MARSHALL PROCEDURAL REQUIREMENTS

QD01

MARSHALL SAFETY, HEALTH, AND ENVIRONMENTAL (SHE) PROGRAM
## DOCUMENT HISTORY LOG

<table>
<thead>
<tr>
<th>Status (Baseline/ Revision/ Change/ Revalidation/ Canceled)</th>
<th>Document Revision/ Change</th>
<th>Effective Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td></td>
<td>7/10/00</td>
<td>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.</td>
</tr>
<tr>
<td>Revision</td>
<td>A</td>
<td>8/23/01</td>
<td>This document has been rewritten in its entirety.</td>
</tr>
<tr>
<td>Revision</td>
<td>B</td>
<td>2/20/2004</td>
<td>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.</td>
</tr>
<tr>
<td>Revision</td>
<td>C</td>
<td>10/29/2004</td>
<td>Revised to bring document in compliance with the HQ Rules Review Action (CAITS: 04-DA01-0387). Changes were also made to reflect S&amp;MA organizational name changes (i.e., QS to QD). Revised safety and health goals and objectives.</td>
</tr>
<tr>
<td>Revision</td>
<td>D</td>
<td>1/17/2006</td>
<td>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&amp;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.</td>
</tr>
<tr>
<td>Revision</td>
<td>F</td>
<td>4/16/2008</td>
<td>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.]</td>
</tr>
</tbody>
</table>
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.

Revision | I | 6/8/2011 | Deleted MPD/MPR/MWI titles in body of document. Addressed NCRs 1264, 1265, 1266, 1269, 1280, and 1292. Updated 2.11 SHE Committee, 3.1.13 SHE Program evaluation, and 3.1.14 SHE Program Plan. Minor updates throughout MPR. Added several definitions and updated others to match other MWIs. Changed 3.1.15 variance to request for relief per NPR 8715.3 update. Defined process for contractor to receive MSFC safety performance awards. Updated Appendix B. Added reference for contractors to be compliant with the MSFC Quality Management System when performing safety related operations and processes.

Revision | J | 2/20/2013 | Total rewrite. Revised per 2011 management review. Reformatted per MWI 1410.1 revision. Rearranged some sections so that the flow is easier to follow and the requirement is clearer. Increased “shall statements” from approximately 350 to 442. The increase in “shall”s is a result of moving some requirements from MWIs to this MPR. Moved the MSFC Fall Protection Requirements from MWI 8715.4 to this MPR. The update makes the WI more generic where it is worded so that it is more applicable to both MSFC and MAF. Where applicable replaced “MSFC and MAF” with “Center” so the instruction is more generic and be easily applicable to both locations. Where applicable replaced Center specific organization names (ISB, EEOH, FMO and PSO) with the generic terms “Center Safety Office, Center Occupational Health Office, Center Environmental Engineering Office, Center Facilities Management Office, Center Protective Services Office, etc.” so the instruction is more generic and can be easily applicable to both locations. Used MSFC or MAF if the instruction is applicable to only one location. Added definitions in Appendix A for “Center Safety Office, Center Occupational Health Office, Center Environmental Engineering Office, Center Facilities Management Office, Center Protective Services Office, etc.” and identified what organization at each location (MSFC or MAF) performs the instruction.

Revision | K | 1/10/2014 | Added responsibilities for Office of Procurement (1.5), Office of Human Capital (1.6) and tenants (2.7). The addition of section 1.5 is to maintain the communications requirements between PS, S&MA and EEOH identified in MWI 8715.9 and allow MWI 8715.9 to be cancelled. Emphasized employees are responsible for their own safety while on the Center (2.3.2, CH 9). Added note for JHAs not needed in office environment (3.1). Defined role of safety office in facilities off Center (3.2.8, 4.8.5). Added process for org to present to IMSC if less than “green” on IMSFC SHE metric charts for 3 consecutive months (3.6.3). Added NAIISC code used by MSFC (3.6.4). Added to remove sign and barricades when hazardous condition no longer exists (4.2.1). Added statement for onsite physicals for certs (4.4.2). Other minor changes throughout MPR to better clarify a requirement. Draft 2 – The review for this draft is limited only to those sections highlighted in blue. These changes are administrative changes where NOTES were added to provide additional information or clarify a statement. Section 3.3.3 “Website for Reporting Program and Project Concerns (WRPPC)” was added because
its use is not mentioned in any other Center level document. Updated safety award Table 2 in Chapter 10 to match the MSFC Clause 52.223-94.

**Revision L** 12/22/2014  Added responsibilities for CD, SHE-related collateral duty roles, contractors, tenants and several MPR sections to address the gaps identified in the gap analysis performed by the NSC REDAA prior to the QARR and IFO audits. The gaps noted a lack of flowdown of HQ requirements to Center documents or the MPR contained wording where it was unclear if there was a full flowdown of the HQ requirement. Updated wording is several sections to clarify the responsibility or requirements. Where applicable stated to “follow the process described in the HQ document” when enough detail is provided in the HQ document so that the requirement is not duplicated in the Center document. Changed S&MA to SMA.

