. PROCEDURE

The MSFC SHE Program has five Core Program Requirements (CPRs). Four of the five MSFC CPRs match directly with the CPRs of the OSHA VPP. MSFC added an additional CPR for Environmental Compliance. See Appendix A, “MSFC SHE Core Program Requirements” for a listing of the elements and sub-elements that make up each CPR. MSFC implements these CPRs as described in the following:

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3.1 CPR 1 - Management Leadership and Employee Involvement.

3.1.1 Management Commitment and Leadership.

3.1.1.1 MSFC is committed to establishing, documenting, and communicating a safety management system that provides clear goals that are attainable and measurable, objectives that are relevant to workplace hazards, trends of workplace injuries and illnesses, and includes policies and procedures that indicate how MSFC can accomplish these objectives and meet these goals.

3.1.1.2 MSFC is committed to establishing safe and healthful working conditions and providing employee protection against hazards by implementing and maintaining the NASA General Safety Program Requirements and the four major elements of the OSHA Voluntary Protection Program (VPP) – Management Leadership and Employee Involvement, Worksite Analysis, Hazard Prevention and Control, and Safety, Health and Environmental Training.

3.1.1.3 MSFC’s management commitment to the MSFC SHE Program is documented in each section of this MPR and the MSFC applicable documents listed in section P.4.

3.1.1.4 Approval of this MPR by the MSFC Center Director signifies MSFC’s management commitment to the MSFC SHE program.

3.1.1.5 This MPR and the documents listed in the applicable documents listed in section P.4 document the MSFC SHE program.

3.1.1.6 This MPR along with the authority documents listed in section P.3 and the applicable documents listed in section P.4 identify how MSFC ensures safety and health is integrated into the general planning for day-to-day activities and also during purchasing and contracting activities to have services conducted by someone other than NASA at MSFC and MAF.

3.1.1.7 SHE Policy.

a. Safety: Strives to prevent human injury and ensure the safety of all operations and products as a critical element in supporting accomplishments of its mission.

b. Health: Strives to prevent occupational illnesses and promote and maintain the physical and mental well-being of its employees, thereby supporting mission success.

c. Environmental: “Enabling Marshall” mission by providing environmental compliance and stewardship and a safe and healthful workplace.

3.1.1.8 SHE Vision.

a. Center Safety and Health Vision:

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- (1) Zero work-related lost-time injuries or illnesses.
- (2) No OSHA-recordable safety or health violations.
- (3) No safety-related property damage.
- (4) No public injuries or illnesses.

b. Center Environmental Vision:

(1) The Center environmental visions are described in MPD 8500.1, “MSFC Environmental Management Program.”

3.1.1.9 SHE Goals: The SHE goals are documented in the Annual SHE Program Plan and each directorate/office shall strive to help the Center fulfill these goals. The Annual SHE Program Plan can be found on the SHE Web page under the “Metrics and Status” pull down menu.

3.1.1.10 The agreement between George C. Marshall Space Flight Center and Marshall Engineers and Scientists Association (MESA) Article 19 lists the safety and health provisions that shall apply.

3.1.1.11 The agreement between George C. Marshall Space Flight Center and the American Federation of Government Employees (AFGE) Agreement Article 39 provides the safety and health provision that shall apply.

3.1.2 Manager and supervisor responsibility and accountability.

3.1.2.1 Managers and supervisors shall be held responsible and accountable for meeting the SHE Program responsibilities through the implementation of a performance evaluation system and ensure that a SHE element is included in each employee’s performance plans that is reviewed semiannually between employees and their immediate supervisor.

3.1.3 Employee accountability.

3.1.3.1 Employees shall be accountable for the SHE program and follow the SHE rules established by this MPR. The degree and specific areas of this accountability are addressed in MSFC Form 4282, “NASA Employee Performance Communication System (EPCS),” MSFC Form 2938, “Position Description Amendment,” and in the responsibility section of this Directive.

3.1.3.2 Contractors shall implement a similar accountability process as defined in their approved SHE Plan.

3.1.4 Managers and Supervisors Involvement.

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3.1.4.1 Managers and supervisors play a key role in SHE Program implementation as indicated by the supervisors' SHE responsibilities which are described in Chapter 1, "Supervisor General SHE Responsibilities." Supervisors are encouraged to participate in the SHE Committee, and appropriate SHE Subcommittees. In addition, section 3.1.9 provides supervisors' requirements for conducting SHE meetings and rewarding employees for SHE accomplishments.

3.1.5 Employee involvement.

3.1.5.1 Employee participation is another key ingredient in MSFC's SHE Program as indicated by the employee responsibilities described in Chapter 2, "Employee General SHE Responsibilities." Each employee is encouraged to actively participate in the SHE Program in at least three meaningful, constructive ways.

3.1.5.2 Employees involvement in the SHE Program can include any of the following: attending monthly SHE Committee meetings; membership on SHE Subcommittees or teams; participating in SHE audits; participating in supervisor worksite SHE visits; participating in a mishap investigation; participating in the development of a hazard analysis or JHA; participating in a readiness review for the startup of a facility or operation; submitting safety concerns by use of the safety concern reporting system; submitting suggestions for improvements to the SHE program by use of the employee feedback systems; serving as a BM or ABM; providing presentations at SHE or safety meetings; providing SHE training; or participating in organization or team safety activities and initiatives.

3.1.6 Contractors and other non-NASA personnel working onsite involvement.

3.1.6.1 Contractors and other non-NASA personnel working onsite shall be provided with safe and healthful working conditions and the same level of employee protection against hazards as those described in this MPR.

3.1.6.2 Contractor selection is conducted in accordance with the requirements described in MWI 5100.1, "Initiating Procurement Requisitions" and/or MWI 5115.2, "Source Evaluation Board/Committee (SEB/C) Process."

3.1.6.3 Contractor SHE Plans or Work Agreements for these personnel shall comply with DRDs STD/SA-SHEWA or STD/SA-SHP or other specifications placed in their contracts that define the SHE requirements as appropriate. DRDs are not placed in construction contracts, so a slightly different process is used for placing SHE requirements in construction contractors. Contact FMO or ISB for more information on this process.

3.1.6.4 Contractors are encouraged to participate in the Contractor Safety Forum, the SHE Committee, and SHE Subcommittees.

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3.1.6.5 Contractor oversight is implemented in accordance with the requirements described in MWI 8715.9, “Occupational Safety Requirements for MSFC Contractors.”

3.1.6.6 SHE requirements are included in contract solicitations and evaluated in accordance with the requirements described in MWI 8715.9, “Occupational Safety Requirements for MSFC Contractors.”

3.1.7 AM/BM Involvement.

3.1.7.1 The AM/BM program functions are to assist managers/supervisors, S&MA, EEOH and FMO provide and maintain a safe and healthful work place throughout the Center and improve SHE-related activities. The AM/BM program is implemented in accordance with the requirements described in MWI 8715.5, “Area/Building Manager Program.”

3.1.7.2 At MAF, the AM/BM program function is implemented using a similar process that also includes the use of supervisors assigned specific areas within buildings to be the POC to resolve facility-related issues.

3.1.8 Authority.

3.1.8.1 Authority shall be given to managers/supervisors to reduce the degree of hazardous conditions that have the potential to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment. This authority allows them to implement interim controls or stop the operation/process/activity when the hazardous conditions cannot be corrected in a reasonable time.

3.1.8.2 Authority shall be given to all employees to stop any operation that they feel has the potential to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment. This authority allows them to take appropriate action if an unsafe act or condition exists, report it to management, and ensure subordinates are aware of their responsibility and authority to do the same.

3.1.8.3 Authority shall be given to all employees to stop any test activity or operation when the test or operation is discovered to be operating outside the pre-established safety parameters for the test or operation. This includes stopping the test or operation when unexpected data is received that is determined to be outside the pre-established safe operating range of the test or operation. The test or operation is to be stopped and investigated to determine the cause of the unexpected data.

3.1.8.4 This authority is often referred to as “stop work authority” and is intended to only stop the portion of the operation where the unsafe act or condition exists.

3.1.9 Resources.

3.1.9.1 Resources shall be provided by MSFC to correct conditions identified as hazardous and

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pose a potential for employee injury or illness. These resources include for correction of emergency conditions when necessary. These conditions can be identified during SHE inspections, audits, or by employee concerns.

3.1.9.2 Hazardous conditions directly related to maintenance of a building can be corrected by initiating a Trouble Call (TC) for minor repairs or a Facilities Work Request (FWR) to the Facilities Work Control. Details on these processes can be obtained from the Center Operations Web page located on Inside Marshall. At MAF, contact the Work Control Center (WCC). Contact FMO if more information is needed on this process.

3.1.9.3 Hazardous conditions that are not related to maintenance of an MSFC or MAF building are normally the responsibility of the MSFC or MAF organization assigned the area or responsible for the operation/activity. MSFC provides funding for these situations which can be obtained through the organization's normal chain of command.

3.1.9.4 Contact the ISB for assistance in correcting hazardous conditions if necessary. At MAF, contact the MSFC S&MA representative, or MSFC Office of Center Operations representatives located at MAF or MSFOC.

3.1.9.5 The SHE Committee shall be contacted for assistance in correcting hazardous conditions that cannot be corrected or funded through the organization's normal chain of command.

3.1.10 Professional Safety and Health Staff.

3.1.10.1 S&MA and Center Operations shall include safety and health professionals who provide SHE-related services to all Center employees as needed and also promote and communicate SHE goals and objectives across the Center. Contractor organizations can also include safety and health professionals. They can be required by contract or MSFC-approved Safety and Health Plan.

3.1.10.2 At MAF, the MSFOC provides this staff.

3.1.11 SHE Monthly Meetings.

3.1.11.1 Supervisors at all levels shall conduct and document monthly SHE meetings with those employees that report directly to them. The SHE meeting is to address the required SHE focus topics listed in the Supervisor Safety Web Page (SSWP), if any, and can be incorporated into a regular staff meeting, or be combined with a manager's or other supervisor's meeting. In cases where employees are assigned in an organization remote from their official supervisor, the employees can attend the SHE meetings of the remote organization in place of their official organization. The official supervisor can document the employee's participation in the SHE meeting of the remote organization in SSWP by adding a comment similar to the following: John Doe attended the EM20 safety meeting this month.