**Revision M** 1/29/2016  Changed Inside Marshall to Explornet Homepage and SHE Webpage to SHE Community. Changed to weekly inspection for all emergency shower/eyewash stations. Some word changes to paragraphs throughout this MPR to better clarify the requirement including Chapters 7, 8 and 9. Changed Center Safety Office, Center Occupational Health Office and Center Environmental Office to Center SHE Office in paragraphs where all 3 Center offices are involved. Added accountability in Chapter 1 for Collateral Duty role, SHE Committee, MAF and contractor/tenants. Added reference for Memorandum of Agreement between Centers. Combined like requirements in Chapters 7, 8, and 9. Included reference to terms now used to report Center OSHA recordable mishaps, Days Away From Work Injury and Illness (DAFWII) and Total Case Rate (TCR). Deleted numerous acronyms. Deleted MSFC Clause 52.223-94.

**Revision N** 11/2/2016  Added MSFC unique clause 52.223-97, Record retention for emergency shower/eyewash, emergency light, AED and portable fire extinguisher inspections. Added reference to Team Redstone Policy for Walking, Jogging and Running. Added reference that Contractors may be requested to perform mishap/close call investigation. Deleted MAF-Plan FY2012 001 and updated section 2.9.2 to reflect this change. Changed mishap/close call to incident. Updated records for annual SHE Program Plan. Changed SHE Committee Rep and SHE organization POC into one role Organization’s SHE POC. Changed NMIS organization POC to Organization’s NMIS POC. Updated several sections for clarification. Added clarification of requirements in most sections. Reworded some statements so they are not a responsibility. Added chapter to describe sign/tag format, color combinations and major message. Acronyms not spelled out first use in body of MWI per OPRD Tips for writing directives.

**Change I** 3/16/2017  On 3/16/17, at the request of the OPRD, administrative changes were made to update Appendix D Records, references to MSFC Explornet Homepage, and Table of Contents to include chapter subsections.

**Revision O** 7/7/2017  Clarified concurrence process for reasonable accommodations dealing with personally-owned exercise equipment in the employee’s work area and service animals brought on Center in 9.1.27 and 9.1.30. Added definition for exercise/fitness equipment in Appendix A. Clarified disposal of smokeless tobacco containers in 9.1.23.3 and 10.1.1.19. Clarified entry of unauthorized employees into areas with barricades in 4.2.3.1 and 4.2.5.5 notes. Spelled acronym first use in body of MPR, does not include NASA, NPD, NPR, MPR, MWI and MSFC. Please limit comments to these Highlighted Areas.
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>PARAGRAPH</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.1 Purpose</td>
<td>9</td>
</tr>
<tr>
<td>P.2 Applicability</td>
<td>9</td>
</tr>
<tr>
<td>P.3 Authority</td>
<td>9</td>
</tr>
<tr>
<td>P.4 Applicable Documents and Forms</td>
<td>10</td>
</tr>
<tr>
<td>P.5 Measurement/Verification</td>
<td>14</td>
</tr>
<tr>
<td>P.6 Cancellation</td>
<td>14</td>
</tr>
<tr>
<td>Chapter 1 Responsibilities</td>
<td>15</td>
</tr>
<tr>
<td>1.1 Center Director</td>
<td>15</td>
</tr>
<tr>
<td>1.2 Directorate/Office Director/Manager</td>
<td>19</td>
</tr>
<tr>
<td>1.3 SMA</td>
<td>23</td>
</tr>
<tr>
<td>1.4 Office of Center Operations</td>
<td>27</td>
</tr>
<tr>
<td>1.5 Office of Procurement</td>
<td>30</td>
</tr>
<tr>
<td>1.6 Office of Human Capital</td>
<td>31</td>
</tr>
<tr>
<td>1.7 MAF</td>
<td>32</td>
</tr>
<tr>
<td>1.8 Center’s SHE Committee</td>
<td>33</td>
</tr>
<tr>
<td>1.9 SHE Collateral Duty Roles</td>
<td>33</td>
</tr>
<tr>
<td>1.10 Contractors/Tenants</td>
<td>34</td>
</tr>
<tr>
<td>Chapter 2 CPR 1 – Management Leadership and Employee Involvement</td>
<td>35</td>
</tr>
<tr>
<td>2.1 Management Commitment</td>
<td>35</td>
</tr>
<tr>
<td>2.2 Employee Involvement</td>
<td>36</td>
</tr>
<tr>
<td>2.3 Responsibility and Accountability</td>
<td>37</td>
</tr>
<tr>
<td>2.4 Authority</td>
<td>40</td>
</tr>
<tr>
<td>2.5 Resources</td>
<td>41</td>
</tr>
<tr>
<td>2.6 Contractors</td>
<td>41</td>
</tr>
<tr>
<td>2.7 Tenants</td>
<td>45</td>
</tr>
<tr>
<td>2.8 Center SHE Program Evaluation</td>
<td>46</td>
</tr>
<tr>
<td>2.9 Annual SHE Program Plan</td>
<td>48</td>
</tr>
<tr>
<td>2.10 Monthly SHE Meetings and Awareness Training</td>
<td>48</td>
</tr>
<tr>
<td>Chapter 3 CPR 2 – Worksite Analysis</td>
<td>50</td>
</tr>
<tr>
<td>3.1 Baseline Hazard Analysis</td>
<td>50</td>
</tr>
<tr>
<td>3.2 Routine Self-Inspections</td>
<td>52</td>
</tr>
<tr>
<td>3.3 Hazard Reporting System for Employees</td>
<td>56</td>
</tr>
<tr>
<td>3.4 Industrial Hygiene Program</td>
<td>58</td>
</tr>
<tr>
<td>3.5 Investigation of Center Incidents</td>
<td>58</td>
</tr>
<tr>
<td>3.6 Trend Analysis of Injury, Illness, and Incidents</td>
<td>60</td>
</tr>
<tr>
<td>Chapter 4 CPR 3 – Hazard Prevention and Control</td>
<td>63</td>
</tr>
<tr>
<td>4.1 Professional Resources</td>
<td>63</td>
</tr>
</tbody>
</table>
4.2 Hazard Elimination and Control Methods .................................................................63
4.3 Hazard Control Instructions/Procedures ....................................................................70
4.4 Occupational Health Care Program ........................................................................73
4.5 Preventive Maintenance of Equipment ....................................................................75
4.6 Tracking of Hazard Correction ................................................................................75
4.7 Disciplinary System ..................................................................................................76
4.8 Emergency Preparedness and Response .................................................................76