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3.1.11.2 SHE meetings normally include the following, as applicable:

- a. Discussion of results of SHE inspection findings and necessary corrective actions.
- b. Discussion of recent mishaps, including close calls and corrective actions.
- c. Discussion of current SHE issues and concerns, including subjects identified at other levels of the organization. Discussion of any assigned SHE program corrective actions.
- d. Presentation of SHE topics relevant to the work or home, including as a minimum any required topics listed on the SSWP.
- e. Recent safety bulletins or other information posted on SHE Web page.
- f. Specific SHE Training required for work area(s) or process(es).

3.1.11.3 Ensure record of the SHE meeting is posted on the SSWP.

3.1.12 Safety Awards.

3.1.12.1 Employee and Employee Team Awards. MSFC is committed to continued improvement of safety in all operations. The presentation of awards is considered appropriate for recognizing outstanding safety-related contributions and is an effective means of encouraging safety excellence. MSFC's Space Flight Safety Awards Program is described on the "MSFC Space Flight Awareness" Web page. Nomination criteria and forms are also listed at this site. Awards are available to recognize individuals/teams who have contributed to MSFC's Safety Program: This includes employees at MAF.

Silver Snoopy Award	Honoree Award
Team Award	Leadership Award
Flight Safety Award	Safety Excellence Award

3.1.12.2 Organization Awards. Onsite organizations that meet or exceed the benchmark set by MSFC for the peak elapsed time or cumulative exposure hours without significant mishap, or make other special achievements, shall be recognized with presentation of an award described in the table below. These awards are presented at the civil service directorate/office level or prime contractor level:

Achievement	Award
a. 1,000,000 Hours or 5 Years (whichever comes first) Without Lost Time or Property Damage Mishap Exceeding \$25,000	Plaque Presented by Center Director at Marshall Team Meeting.

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b. 5,000,000 Hours or 10 Years (whichever comes first) Without Lost Time or Property Damage Mishap Exceeding \$25,000	Plaque Presented by Center Director at Special Ceremony for All Organization Employees. Memento for each employee.
c. 10,000,000 Hours or 20 Years (whichever comes first) Without Lost Time or Property Damage Mishap Exceeding \$25,000	Trophy Presented by NASA Administrator (if possible) or Center Director at Special Ceremony for All Organization Employees. Memento for each employee.
d. Prime Contractor with a verified Annual Average Self-Evaluation Score of 36 or Higher and Lost Time Case rate at Least 50% less than North American Industry Classification System Average	Plaque Presentation by Center Director at Marshall Team Meeting.

3.1.13 SHE Program Evaluation.

3.1.13.1 The SHE Committee shall ensure an evaluation of the MSFC SHE Program is conducted to determine the overall effectiveness of the MSFC safety and health management system.

3.1.13.2 The evaluation shall be conducted at least annually and is normally accomplished by an audit of the SHE Program. The evaluation can be conducted on a more frequent basis if determined necessary by the SHE Committee.

3.1.13.3 The evaluation shall be a critical review of all safety and health elements included in the SHE Program.

3.1.13.4 The evaluation shall be conducted by reviewing and assessing data obtained from SHE-related activities such as results from SHE Inspections, SHE audits, employee feedback, concerns brought forth to the SHE Committee and other SHE-related data as deemed necessary.

3.1.13.5 The evaluation includes an assessment on the effectiveness of how the MSFC SHE Program is being implemented at MAF.

3.1.13.6 The results of this evaluation shall be forwarded to the SHE Committee for inclusion into MSFC annual assessment.

3.1.13.7 Each year S&MA obtains feedback on the effectiveness and root level understanding of the SHE Program from employees. Employees can provide their views on the effectiveness of the SHE program by using the “SHE Feedback” located on the SHE Web page on Inside Marshall.

3.1.13.8 Individual organizations that are identified to have issues specific to their organization

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shall establish corrective action plans for these issues. These plans are to, as a minimum, address the issues in the “get well plan,” and submit these plans to S&MA within 6 weeks of receiving the survey results.

3.1.13.9 S&MA shall include corrective actions for generic cross-Center issues in the Annual SHE Program Plan.

3.1.13.10 S&MA and EEOH shall conduct audits of their respective areas within the SHE program in accordance with the audit schedule determined by their respective office to ensure compliance with this MPR. This includes random visits to MAF to support the MSFC S&MA representative and MSFC Office of Center Operations representative to ensure compliance with the requirements contained in this MPR.

3.1.13.11 To reduce operational impact, when possible, these audits can be conducted in conjunction with the Marshall Management System internal audits.

3.1.13.12 At MAF, the MSFOC assists the MSFC S&MA representative and MSFC Office of Center Operations representative in conducting this evaluation.

3.1.14 Annual SHE Program Plan.

3.1.14.1 Each year with the support of Center Operations, Office of Human Capital, and the SHE Committee, S&MA shall prepare an Annual SHE Program Plan for the coming year.

3.1.14.2 The Annual SHE Program Plan shall include the following:

- a. Encompass a critical review and assessment of the effectiveness of each element and subelement of the SHE Program.
- b. Document significant accomplishments and/or areas for improvement by individual element, and the status of, and action taken for, the previous year’s Plan’s targets.
- c. Address any Center-wide issues identified in suborganization self-assessments, employee surveys, S&MA audits, and external assessments of the MSFC SHE program conducted during the year.
- d. Address the current status of each element and subelement of the SHE program.
- e. Include all findings from SHE assessments conducted during the preceding year and all open findings not closed in the previous year’s Annual SHE Program Plan. Examples of SHE assessments include, but are not limited to, annual SHE Program assessment, suborganization self-assessment generic issues, external assessments, employee survey generic issues.
- f. List by element the actions for correction of any findings and/or for improvement of the SHE

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Program along with the assignee and the target completion date for each.

g. Be presented for approval to the SHE Committee and Center Management at the IMSC no later than the regular November meeting.

h. Be approved and signed by the MSFC Center Director.

3.1.14.3 Actions assigned to organizations for the correction of any findings and/or for improvement of the SHE Program along with the assignee and the target completion date for each shall be tracked to closure. These actions can be maintained in an electronic database.

3.1.14.4 At MAF, the Annual MAF SHE Program Plan is approved by the MAF Chief Operating Officer and a copy forwarded to MSFC S&MA for inclusion in Annual SHE Program Plan at MSFC.

3.1.15 Safety Variance Process.

3.1.15.1 The basic concept for requesting a variance is for the system/operation owner to evaluate the system/operation to determine if all requirements for safe operation of the system/operation can be met. For those requirements that cannot be met, the system/operation owner prepares a request for a variance to the requirements, routes the request through any offices/departments necessary for concurrence, then to the Directorate/Office directly responsible for the requirement. The Directorate/Office directly responsible for the program, project, operation or process requirement, is the best to determine whether a variance to the requirement can be obtained without a negative impact.

3.1.15.2 When requesting a variance, the system/operation owner having direct responsibility for implementing the safety requirements is accepting the risks associated with the variance and shall implement all actions necessary to provide alternate means that provide an equivalent or lower level of risk, and ensure the operation does not present undue risk to public health, safety, the environment, or personnel.

3.1.15.3 Variances shall be requested and approved on a case-by-case basis.

3.1.15.4 Waiver/variances to safety-related Federal, state or local regulatory requirements, or to safety-related consensus standards imposed by regulation, (e.g., OSHA, or NFPA) shall be requested in accordance with the process described by the regulatory office responsible for the requirement and through the appropriate NASA HQ/MSFC Directorate/Office in accordance with the requirements described in NPR 8715.3 “NASA General Safety Program Requirements.”

3.1.15.5 Waivers/variances to SHE-related requirements contained in NASA or MSFC SHE-related directives (NPDs, NPRs, MPDs, MPRs, and MWIs) shall be requested in accordance with the requirements described in MWI 1410.1, “Processing Marshall Management Directives” or in accordance with a variance approval process defined in an approved MPD, MPR, or MWI

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for a given system/operation.

3.1.15.6 Waivers/variances to safety-related requirements contained in Program or Project documentation shall be in accordance with the Program/Project defined processes and the requirements described in NPR 8715.3, “NASA General Safety Program Requirements.”

3.1.15.7 Operations that contain high or medium risk of injury to employees shall be halted until the waiver/variance is approved, or the problem is corrected and regulatory compliance can be achieved.

3.1.15.8 Waiver/variance request and approval from health and environmental-related issues shall be requested in accordance with this variance process or a variance process defined by EEOH.

3.1.15.9 Waiver/variance can be requested in accordance with the process described in an approved MPD/MPR/MWI for a specific process.

3.1.15.10 At MAF, variance request for safety, health and environmental requirements shall be routed through the MSFC S&MA representative or MSFC Center Operations Office representative located at MAF prior to forwarding on to MSFC S&MA or MSFC EEOH for processing and approval.

3.2 CPR 2 - Worksite Analysis.

3.2.1 Hazard Assessment.

3.2.1.1 Each organization shall ensure the appropriate level of hazard assessment is conducted and documented for new and existing facilities, operations, jobs and tasks in accordance with the requirements described in MWI 8715.15, “Operational Safety Assessment Program.”

3.2.1.2 The level of hazard assessment required shall depend upon the level of risk to employee or property when operating a facility or performing an operation, job or task. This is normally a detailed hazard analysis for facilities, operations, jobs, tasks perceived to have a high or medium level of risk and a less detailed job hazard analysis for those perceived to have a low or minimal level of risk.

3.2.1.3 When a hazard assessment is conducted, it shall clearly identify the potential hazards, concerns or undesired events associated with a job, task or operation and the recommended corrective actions to eliminate, control or mitigate the hazard, concern or undesired event.

3.2.1.4 Hazard assessments shall be updated when substantial modifications are made that potentially affect the safe operation of the facility, equipment, operation, process, job or task, or the safety measures implemented by a previous hazard assessment potentially increase the perceived level of risk in accordance with the requirements described in MWI 8715.15,

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“Operational Safety Assessment Program.”

3.2.1.5 Supervisors shall ensure employees are aware of and review the job hazard analysis conducted for the specific jobs, tasks or operations they are to perform in accordance with the requirements described in MWI 8715.15, “Operational Safety Assessment Program.”

3.2.1.6 Supervisors shall ensure facilities/operations receive the necessary level of readiness review prior to initial startup or restart in accordance with the requirements described in MWI 8715.17, “Hazardous Operations Readiness Review Program.

3.2.1.7 The initial assessment for any facility, operation, job or task shall be considered as its baseline assessment.

3.2.2 Routine Self-Inspections.

3.2.2.1 Supervisors and managers shall conduct regular safety and health inspections, document the hazards and track the hazards the SSWP until corrected.

3.2.2.2 Supervisors and managers shall conduct and document monthly SHE visits and initiate appropriate corrective action for potentially-unsafe conditions and actions in accordance with the requirements described in MWI 8715.16, “Supervisor Safety, Health and Environmental (SHE) Visits.”

3.2.2.3 AM and BM or their designated alternates shall conduct and document inspection of the common areas of assigned facilities and grounds at least once monthly, and initiate appropriate corrective action for potentially-unsafe conditions and actions in accordance with the requirements described in MWI 8715.5, “Area/Building Manager Program.”

3.2.2.4 ISB and EEOH shall conduct regular safety and health inspections, and document and track the hazards until corrected in accordance with the requirements described in MWI 8715.12, “Safety, Health and Environmental-Finding Tracking System (SHEtrak).”

3.2.2.5 At MAF, the MSFOC shall conduct the safety and health inspections.

3.2.2.6 ISB and EEOH inspections include the following:

- a. New, refurbished, or leased facilities shall be inspected by S&MA prior to NASA employee occupancy.
- b. All safety issues shall be documented and satisfactorily resolved prior to occupancy.
- c. For leased facilities, a safety inspection shall be conducted prior to signing a lease agreement.
- d. All safety issues shall be documented and satisfactorily resolved prior to signing lease

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agreements.

e. ISB shall conduct annual comprehensive safety inspection of all MSFC and MAF facilities including those in an inactive status; semi-annual inspections of all facilities and operations identified as hazardous or contain high or medium risks; and weekly construction site safety inspections in accordance with the requirements described in 29 CFR Part 1960.26, "Conduct of Inspections," and NPR 8715.1 "NASA Occupational Safety and Health Programs."

f. Inspections shall be performed by ISB and EEOH inspectors and/or other employees that have received sufficient training and have experience to recognize, evaluate, and provide general recommendations in resolving workplace hazards, as defined in 29 CFR Part 1960.2, "Definitions" and NPR 8715.1, "NASA Safety and Health Handbook Occupational Safety and Health Programs," section 4.2.

g. Inspection records shall be maintained in accordance with section 4 of this MPR.

3.2.3 Unsafe Condition Reporting System for Employees.

3.2.3.1 Employees can report unsafe working conditions or hazards in the workplace using the Center's SCRS described in MWI 8715.13, "Safety Concerns Reporting System (SCRS)." Employees can submit their concerns into this system without fear of reprisal or they can elect to remain anonymous. This reporting system provides feedback on the action taken and status to the employee that submitted the concern, if the employee's name is provided. All concerns that are submitted into the SCRS system are tracked till closure. The reporting precedence for reporting an unsafe condition is described in Chapter 5, "Hazard Reporting Procedures."

3.2.3.2 S&MA shall ensure NASA HQ is notified when a safety concern is received related to a NASA program or activity in accordance with the requirements described in MWI 1700.3, "NASA Safety Reporting System Corrective Action Process."

3.2.4 Industrial Hygiene (IH) Program.

3.2.4.1 The IH program is to provide employees at MSFC and MAF with an environment in which occupational health hazards are identified, evaluated, eliminated, and/or controlled in such a manner that personnel do not suffer adverse health effects as a result of their employment in accordance with the requirements described in MPD 1840.1, "MSFC Environmental Health Program."

3.2.5 Mishaps/Close Calls Investigated and Hazards Corrected.

3.2.5.1 All mishaps and close calls shall be reported, investigated, and documented to determine the proximate or root cause(s) in order to develop and implement the appropriate corrective and/or preventive action to prevent recurrence in accordance with the requirements described in MWI 8621.1, "Mishap and Close Call and Investigation Program."

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3.2.5.2 Government-owned or leased motor vehicle accidents are investigated in accordance with the requirements described in MPR 6700.1, “MSFC Vehicle and Motor Pool Operations.”

3.2.5.3 ISB shall ensure management is notified of mishap/close calls by phone call and/or distributing intranet e-mail message. This notification normally includes an initial notification of what happened with a follow-up notification with additional information gathered during the initial investigation.

3.2.5.4 At MAF, the MSFC S&MA representative shall ensure MSFC S&MA is notified of any mishap/close calls at occur at MAF.

3.2.5.5 ISB notifies the general population of recent mishap and close call by posting a safety bulletin on the SHE Web page that includes a description of what happened, the proximate or root cause(s) and what could have done to prevent the mishap or close call from reoccurring and/or the lessons learned from the mishap/close call. The safety bulletins can be obtained from the SHE Web page under the “News & Information” pull down menu. More detailed information can be obtained from the SHE Web page under the “Mishap, Questions & Concerns” pull down menu. Select the “Personnel Mishap/Close Call Listing.”

3.2.5.6 ISB shall ensure safety bulletins are provided to supervisors for discussion with employees during monthly SHE meetings. These are normally provided to the supervisor via the Supervisor Safety Web Page.

3.2.5.7 ISB shall ensure the organizations directly responsible for the area where a mishap/close call occurred that are evaluated to be a type C or worse mishap and high-visibility and significant close-calls present to the SHE Committee and the MTM in accordance with the requirements described in MWI 8621.1, “Mishap and Close Call and Investigation Program.” The presentation is to provide details of how the mishap/close call occurred and what measures are being implemented to prevent it from reoccurring.

a. Mishaps that occur at MAF shall be presented to the MAF SHE Committee when determined necessary by the MSFC S&MA representative or MAF SHE Committee. In some cases, the MAF mishaps can be requested to be presented to the SHE Committee at MSFC. Contact ISB or the MSFC S&MA representative located at MAF for more information.

3.2.5.8 The responsible organization’s report shall include, at a minimum, the description of what happened, the proximate or root cause(s) and what can be done to prevent the mishap/close call from reoccurring and/or the lessons learned from the mishap/close call.

3.2.5.9 Employees can contact ISB to obtain additional information concerning specific control measures implemented for a mishap/close call.

3.2.5.10 Alerts that can affect SHE are distributed in accordance with the requirements in MWI

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1280.5, “MSFC Alert Processing.”

3.2.6 Injury, Illness, and Close Call Trend Analysis.

3.2.6.1 ISB shall analyze injury, illness, and close call data, and identify any significant trends in accident experience.

3.2.6.2 Trend analysis data shall be presented to the SHE Committee and Center management at the MTM regularly, and posted on the SHE Web site.

3.2.6.3 Trend analysis results shall be used to guide planning of accident prevention strategies and programs.

3.2.6.4 ISB shall post the OSHA Summary of Work-Related Injuries and Illnesses (OSHA Form 300) reports for the general population’s review. This is normally posted on the main bulletin board in the basement of Building 4200 and the lobby of 4203 and on the SHE Web page.

3.2.6.5 At MAF, the OSHA Summary of Work-Related Injuries and Illnesses (OSHA Form 300) is posted in locations identified by the MSFC S&MA representative located at MAF.

3.3 CPR 3 - Hazard Prevention and Control.

3.3.1 Professional Resources.

3.3.1.1 A staff of safety and health professionals and licensed health care professionals shall be maintained to ensure the effective implementation of systems for hazard prevention and control at MSFC and MAF. Support from safety and health professionals is also provided from NASA Headquarters and other NASA sites.

3.3.1.2 At MAF, the MSFOC provides this staff. Contact the MSFC S&MA representative located at MAF for assistance if needed.

3.3.2 Hazard Elimination and Control Methods.

3.3.2.1 The type of hazards, the severity and risk the hazards pose to employees and property shall be considered when determining the methods of prevention, elimination, and control in accordance with the requirements described in MWI 8715.15, “Operational Safety Assessment Program.”

3.3.2.2 Hazardous conditions that cannot be corrected on the spot and are temporary in nature shall be identified. The identification can be accomplished by any method deemed appropriate for the hazard such as placing cones or barricade pedestals with retractable barricade strap, or erecting a temporary barricade to alert other employees of wet floors in accordance with the requirements described in MWI 8715.3, “Hazard Identification and Warning System.”

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3.3.2.3 Hazardous conditions that cannot be corrected by engineering design or by the incorporation of safety devices and guards and pose a risk of personnel injury shall require the use of personal protective equipment (PPE) in accordance with the requirements described in MWI 8715.4, “Personal Protective Equipment (PPE) and Systems.”

3.3.2.4 Operations identified as potentially hazardous and contain a high risk or medium risk for employee injury or illness shall be kept isolated or separated from the general workforce and locations identified as office areas. Operations identified to contain a low risk for employee injury or illness are recommended to be separated from locations identified as office areas. Contact ISB for assistance as necessary.

3.3.2.5 Hazard Mitigation Hierarchy. Hazards shall be eliminated, controlled or mitigated in the following order of precedence:

- a. Engineering Controls - Design to physically eliminate, isolate or minimize the hazard.
- b. Safety Management Programs - Incorporate protective safety guards and warning devices.
- c. Administrative Controls - Develop operating procedures and training to significantly limit exposure to the hazard. Require the use of PPE when all other hazard controls have been exhausted.

3.3.2.6 Additional Administrative Controls. Center instructions developed to address SHE administrative controls include:

- a. Appendix Z, “Maximum Work Hour Guidelines.”
- b. MPD 1800.1, “MSFC Smoking Policy.”

3.3.2.7 Safe work practices instructions include:

- a. Chapter 3, “Site-wide Safety Rules.” These rules represent a minimum set of safety rules for MSFC and MAF, and apply to all personnel on MSFC-owned property. Supervisors shall add safety rules specific to hazardous operations for which they are responsible.
- b. Chapter 4, “Minimum Housekeeping Requirements.” These are the minimum housekeeping requirements for all MSFC and MAF areas. Supervisors shall ensure employees are aware of these requirements and any additional specific housekeeping requirements for their area of responsibility.
- c. Standard Safe Work Practice requirements for electrical jobs/tasks are described in MWI 8715.1, “Electrical Safety Program.”