Chapter 5 CPR 4 – SHE Training .................................................................................78
5.1 SHE Training ...........................................................................................................78
5.2 Minimum Training for All Center Employees ..........................................................81
5.3 Employees Designated for SHE Collateral Duty .....................................................82
5.4 Visitors ....................................................................................................................82
5.5 Construction Employees .........................................................................................83
5.6 Center Certification .................................................................................................83
5.7 Unable to Provide Evidence of Training ....................................................................83

Chapter 6 CPR 5 – EMS ...............................................................................................85
6.1 EMS .........................................................................................................................85
6.2 MAF EMS ................................................................................................................85
6.3 Transporting Hazardous Materials on Center .........................................................85

Chapter 7 General SHE Rules for Supervisors ............................................................86
7.1 General SHE Rules Applicable to All Center Supervisors .......................................86

Chapter 8 General SHE Rules for Employees ..............................................................91
8.1 General SHE Rules Applicable to All Center Employees ........................................91

Chapter 9 Center-wide Safety Rules ...........................................................................94
9.1 Center-wide Safety Rules Applicable to All Center Employees ..............................94

Chapter 10 Minimum Housekeeping Rules .................................................................98
10.1 Minimum Housekeeping Rules Applicable to All Center Employees ..................98

Chapter 11 Safety Awards ............................................................................................100
11.1 Center Safety Awards ............................................................................................100
11.2 Organization Safety Awards ..................................................................................100
11.3 Requesting Consideration for Safety Awards .......................................................101
11.4 Organization/Program/Project Safety Awards .......................................................102

Chapter 12 Request for Relief from Safety-Related Requirements ...............................103
12.1 Request for Relief ..................................................................................................103

Chapter 13 Minimum Clothing in Areas With an Increased Level of Risk for Injury ....105
13.1 Minimum Clothing Worn in Industrial Areas (e.g., Testing Areas, Laboratories) ...105

DIRECTIVE IS UNCONTROLLED WHEN PRINTED
Verify current version before use at https://dml.msfc.nasa.gov/directives
13.2 Minimum Clothing Worn Outside Designated Walkway or Safe Zone ..........105
13.3 Minimum Footwear Worn in Industrial Areas .......................................105

Chapter 14 Minimum Safety Rules for Operating Slow-Moving Vehicles,
Mini-scooters, and Bicycles at MSFC ............................................................... 106
14.1 Slow-Moving Vehicles on MSFC Roadways .............................................106
14.2 Mini-Scooters, Bicycles, and Mobility Scooters ................................. 106