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d. Methods to identify and control hazardous conditions are described in MWI 8715.3, “Hazard Identification and Warning Systems” and MWI 8715.15, “Operational Safety Assessment Program.”

e. Methods to identify when employees are to wear and use PPE are described in MWI 8715.4, “Personal Protective Equipment (PPE) and Systems” and MWI 8715.3, “Hazard Identification and Warning Systems.” The MWIs include the requirement for the PPE sign to clearly state the specific PPE requirements and when the PPE is required to be worn (e.g., “Safety Glasses required while operating machinery”).

f. NPR 8831.2, “Facilities Maintenance Management.”

3.3.2.8 Hazard Control Program instructions have been developed to address specific hazard controls methods for specific jobs/tasks that include:

- a. MPD 1040.3, “MSFC Emergency Program”
- b. MPD 1800.1, “MSFC Smoking Policy”
- c. MPD 1840.1, “MSFC Environmental Health Program”
- d. MPD 1840.2, “MSFC Hearing Conservation Program”
- e. MPD 1840.3, “MSFC Respiratory Protection Program”
- f. MPD 1860.2, “Radiation Safety Program”
- g. MPD 8500.1, “MSFC Environmental Management Policy”
- h. MPD 8570.1, “MSFC Energy Management Program.”
- i. MPR 1040.3, “MSFC Emergency Plan”
- j. MPR 1600.1, “MSFC Security Procedural Requirements”
- k. MPR 1800.1, “Bloodborne Pathogens”
- l. MPR 1800.2, “MSFC Ergonomics Program”
- m. MPR 1800.3, MSFC Sanitation Program”
- n. MPR 1810.1, “MSFC Occupational Medicine”
- o. MPR 1840.1, “MSFC Confined Space Entries”

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- p. MPR 1840.2, “MSFC Hazard Communication Program”
- q. MPR 1840.3, “MSFC Hazardous Chemicals in Laboratories Protection Program”
- r. MPR 1840.4, “MSFC Asbestos Program”
- s. MPR 1860.1, “MSFC Radiation Safety Procedural Requirements”
- t. MPR 1860.2, “Nonionizing Radiation Safety”
- u. MPR 3410.1, “Training”
- v. MPR 6410.1, “Handling, Storage, Packaging, Preservation, and Delivery (HSPPD)”
- w. MPR 8500.1, “MSFC Environmental Management Program”
- x. MPR 8500.2, “MSFC Environmental Management System (EMS) Manual”
- y. MPR 8823.2, “Pressure System Safety and Certification Requirements”
- z. MWI 1810.1, “Automated External Defibrillator (AED) Program”
- aa. MWI 3410.1, “Personnel Certification Program”
- bb. MWI 6410.1, “Packaging, Handling, and Moving Program Critical Hardware”
- cc. MWI 6430.1, “Lifting Equipment and Operations”
- dd. MWI 6700.1, “MSFC Vehicle and Motor Pool Operations”
- ee. MWI 8540.2, “Green Purchasing Program”
- ff. MWI 8550.1, “Waste Management”
- gg. MWI 8550.2, “Storm Water Management”
- hh. MWI 8550.3, “Wastewater Compliance”
- ii. MWI 8550.4, “Air Emissions Compliance”
- jj. MWI 8550.5, “Chemical Management”

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- kk. MWI 8621.1, “Mishap and Close Call Reporting and Investigation Program”
- ll. MWI 8715.1, “Electrical Safety Program”
- mm. MWI 8715.2, “Lockout/Tagout Program”
- nn. MWI 8715.3, “Hazard Identification and Warning System”
- oo. MWI 8715.4, “Personal Protective Equipment (PPE) and Systems”
- pp. MWI 8715.5, “Area/Building Manager Program”
- qq. MWI 8715.10, “Explosives, Propellants, and Pyrotechnics Program”
- rr. MWI 8715.11, “Fire Safety Program”
- ss. MWI 8715.12, “Safety, Health and Environmental-Finding Tracking System (SHEtrak)”
- tt. MWI 8715.13, “Safety Concerns Reporting System (SCRS)”
- uu. MWI 8715.15, “Operational Safety Assessment Program”
- vv. MWI 8715.17, “Hazardous Operations Readiness Review Program”
- ww. MWI 8715.16, “Supervisor Safety, Health and Environmental (SHE) Visits”

NOTE: The MPRs/MWIs listed above are only applicable to MAF to the extent stated in the MPR/MWI Applicability Statement.

3.3.2.9 Managers of facilities/operations identified as hazardous or perceived to contain a high or medium level of risk to employees or property shall establish any additional site or job/task specific controls necessary to ensure personnel, visitor, and property safety.

3.3.2.10 Supervisor shall ensure facilities/operations identified as hazardous and contain high, medium or low risk to employees are entered into the IHOPS database.

3.3.2.11 The MSFC S&MA representative and MSFC Office of Center Operations representative located at MAF shall ensure all of the activities and programs contained in the MSFC documents listed in section 3.3.2.8 are implemented at MAF as applicable.

3.3.2.12 The day-to-day performance of the activities contained in the MSFC documents listed in section 3.3.2.8 at MAF shall be conducted by the MSFOC with oversight, direction and assistance from the MSFC S&MA representative and MSFC Office of Center Operations representative located at MAF.

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3.3.2.13 At MAF, the Radiation Program shall comply with the state of Louisiana regulations in addition to those in MPD 1860.2, "Radiation Safety Program."

3.3.2.14 At MAF, the loss of any radioactive material shall be reported immediately to the MSFC S&MA representative and MSFOC.

3.3.2.15 At MAF, radio frequency/microwave radiation devices shall comply with the state of Louisiana regulations in addition to those in MPR 1860.2, "Nonionizing Radiation Safety."

3.3.2.16 At MAF, Hot Work/Flame Permits are issued by the MAF Fire Department.

3.3.2.17 At MAF, Excavation/Digging permits are issued by the MSFOC with concurrence from the MSFC S&MA representative.

3.3.2.18 Buddy System

a. The buddy system where personnel work in pairs to render emergency assistance shall be used when performing operations identified to contain high or medium risk of injury to the employee in accordance with the requirements described in MWI 8715.15, "Operational Safety Assessment Program."

b. The buddy system or a periodic contact arrangement shall be considered when personnel are required to work alone for 4 hours or longer performing operations analyzed to contain low or minimal risks of injury to employees.

NOTE: When in doubt about when the buddy system is appropriate for use, contact ISB for assistance.

3.3.2.19 Process Safety Management

a. Activities and operations that include the use of highly-hazardous chemicals shall implement the requirements described in 29 CFR Part 1910.119 as determined applicable. Contact ISB and EEOH for assistance as necessary.

3.3.3 Occupational Health Care Program.

3.3.3.1 The occupational health care program is intended to prevent, provide diagnosis and treatment, and care of illnesses and injuries caused or aggravated by the work environment and is implemented in accordance with the requirements described in MPR 1810.1, "MSFC Occupational Medicine."

3.3.3.2 Emergency medical services are provided by onsite ambulance service during normal working hours. After normal working hours, the Redstone Arsenal Fire Department serves as the first responders until an offsite ambulance arrives.

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3.3.3.3 Offsite emergency medical services are available by calling 911.

3.3.3.4 MSFC and MAF employees are trained in cardiopulmonary resuscitation (CPR) on a voluntary basis.

3.3.3.5 Automated External Defibrillators (AEDs) are also available in some MSFC and MAF buildings. If the building has AEDs, the location is identified on the building's Evacuation/Emergency Plan located in the building's lobby.

3.3.3.6 At MAF, emergencies, incidents and accidents are reported by calling 911 when using a MAF network phone. When using a cell phone or a non-MAF network phone, call (504) 257-2333 or 911. Emergency medical services are provided onsite and ambulance service is obtained from a near-by hospital.

3.3.3.7 At MAF, the MSFOC provides this staff. Contact the MSFC S&MA representative located at MAF for assistance if needed.

3.3.4 Facility and Equipment Maintenance.

3.3.4.1 FMO conducts maintenance and repair of facility and infrastructure equipment to prevent it from failing and creating a hazard. FMO maintains the preventive maintenance program to monitor, replace and repair facility and infrastructure equipment at MSFC and MFSC's MAF.

3.3.4.2 Critical maintenance items shall be identified by the facility and equipment owners and tracked to ensure maintenance schedules are maintained.

3.3.4.3 The facility and equipment maintenance program shall be implemented in accordance with the requirements described in NPR 8831.2, "Facilities Maintenance Management."

3.3.4.4 Equipment owners other than FMO are responsible for ensuring maintenance and repair of their equipment is conducted to prevent it from failing and creating a hazard.

3.3.5 Disciplinary System.

3.3.5.1 Employees can be disciplined for violations of the safety and health policies, procedure, and rules. For Civil Service employees, the disciplinary system requirements are described in DG-03, "NASA Desk Guide for Table of Disciplinary Offences and Penalties." A current copy of the requirements are maintained for employee awareness on the SHE Web page under the "policies and procedures" pull down menu select "NASA Disciplinary Program."

3.3.5.2 Contractor employees, disciplinary systems are described in their respective company policies.

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3.3.6 Emergency Preparedness and Response.

3.3.6.1 The MSFC emergency program is implemented in accordance with the requirements described in MPD 1040.3, “MSFC Emergency Program.”

3.3.6.2 MAF’s emergency program is also included in MPD 1040.3, “MSFC Emergency Program.” MAF is developing a site-specific MAF Emergency Plan. Contact the MSFC S&MA representative located at MAF for assistance if needed.

3.3.6.3 Fire evacuation drills are conducted in accordance with the requirements described in MWI 8715.11, “Fire Safety Program” and NASA STD 8719.11, “Safety Standard for Fire Protection.”

3.3.6.4 Emergency/Evacuation plans for specific buildings are posted in common areas on each floor of the respective buildings.

3.3.6.5 Managers of facilities/operations identified as hazardous and/or high risk shall ensure emergency plans are prepared for these facilities/operations and ensure that they are:

- a. Maintained up-to-date.
- b. Provided (a copy) to the MSFC and MAF Emergency Operations Center.
- c. Discussed with the affected personnel.
- d. Exercised periodically during fire and severe weather drills.

3.4 CPR 4 – SHE Training.

3.4.1 SHE Training Program.

3.4.1.1 MSFC’s SHE Program is dependent on employees and supervisors having the basic knowledge and skills necessary to identify and control hazards and the specialized knowledge and skills to perform their jobs in a safe manner.

- a. Safety-related training requirements are identified by the SHE Training Assessment.
- b. Certification requirements are described in MWI 3410.1, “Personnel Certification Program.”

3.4.1.2 S&MA, EEOH and the Training and Incentives Office shall coordinate the MSFC SHE Training Program. At MAF, the MSFOC coordinates the training for MAF employees.

3.4.1.3 SHE training shall be mandatory for all employees, supervisors, and managers. The type of training courses required is dependent on the employee’s assigned duties.

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3.4.1.4 The SHE Training Catalog provides information on all SHE training offered and/or required of MSFC personnel. The catalog is located online on the Safety, Health and Environmental Web page, select the “Training” pull down menu, the “SHE Training.” The link to this catalog is located on this page. The online catalog provides a course description, target audience, required frequency, regulatory requirement (if any), and registration link. It also indicates whether the training is mandatory, job dependent, or highly recommended.

3.4.1.5 Supervisors shall ensure jobs, tasks and operations conducted by employees are assessed to determine the specific training needed for the employee to conduct the job, task or operation in a safety and healthful manner.

3.4.1.6 Supervisors shall use the SHE Training Assessment to ensure SHE-related training specific to the jobs and tasks conducted by their employees is identified and documented for each employee. The SHE Training Assessment is conducted in accordance with the requirements described in MPR 3410.1, “Training.”

3.4.1.7 Sponsors of any visitor whose stay at MSFC or MAF is expected to be over 60 days shall ensure a SHE Training Assessment is conducted for the visitor to identify the safety-related training needed during their visit.

3.4.2 All Employees including managers and supervisors.

3.4.2.1 At a minimum, all employees shall receive training to include the following:

- a. General awareness and the fundamental principles of the SHE Program.
- b. Roles and responsibilities in the SHE Program.
- c. SHE rules applicable to their worksite.
- d. How to recognize and report hazardous conditions in their worksite.
- e. Center and worksite-specific emergency procedures.
- f. How to recognize the signs and symptoms of workplace-related illnesses and how to obtain medical services (e.g., Building 4249, MSFC Medical Center).
- g. Specific job/task-related training that identifies the hazards, risks and process of performing a specific job/task in a safe and healthful manner. This can be accomplished by on-the-job training and being familiar with requirements and procedures written specifically for the job/task.
- h. When PPE is required for the job/task, the training shall include why PPE is required, the

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PPE limitations, how to properly use the PPE, and how to properly maintain the PPE.

i. Employees’ rights under OSHA 29 CFR 1960, “Occupational Safety and Health Programs and Related Matters.”

3.4.3 All employees shall complete any specific SHE-related training identified by their supervisor or designee when completing the SHE Training Assessment in accordance with the requirements described in MPR 3410.1, “Training.”

3.4.3.1 If SHE Training Assessment is completed by someone other than the employee’s supervisor, they shall be knowledgeable of the employee’s job/task assignments and of what specific training is needed to perform the job/task in a safe and healthful manner.

3.4.4 Employees designated to support the SHE Program in addition to their everyday duties include those designated as BM and ABM, Organization SHE Point-of-Contact (POC), SHE Committee representatives and Area Managers. These additional duties are referred to as “collateral duties” and require additional training in how to recognize and resolve hazards. Employees assigned to serve in any of these roles shall attend “SHE 103 – SHE Collateral Duty Training” in accordance with 29 CFR Part 1960.58, “Training of collateral duty safety and health personnel and committee members.”

3.4.4.1 BM/ABM, organization SHE POC, and SHE Committee representatives shall attend periodic SHE information update meetings conducted by S&MA as necessary.

3.4.4.2 Responsibilities for employees serving in any of these roles are listed in MWI 8715.5, “Area/Building Manager Program.”

3.4.5 All employees that conduct worksite self-inspections shall be trained to recognize workplace hazards, particularly the types of hazards directly related to their work environment in accordance with the requirements described in NPR 8715.1, “NASA Occupational Safety and Health Programs.”

3.4.6 Training Records shall be maintained in accordance with MPR 3410.1, “Training.”

3.4.7 Specialized SHE training requirements that can include assessing the employee’s comprehension and training effectiveness for SHE certifications are described in MWI 3410.1, “Personnel Certification Program.”

3.4.8 Sponsors of any visitor whose stay at MSFC or MAF is expected to be over 30 days are to ensure the visitor receives, at a minimum, SHE 101V “SHE Program Awareness Training” within the first 10 days of their visit in accordance with the requirements described in MPR 3410.1, Training.” This training can be obtained prior to arrival at MSFC or MAF from the MSFC Homepage under “Visitor Information.” Contact ISB for assistance in obtaining this training.

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3.4.9 Sponsors of any visitor whose stay at MSFC or MAF is expected to be over 60 days are to ensure the visitor receives, at a minimum, SHE 101, “SHE Program Awareness Training” within the first 10 days of their visit.” This training can be obtained from SATERN. Contact ISB for assistance in obtaining this training.

3.4.10 Employees whose stay at MSFC or MAF is in support of construction activities are to receive, at a minimum, SHE 101C, “SHE Program Awareness Training for Construction” within the first 10 days of them starting work on the construction project. This training can be obtained prior to arrival at MSFC or MAF from the MSFC Homepage under “Visitor Information.” Contact ISB for assistance in obtaining this training.

3.5 CPR 5 - Environmental Compliance.

3.5.1 MSFC’s environmental management policy, requirements and program are described in MPD 8500.1, “MSFC Environmental Management Policy,” MPR 8500.1, “MSFC Environmental Management Program,” and MPR 8500.2, “MSFC Environmental Management System Manual.”

3.5.2 MSFC’s requirements and procedures for storm water pollution prevention are described in MWI 8550.2, “Storm Water Management,” and MWI 8550.3, “Wastewater Compliance.”

3.5.3 MSFC’s clean air requirements and procedures are described in MWI 8550.4, “Air Emissions Compliance.”

3.5.4 MSFC’s hazardous waste compliance requirements and procedures are described in MWI 8550.1, “Waste Management.”

3.5.5 MSFC’s hazardous materials compliance requirements and procedures are described in MWI 8550.5, “Chemical Management.”

3.5.6 MSFC’s energy management requirements and procedures are described in MPD 8570.1, “MSFC Energy Management Program.”

3.5.7 MSFC’s green purchasing program for purchasing environmentally-preferable products designated by the EPA is addressed in MWI 8540.2, “Green Purchasing Program.”

3.5.8 MAF’s environmental compliance program is separate from the MSFC environmental compliance program and shall be in compliance with the requirements defined in MPD 8500.1, “MSFC Environmental Management Policy.”

4. RECORDS

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The records listed below are specific to this MPR. Other records associated with the MSFC SHE Program are identified in the applicable Center directives.

4.1 Annual SHE Program Plan shall be maintained by S&MA and destroyed when 10 years old, when superseded, or obsolete, whichever is sooner, in accordance with NRRS 1/125/A [1740].

4.1.1 At MAF, the Annual MAF SHE Program Plan shall be maintained by the MSFOC and destroyed when 10 years old, when superseded, or obsolete, whichever is sooner, in accordance with NRRS 1/125/A [1740]. A copy of this plan is forwarded to MSFC S&MA for inclusion into the Annual SHE Program Plan.

4.2 Inventory of Hazardous/Potentially-Hazardous Operations shall be maintained by S&MA in accordance with NRRS 8/108 in the Inventory of Hazardous Operations (IHOPS) database, temporary, destroy/delete when no longer needed.

4.2.1 At MAF, the Inventory of Hazardous/Potentially-Hazardous Operations shall be maintained by the MSFOC in accordance with NRRS 8/108 in the Inventory of Hazardous Operations (IHOPS) database, temporary, destroy/delete when no longer needed.

4.3 Monthly SHE Meeting Summary Report shall be maintained by S&MA in accordance with NRRS 1/14/B.2, and then destroyed when 3 years old or no longer needed for reference, whichever is sooner.

4.4 OSHA Form 300A, "Summary of Work-Related Injuries and Illnesses," shall be maintained by S&MA in accordance with 20 CFR Part 1904.33, "Retention and updating" for 5 years following the end of the calendar year that the record covered and then destroyed.

4.4.1 All contractors are responsible for maintaining their own OSHA Form 300A, "Summary of Work-Related Injuries and Illnesses."

4.5 S&MA Safety Report (the injury, illness, and close call trends) shall be maintained in the SHE Committee minutes in accordance with NRRS 1/14/B.2, and then destroyed when 3 years old or no longer needed for reference, whichever is sooner.

4.5.1 At MAF, the MSFOC Safety Report (the injury, illness, and close call trends) shall be maintained in the MAF SHE Committee minutes in accordance with NRRS 1/14/B.2, and then destroyed when 3 years old or no longer needed for reference, whichever is sooner. A copy of this report is forwarded to MSFC S&MA for inclusion into the S&MA Safety Report.

4.6 Safety Deviations/Waivers to MSFC SHE program requirements shall be maintained by S&MA for duration of the deviation/waiver plus 5 years, and then destroyed in accordance with NRRS 1/72/E [1410].

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4.7 Safety Deviations/Waivers to MSFC Program/Project requirements shall be maintained in accordance with the appropriate Program/Project Plan or Configuration Management Plan.

4.8 Safety Program Self-Assessment Report and Safety Trends shall be maintained by S&MA in accordance with NRRS 1/14/B.2, and then destroyed when 3 years old or no longer needed for reference, whichever is sooner.

4.8.1 At MAF, Safety Program Self-Assessment Report and Safety Trends shall be maintained by the MSFOC in accordance with NRRS 1/14/B.2, and then destroyed when 3 years old or no longer needed for reference, whichever is sooner. A copy of this report is forwarded to MSFC S&MA for inclusion into the S&MA Safety Program Self-Assessment Report and Safety Trends Report.

4.9 SHE Committee Meeting Minutes shall be posted on the Safety, Health and Environmental Web page and maintained in accordance with NRRS 1/14/B.2, and then destroyed when 3 years old or no longer needed for reference, whichever is sooner.

4.9.1 At MAF, the MAF SHE Committee Meeting Minutes shall be posted on the MAF Web page and maintained in accordance with NRRS 1/14/B.2, and then destroyed when 3 years old or no longer needed for reference, whichever is sooner.

4.10 SCRS records. See MWI 8715.13, "Safety Concerns Reporting System (SCRS)."

4.11 SHE Inspection records and related Hazard Abatement Plans shall be maintained by S&MA in the SHEtrak database until related property is disposed of by NASA, then retired to the Federal Record Center (FRC) and destroyed 5 years after disposal in accordance with NRRS 1/117/A [1700].

4.11.1 At MAF, the SHE Inspection records and related Hazard Abatement Plans shall be maintained by the MSFOC in the SHEtrak database until related property is disposed of by NASA, then retired to the Federal Record Center (FRC) and destroyed 5 years after disposal in accordance with NRRS 1/117/A [1700].

4.12 SSWP SHE Meeting Minutes shall be maintained by S&MA in accordance with NRRS 1/14/B.2, and then destroyed when 3 years old or no longer needed for reference, whichever is sooner.

4.12.1 When SSWP is not utilized, hardcopy records shall be maintained by each supervisor for 3 years.

4.13 Employee Safety Training records shall be maintained in accordance with MPR 3410.1, "Training."

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4.14 Employee Safety Training records for contractors shall be maintained by the contractor in accordance with MPR 3410.1, "Training."

4.15 Record of visitors that receive SHE 101V, "SHE Program Awareness Training" shall be forwarded to ISB by the sponsor and maintained by ISB for as long as the visitor is onsite at MSFC or MAF (NRRS 3/33/H).

4.16 Record of construction employees that receive SHE 101C, "SHE Program Awareness Training for Construction" shall be maintained by the contractor in accordance with MPR 3410.1, "Training." A copy of this training is also maintained by FMO.

5. FLOW DIAGRAM

None.

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CHAPTER 1 SUPERVISOR GENERAL SHE RESPONSIBILITIES

Supervisors shall:

CH1.1 Stop any operation or activity if an unsafe act or condition exists that they feel have the potential to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment and take appropriate action if an unsafe act or condition exists, report it to management, and ensure subordinates are made aware of their responsibility and authority to do the same.

CH1.2 Promote safety, health, and environmental stewardship by setting a positive example by following the rules, wearing any required personal protective equipment, reporting hazards, reporting injuries and illnesses, and basically doing anything that they expect employees to do and communicating MSFC SHE goals.

CH1.3 Communicate housekeeping rules and look for housekeeping problems as part of their daily routine. Minimum requirements are provided in Chapter 4, “Minimum Housekeeping Requirements.”

CH1.4 Conduct monthly SHE meetings with employees and monthly SHE visits of assigned areas of responsibility in accordance with MWI 8715.16, “Supervisor Safety, Health, and Environmental (SHE) Visits.”

CH1.5 Evaluate employees’ SHE performance using the performance appraisal system.

CH1.6 Be members of, or support, MSFC’s SHE Committees.

CH1.7 Encourage employees to be involved in the MSFC SHE Program. Section 3.1.5 provides examples of the different methods of how employees can be involved in the MSFC SHE Program.

CH1.8 Ensure JHAs and other hazard assessments are performed in accordance with MWI 8715.15, “Operational Safety Assessment Program” and employees are aware of the specific hazards associated with the jobs/tasks they are expected to perform.

CH1.9 Inform employees of the specific hazards associated with their workplace and duties, location of nearest medical treatment facility, procedure for obtaining treatment, method of reporting occupational injuries or illnesses, and their responsibilities and rights under OSHA law (29 CFR Part 1960.59, “Training of Employees and Employee Representatives” for civil service or 29 CFR Part 1903.2(a)(1), “Inspections, Citations, and Proposed Penalties” for contractors).

CH1.10 Ensure MSFC Form 596, “Emergency Telephone Numbers,” or equivalent is posted on telephones in their area.

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CH1.11 Report and investigate mishaps, including close calls, in accordance with MWI 8621.1, “Mishap and Close Call Reporting and Investigation Program.”

CH1.12 Ensure personnel receive job specific training needed to perform their jobs/tasks in a safe and healthful manner. This includes on-the-job training.

CH1.13 Ensure personnel are certified where required, before assigning them to perform potentially-hazardous or high risk jobs/tasks that require certification, in accordance with MWI 3410.1, “Personnel Certification Program.”

CH1.14 Ensure all personnel (including visitors, contractors, and researchers) within work areas under their supervision comply with the requirements of the MSFC SHE Program.

CH1.15 Perform a self-assessment of their organization regularly to ensure jobs, tasks and operations performed by the organization are in compliance with the MSFC SHE Program requirements. The self-assessment can be included as part of the monthly supervisor safety visits to the various areas for which the supervisor has responsibility.

CH1.16 Coordinate, as necessary, with the building’s Access Authority, Protective Services Office, and BMs to identify areas/rooms within their area of responsibility that need to be identified as “access controlled,” “restricted,” “authorized personnel only,” and “Mission Essential Infrastructure (MEI).” See MPR 1600.1, “MSFC Security Procedural Requirements” for additional information.

CH1.17 Ensure, as necessary within their area of responsibility, that access to areas/rooms identified as “access controlled,” “restricted,” “authorized personnel only,” and “MEI” is limited only to employees that have been granted access to those areas/rooms.

CH1.18 Identify a POC that can be contacted to grant access to each area they have identified as “access controlled,” “restricted,” “authorized personnel only,” and “MEI” within their area of responsibility. It is recommended the POC name and phone number be posted adjacent to the posted sign or at the entrance to the controlled area/room.

CH1.19 Ensure jobs/tasks are assessed prior to being performed by employees to identify potential hazards. Any hazards that are identified are eliminated or actions (engineering or administrative) are taken to control the hazards and put in place prior to the job/task being performed.

CH1.20 Coordinate with technical disciplines to ensure adequate review of program/project SHE-related activities during the planning, construction, testing and operation phases of new and modified facilities, equipment and processes.

CH1.21 Ensure the buddy system is used to render emergency assistance when performing

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operations that have been identified to contain high or medium risk of injury to the employee in accordance with the requirements described in MWI 8715.15, “Operational Safety Assessment Program.”

CH1.22 Ensure the SHE Training Assessment is completed for each employee for which they are responsible and update this assessment when the employee’s job assignments change that can require additional SHE training.

CH1.22.1 If the SHE Training Assessment is completed by someone other than the supervisor, the employee completing the SHE Training Assessment is to be knowledgeable of the hazards and risks directly associated with the jobs and tasks performed by the employee and technically competent to identify the specific training required.

CH1.23 Ensure employees follow the safety precautions identified by “warning” and “caution” notes in operating procedures.

CH1.24 Ensure employees wear PPE when required due to the hazards in the area or required by a hazard analysis, operating procedure or PPE signage.

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CHAPTER 2 EMPLOYEE GENERAL SHE RESPONSIBILITIES

Employees shall:

CH2.1 Stop any operation or activity if an unsafe act or condition exists that they feel has the potential to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment, take appropriate action if necessary and report it to the supervisor, the BM, or the safety designee listed on the “Occupational Safety and Health Protection for NASA Employees” poster.

CH2.2 Adhere to the SHE rules, plans, and procedures.

CH2.3 Avoid unsafe acts.

NOTE: EO 12196, “Occupational Safety and Health Programs for Federal Employees” and MSFC management guarantee employees freedom from restraint, interference, coercion, discrimination, or reprisal for exercising their rights in participating in the activities of the Agency’s occupational safety and health programs.

CH2.4 Report all safety, health, and environmental problems, close calls, and mishaps encountered to their supervisor. See Chapter 5, “Hazard Reporting Precedence.”

CH2.5 Report all fires immediately.

CH2.6 Attend and participate in SHE Committees, SHE meetings, and SHE training and awareness activities.

CH2.7 Correct imminent danger hazards immediately or secure area and mark with hazard warnings to prevent injury or damage per MWI 8715.3, “Hazard Identification and Warning System.”

CH2.8 Be involved in the MSFC SHE Program. Section 3.1.5 provides examples of the different methods of how employees are involved in the MSFC SHE Program.

CH2.9 Become familiar with emergency procedures and follow them when necessary.

CH2.10 Obtain and post a “Permit for Portable Appliance,” MSFC Form 3798, for privately-owned, electrically-powered appliances with heating elements (MWI 8715.11, “Fire Safety Program”).

CH2.11 Be familiar with the safety and health information provided on Material Safety Data Sheets for the hazardous chemicals in their work area.

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CH2.12 Wear PPE when required due to the hazards in the area or required by a hazard analysis, operating procedure or PPE signage.

CH2.13 Do not enter areas/rooms identified as “access controlled,” “restricted,” “authorized personnel only,” or “MEI” unless granted access to enter by the areas/rooms POC or supervisor, or organization that identified access to the area/room needed to be controlled.

CH2.14 Assess jobs/tasks prior to performing them to identify any potential hazards. Eliminate the hazards or ensure actions (engineering or administrative) are taken and put in place to control the hazard.

CH2.15 Receive training specific for the job/task to be performed and certification as required.

CH2.16 Use the buddy system so that emergency assistance can be rendered when performing operations identified to contain high or medium risk of injury to the employee in accordance with the requirements described in MWI 8715.15, “Operational Safety Assessment Program.”

CH2.17 Complete all SHE training identified by their supervisor in the SHE Training Assessment.

CH2.18 Conduct jobs/tasks following the sequence of steps identified in operating procedures when an operating procedure is required. This includes safety precautions identified by “warning” and “caution” notes.

CH2.19 Initiate appropriate actions necessary to correct potentially-hazardous conditions that cannot be corrected on the spot. This action includes submitting a facility work request or safety concern, placing cones or barricade pedestals with retractable barricade strap, or erecting a temporary barricade to alert other employees of the hazard in accordance with the requirements described in MWI 8715.3, “Hazard Identification and Warning System.”

CH2.20 Become familiar the specific hazards associated with their workplace and duties, location of nearest medical treatment facility, procedure for obtaining treatment, method of reporting occupational injuries or illnesses, and their responsibilities and rights under OSHA law (29 CFR Part 1960.59, “Training of Employees and Employee Representatives” for civil service or 29 CFR Part 1903.2(a)(1), “Inspections, Citations, and Proposed Penalties” for contractors).

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CHAPTER 3 SITE-WIDE SAFETY RULES

All Employees shall:

CH3.1 Move to a secure area immediately after being notified (emergency warning system, fire alarm, or other alarm system).

CH3.2 Remove loose objects or other tripping hazards from floors immediately. Clean liquid spills from floor immediately or highlight by safety cones or signs.

CH3.3 Keep fire exits and means of egress free of boxes, file cabinets, and excess furniture.

CH3.4 Close desk or file drawers when not in use and not open more than one drawer of a file cabinet at a time.

CH3.5 Use only approved ladders, scaffolds, or step stands to reach items stored overhead or out of reach.

CH3.6 When going up or down stairs, take one step at a time and hold the handrail where possible. In situations where there is two-way traffic, bear to the right side of the stairway.

CH3.7 Use proper manual lifting techniques and limit lifts to their personal physical capabilities, (typically no more than 40 pounds per employee).

CH3.7.1 Seek assistance from another employee when the item weighs more than 40 pounds or is too bulky to safely handle.

CH3.7.2 Any task requiring an employee to manually lift an object weighing more than 40 pounds shall be assessed to determine if alternate lifting methods are feasible and only allowed with prior concurrence from the Industrial Safety Branch.

CH3.8 Store hazardous chemicals/materials only in approved cabinets/areas.

CH3.9 Wear seat belts in all vehicles while onsite and anywhere on duty.

CH3.10 Not use cell phone while driving a personal vehicle on MSFC, or anywhere when driving or operating a Government vehicle or equipment except in a hand-free arrangement.

CH3.11 Not leave a vehicle running while unattended.

CH3.12 Walk on sidewalks and/or marked paths if available.

CH3.13 Not ride bicycles and motorized scooters on sidewalks or inside buildings.

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CH3.13.1 Exception 1: Electric-powered units used by persons with physical disabilities. The ODEO approves the documented “need” for the electric-powered unit and the Industrial Safety Branch approves the electric-powered unit.

CH3.13.2 Exception 2: Bicycles are allowed to be ridden inside MAF building 103.

CH3.14 Wear a suitable helmet conforming to Federal safety standards and a reflective vest when operating or riding bicycles on MSFC roadways in accordance with Redstone Army Regulation 190-5.

CH3.14.1 Exception 1: The use of helmets and reflective vests are not required when riding bicycles from building to building within access controlled areas (i.e., East and West Test Areas, 4700 area complex).

CH3.14.2 Exception 2: Employees riding bicycles on MAF roadways are to comply with the State of Louisiana requirements.

CH3.15 Walk (not run) in buildings, parking lots, or sidewalks. Running is allowed only in designated exercise areas.

CH3.16 Turn off coffeemakers and heat-producing appliances at the end of the shift and when left unattended in accordance with MWI 8715.11, “Fire Safety Program.”

CH3.17 Avoid cleaning areas/items contaminated with blood. (Only personnel who have completed the bloodborne pathogens course are allowed to clean areas/items contaminated with blood.)

CH3.18 Not feed wild animals.

CH3.19 Except for special “open” events, not bring children into the workplace on a routine basis or for extended visits. When children briefly accompany the parent to the workplace, the employee is responsible for the safety, well being, and conduct of the child.

CH3.20 Not enter any area where a barricade is erected to restrict entry unless authorized to enter.

CH3.21 Maintain floors, where practical, in a dry condition. Especially important is the prompt cleanup of water, oil drips or grease from vehicular equipment in work areas.

CH3.22 Provide platforms, mats or other dry standing places in areas where wet processes are used.

CH3.23 Keep work areas free from protruding nails, splinters, loose objects, and unnecessary holes and openings.

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CH3.24 Ensure that sufficient lighting and adequate waste containers are provided in the work area.

CH3.25 Pedestrians have the right-of-way at crosswalk paths designated by painted crosswalk on the pavement.

CH3.25.1 Vehicles have the right away at main roadway mid-block crossing points with no painted crosswalks. These crossing points are marked with signs stating “Pedestrians Yield to Motorists.”

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CHAPTER 4 MINIMUM AREA ORDERLINESS REQUIREMENTS

Employees shall:

CH4.1 Keep area neat and orderly at all times. Limit materials, tools, and equipment out of normal storage places to those needed for operations.

CH4.2 Arrange desks, tables, and other furniture and equipment, so that electrical and telephone cords and outlets do not present a tripping hazard.

CH4.3 Securely fasten shelves, cabinets, lockers, and other furniture to the floor or wall if a possibility of overturning exists.

CH4.4 Store materials so they do not create a hazard. Bags, containers, bundles, and other materials stored in tiers are to be stacked, blocked, interlocked, and limited in height so that they are stable and secure against sliding or collapsing.

CH4.5 Not store items on the top of any free-standing or fixed furniture that is 6 feet or greater in height, unless the top is specifically designed for such purpose.

CH4.6 Stack/arrange items stored on the top of any height furniture so that it does not create a potential hazard to personnel and property.

CH4.7 Not store furniture, equipment, supplies, or other substantial physical objects in required egress corridors and passageways serving six or more people except in lobbies, recessed areas, or other spaces specifically designed for such purpose.

CH4.8 Maintain storage in areas protected by automatic sprinklers at least 18 inches below the level of the sprinkler heads.

CH4.9 Provide waste cans with a self-closing lid and ventilated bottom (UL or ARL approved) in areas that have cloth rags or paper towels saturated with combustible or flammable liquids.

CH4.10 Provide metal cans with self-extinguishing lids in computer rooms and areas that generate a large amount of paper.

CH4.11 Clean work areas and remove combustible materials at the end of each workday.

CH4.12 Not use furnace rooms, boiler rooms, or equipment rooms for storage.

CH4.13 Maintain floors in a dry condition. Clean up any spilled fluids (water, oil, or grease) from floor in the work area.

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CHAPTER 5 HAZARD REPORTING PRECEDENCE

TO REPORT A SUSPECTED UNSAFE CONDITION:

Employees shall be responsible for reporting unsafe or potentially-unsafe conditions in the workplace, or unsafe products the Center produces. Employees are guaranteed freedom from restraint, interference, coercion, discrimination, or reprisal for exercising their rights. Several lines of communication are available. The preferred sequence of reporting safety concerns is:

CH5.1 Contact your supervisor/management.

CH5.2 Contact MSFC Safety Hotline 544-HELP, “Safety Option.”

CH5.3 Submit MSFC SCRS via mail-in pamphlet (local bulletin boards) or the SHE Web page.

CH5.4 Contact the Industrial Safety Branch Manager 544-0046, or at MAF, contact the S&MA representative located at MAF at 504-257-2526.

CH5.5 Contact the safety designee listed on the “Occupational Safety and Health Protection for NASA Employees” poster (S&MA Director), NASA Safety Reporting System (NSRS). Forms are available in common areas of buildings at MSFC and on the SHE Web page.

CH5.6 Report safety concerns via OSHA Hotline 1-800-321-OSHA.

NOTE: If the condition is not satisfactorily corrected, go to the next step. If none of these reporting steps provides satisfactory correction, the employee may file an appeal or grievance in accordance with the requirements described in NPR 8715.1, “NASA Occupational Safety and Health Programs.”

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APPENDIX A
MSFC SHE CORE PROGRAM REQUIRMENTS
(Parenthesis indicate section in MPR)

- A.1 CPR 1 - Management Leadership and Employee Involvement (3.1)
 - A.1.1 Management Commitment and Leadership (3.1.1)
 - A.1.2 SHE Policy (3.1.1.7)
 - A.1.3 SHE Vision (3.1.1.8)
 - A.1.4 SHE Goals (3.1.1.9)
 - A.1.5 Agreement between MSFC, MESA and AFGE (3.1.1.10 and 3.1.1.11)
 - A.1.6 Managers and Supervisors Responsibility and Accountability (3.1.2)
 - A.1.7 Employee Accountability (3.1.3)
 - A.1.8 Management and Supervisor Involvement (3.1.4)
 - A.1.9 Employee Involvement (3.1.5)
 - A.1.10 Contractor and Other Non-NASA Personnel Working Onsite Involvement (3.1.6)
 - A.1.11 AM/BM Involvement (3.1.7)
 - A.1.12 Authority (3.1.8)
 - A.1.13 Resources (3.1.9)
 - A.1.14 Professional Safety and Health Staff (3.1.10)
 - A.1.15 SHE Monthly Meetings (3.1.11)
 - A.1.16 Safety Awards (3.1.12)
 - A.1.17 SHE Program Evaluation (3.1.13)
 - A.1.18 Annual SHE Program Plan (3.1.14)
 - A.1.19 Safety Variance Process (3.1.15)

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A.2 CPR 2 - Worksite Analysis. (3.2)

A.2.1 Hazard Assessment (3.2.1)

A.2.2 Routine Self-Inspections (3.2.2)

A.2.3 Unsafe Condition Reporting System for Employees (3.2.3)

A.2.4 IH Program (3.2.4)

A.2.5 Mishap/Close Calls Investigated and Hazards Corrected (3.2.5)

A.2.6 Injury, Illness, and Close Call Trend Analysis (3.2.6)

A.3 CPR 3 - Hazard Prevention and Control. (3.3)

A.3.1 Professional Resources (3.3.1)

A.3.2 Hazard Elimination and Control Methods (3.3.2)

A.3.3 Occupational Health Care Program (3.3.3)

A.3.4 Facility and Equipment Maintenance (3.3.4)

A.3.5 Disciplinary System (3.3.5)

A.3.6 Emergency Preparedness and Response (3.3.6)

A.4 CPR 4 – SHE Training. (3.4)

A.4.1 Responsibilities, recognize hazardous conditions and hazard control methods (3.4.2)

A.4.2 Training documentation (3.4.6)

A.4.3 Training comprehensive and effectiveness (3.4.7)

A.5 CPR 5 - Environmental Compliance. (3.5)

A.5.1 MSFC's environmental management policy, requirements and program (3.5.1)

A.5.2 MSFC's requirements and procedures for storm water pollution prevention (3.5.2)

A.5.3 MSFC's clean air requirements and procedures (3.5.3)

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A.5.4 MSFC's hazardous waste compliance requirements and procedures (3.5.4)

A.5.5 MSFC energy management requirements and procedures (3.5.6)

A.5.6 MSFC green purchasing program (3.5.7)

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**APPENDIX B
MSFC SHE PROGRAM REQUIREMENTS COMPARED TO OSHA VOLUNTARY
PROTECTION PROGRAM (VPP) REQUIREMENTS**

	CPR	VPP Elements	MPR 8715.1 sections and other MSFC documents that address VPP elements
B.1	CPR 1	Management Leadership and Employee Involvement	3.1
B.1.1	CPR 1-1	Management commitment to worker safety and health protection	3.1.1.1, 3.1.1.2, 3.1.1.3, 3.1.1.4
B.1.2	CPR 1-2	Top management's personal involvement	2.2, 2.3, 2.4, 2.5
B.1.3	CPR 1-3	System to address issues/concerns during overall management planning/purchasing/contracting	3.1.1.6, MWI 5100.1, MWI 5115.2, MWI 8715.9
B.1.4	CPR 1-4	Safety and Health (S&H) integrated into the general day-to-day management system	3.1.1.6
B.1.5	CPR 1-5	Written S&H management system	3.1.1.5
B.1.6	CPR 1-6	S&H policy communicated and understood by employees	3.1.1.7, SHE Web page under "Policies and Procedures" pull down menu select "Policy, Vision, Goals"
B.1.7	CPR 1-7	S&H goals and results-oriented objectives for meeting these goals	3.1.1.8, SHE Web page under "Metrics and Status" pull down menu select "SHE Program Plan"
B.1.8	CPR 1-8	Clearly assigned S&H responsibilities, with documented authority and accountability (from top managers to line supervisors to employees)	Section 2, Responsibilities, 3.1.2, 3.1.3, 3.1.8
B.1.9	CPR 1-9	Resources necessary to meet S&H responsibilities including access to certified S&H professionals	3.1.9, 3.1.10
B.1.10	CPR 1- 10	Selection and oversight of contractors that ensure effective S&H protection	3.1.6.2, MWI 5100.1, MWI 5115.2, MWI 8715.9

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B.1.11	CPR 1-11	3 meaningful ways employees can participate in the S&H activities and decision-making that impact their S&H in addition to the hazard reporting system	3.1.5.2
B.1.12	CPR 1-12	Annual S&H management system evaluation	3.1.13, 3.1.14
B.1.13	CPR 1-13	Signed agreements with collective bargaining agents. If no collective bargaining agent, the written assurance by management that employees understand and support the S&H management system	3.1.1.10, 3.1.1.11
B.2	CPR 2	Worksite Analysis	3.2
B.2.1	CPR 2-1	Baseline hazard analysis to identify and document common hazards at the worksite (OSHA regulations, building codes, recognized industry standards)	3.2.1, 3.2.1.6, MWI 8715.15, MWI 8715.12
B.2.2	CPR 2-2	Documentation within the baseline hazard analysis for sampling identifies health hazards (frequency of exposure, durations, number of exposed employees) Hazard analysis for routine jobs	MPD 1810.1
B.2.3	CPR 2-3	Hazard analysis routine jobs, tasks and processes	3.2.1.1, 3.2.1.5
B.2.4	CPR 2-4	Update hazard analysis when significations changes occur including non-routine tasks, new processes, materials, equipment and facilities	3.2.1.4
B.2.5	CPR 2-5	Samples, tests and analyses follow nationally-recognized procedures	MPD 1810.1
B.2.6	CPR 2-6	Self-inspections that cover the entire worksite at least quarterly (weekly for construction) conducted by trained staff with written documentation and hazard correction tracking	3.2.2, MWI 8715.12, MWI 8715.5, MWI 8715.16

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B.2.7	CPR 2-7	Written reporting system for employee to express concerns and receive a timely response	3.2.3, MWI 8715,13
B.2.8	CPR 2-8	Accident investigations conducted by trained staff with written findings to identify all contributing factors	3.2.5. MWI 8621.1
B.2.9	CPR 2-9	System that analyzes injury, illness and related data used to identify common causes and needed corrections in procedures, equipment or programs	3.2.6, SHE Web page under "Metrics and Status" pull down menu select "current safety metric", or "safety search."
B.3	CPR 3	Hazard Prevention and Control	3.3
B.3.1	CPR 3-1	Effective system for identifying and eliminating or controlling hazards. All affected employees are to understand and follow the system	3.3.2, MWI 8715.12, MWI 8715.3
B.3.2	CPR 3-2	System for tracking hazards includes documentation, how and when hazards are identified, control or eliminated and communicated to employees	3.3.2, MWI 8715.12, MWI 8715.3
B.3.3	CPR 3-3	Written preventive/predictive maintenance system that reduces safety-critical equipment failures and schedules routine maintenance and monitoring	3.3.4, NPR 8831.1
B.3.4	CPR 3-4	Occupational health care program (medical services, staff trained in CPR, and hazard analysis by licensed health care professionals	3.3.3, MPR 1810.1
B.3.5	CPR 3-5	Consistent disciplinary system that operates for all employees to disregard rules	3.3.5, SHE Web page under the "policies and procedures" pull down menu select "NASA Disciplinary Program."
B.3.6	CPR 3-6	Written plans to cover emergency situations including emergency and evacuation drills for all shifts	3.3.6, MPR 1040.3, MWI 8715.11
B.4	CPR 4	Safety and Health Training	
B.4.1	CPR 4-1	Training for managers and supervisors to emphasize S&H leadership responsibilities	3.4.2

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B.4.2	CPR 4-2	Training for all employees on the S&H management system, hazards, hazard controls in place	3.4.2, MPR 34101.
B.4.3	CPR 4-3	Training to recognize hazards and safe work practices	3.4.2
B.4.4	CPR 4-4	Method for assessing the comprehension and effectiveness of the training	3.4.7, MWI 34101.
B.4.5	CPR 4-5	Documenting all training that individual employees receive	3.4.6, SATERN

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APPENDIX C MAXIMUM WORK HOUR GUIDELINES

C.1 Supervisors are recommended to use the following guidelines for workers whose job performance can directly impact the safety of others, the safety of NASA high value property, or mission safety, and to consider them for other workers.

C.2 Maximum Work Periods:

C.2.1 12 Consecutive hours (16 hours in an emergency situation).

C.2.2 60 hours during a workweek (7-day period).

C.2.3 7 consecutive days without at least 1 full day off.

C.2.4 240 hours during a 4-week period.

C.2.5 2,500 hours during a rolling 12-month period.

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APPENDIX D ACRONYMS

- D.1 Alabama Department of Environmental Management (ADEM)
- D.2 American Federation of Government Employees (AFGE)
- D.3 American National Standards Institute (ANSI)
- D.4 Area Manager (AM)
- D.5 Assistant BM (ABM)
- D.6 Authority Having Jurisdiction (AHJ)
- D.7 Automated External Defibrillator (AED)
- D.8 Building Manager (BM)
- D.9 Cardiopulmonary Resuscitation (CPR)
- D.10 Code of Federal Regulations (CFR)
- D.11 Contracting Officer (CO)
- D.12 Core Program Requirement (CPR)
- D.13 Data Requirement Document (DRD)
- D.14 Designated Safety and Health Official (DASHO)
- D.15 Employee Performance Communication System (EPCS)
- D.16 Environmental Engineering and Occupational Health (EEOH)
- D.17 Environmental Management System (EMS)
- D.18 Facilities Management Office (FMO)
- D.19 Facilities Work Request (FWR)
- D.20 Applied Research Laboratory (ARL)
- D.21 Handling, Storage, Packaging, Preservation, and Delivery (HSPPD)

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- D.22 Headquarters (HQ)
- D.23 Incident Reporting Information System (IRIS)
- D.24 Industrial Hygiene (IH)
- D.25 Industrial Safety Branch (ISB)
- D.26 Integrated Management Systems Council (IMSC)
- D.27 Inventory of Hazardous Operations (IHOPS)
- D.28 Job Hazard Analysis (JHA)
- D.29 Louisiana Department of Environmental Quality (LDEQ)
- D.30 Manufacturing Support and Facility Operations Contractor (MSFOC)
- D.31 Marshall Engineers and Scientists Association (MESA)
- D.32 Marshall Procedural Requirements (MPR)
- D.33 Marshall Space Flight Center (MSFC)
- D.34 Marshall Team Meeting (MTM)
- D.35 Material Safety Data Sheets (MSDS)
- D.36 Michoud Assembly Facility (MAF)
- D.37 Mission Essential Infrastructure (MEI)
- D.38 NASA FAR Supplement (NFS)
- D.39 NASA Records Retention Schedules (NRRS)
- D.40 NASA Safety Reporting System (NSRS)
- D.41 National Fire Protection Association (NFPA)
- D.42 Occupational Safety and Health Administration (OSHA)
- D.43 Office of Diversity and Equal Opportunity (ODEO)

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- D.44 OSHA Voluntary Protection Program (VPP)
- D.45 Personal Protective Equipment (PPE)
- D.46 Point of Contact (POC)
- D.47 Qualified Credentialed Professional (QCP)
- D.48 Safety and Mission Assurance (S&MA)
- D.49 Safety Concerns Reporting System (SCRS)
- D.50 Safety, Health and Environmental (SHE)
- D.51 Safety, Health and Environmental-Finding Tracking System (SHEtrak)
- D.52 System for Administrative Training and Education Resources for NASA (SATERN)
- D.53 Source Evaluation Board/Committee (SEB/C)
- D.54 Space Shuttle Program (SSP)
- D.56 Supervisor Safety Web Page (SSWP)
- D.57 Trouble Call (TC)
- D.58 Underwriters Laboratory (UL)
- D.59 Work Control Center (WCC)