Chapter 15 General Descriptions for Signs/Tags Used at the Center................. 108
15.1 Sign/Tags (including placards and labels) ............................................. 108
15.2 Danger Signs/Tags ........................................................................... 108
15.3 Warning Signs/Tags .......................................................................... 109
15.4 Caution Signs/Tags ........................................................................... 109
15.5 Notice Signs/Tags .............................................................................. 110
15.6 Safety Instruction Signs ...................................................................... 110

Chapter 16 Center Fall Protection Requirements ............................................. 111
16.1 Designation of Roles ........................................................................ 111
16.2 Center Fall Protection Administrator .....................................................111
16.3 Fall Protection Engineer ......................................................................113
16.4 Organization/Contractor Competent and Qualified Employee ...............113
16.5 Organization/Contractor Authorized Employee (user) ...........................114
16.6 Training ..............................................................................................115
16.7 Refresher Training ............................................................................ 116
16.8 Record of Training ............................................................................ 117
16.9 Requirement to Provide Fall Protection .............................................. 117
16.10 PFAS .................................................................................................118
16.11 Inspecting PFAS and Components ......................................................118
16.12 Inspecting Work Site for a Fall Protection System ............................... 119
16.13 Safety Assessment for Fall Protection .............................................. 120
16.14 Site-Specific Procedure for Fall Protection ....................................... 120
16.15 Plan for a Prompt Fall Rescue ............................................................. 121
16.16 Aerial Lift (mobile extension boom) .................................................. 122
16.17 Scissor Lift (guardrail-equipped platforms) ........................................ 123
16.18 Permanently-Installed (fixed) Ladders .............................................. 123
16.19 Portable Metal and Wood Ladders ...................................................... 124
16.20 Temporary Work Platform ................................................................. 124
16.21 Scaffold ............................................................................................ 124

Appendix A Definitions .............................................................................. 125

Appendix B Acronyms .............................................................................. 132

Appendix C Verification Matrix ................................................................. 136
Appendix D Records .................................................................................................................. 137

Appendix E Guide for Supervisors Performing A Work Area SHE Visit .............................. 140

Appendix F References ........................................................................................................... 142
PREFACE

P.1 PURPOSE

To implement a Center-level Safety, Health and Environmental (SHE) Program that complies with Occupational Safety and Health Administration (OSHA), Voluntary Protection Program (VPP), and Environmental Protection Agency (EPA) and current applicable federal and state regulations, policies, and requirements in accordance with NPD 8500.1, NPD 8700.1, NPR 1800.1, NPR 8570.1, NPR 8715.1, NPR 8715.2, and NPR 8715.3.

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).

c. This MPR applies as follows: all mandatory actions (i.e., requirements) are denoted by statements containing the term “shall.” The terms: “may” or “can” denote discretionary privilege or permission; “should” denotes a good practice and is recommended, but not required; “will” denotes expected outcome; and “are/is” denotes descriptive material.

d. This MPR applies the following: all document citations are assumed to be the latest version unless otherwise noted.

e. This MPR does not apply to MSFC’s Flight Safety Program. For information concerning that program, refer to the program-level documents or contact the MSFC Safety and Mission Assurance (SMA) Directorate.

P.3 AUTHORITY

a. NPD 8500.1, NASA Environmental Management

b. NPD 8700.1, NASA Policy for Safety and Mission Success

c. NPR 1800.1, NASA Occupational Health Program Procedure

d. NPR 8570.1, NASA Energy Management Program

e. NPR 8715.1, NASA Occupational Safety and Health Programs

P.4 APPLICABLE DOCUMENTS AND FORMS


d. Protecting Federal Employees and the Public from Exposure to Tobacco Smoke in the Federal Workplace, E.O. 13058

e. Inspections, Citations, Proposed Penalties, 29 CFR pt. 1903

f. Recording and Reporting Occupational Injuries and Illnesses, 29 CFR pt. 1904

g. Occupational Safety and Health Standards, 29 CFR pt. 1910

h. Safety and Health Regulations for Construction, 29 CFR pt. 1926


j. Environmental Protection Agency, 40 CFR

k. Safety and Health, 48 CFR Subpart 1823.70

l. Federal Acquisition Regulations, 48 CFR pts. 1-51

m. NASA Federal Acquisition Regulation Supplement

n. NPD 1000.0, NASA Governance and Strategic Management Handbook

o. NPD 1000.3, The NASA Organization

p. NPD 3410.2, Employee and Organizational Development

q. NPD 8710.5, Policy for Pressure Vessels and Pressurized Systems

r. NPD 8820.2, Design and Construction of Facilities

s. NPR 1400.1, NASA Directives and Charters Procedural Requirements
t. NPR 3713.1, Reasonable Accommodations Procedures

u. NPR 8000.4, Agency Risk Management Procedural Requirements

v. NPR 8553.1, NASA Environmental Management System

w. NPR 8621.1, NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping

x. NPR 8820.2, Facility Project Requirements (FPR)

y. NPR 8831.2, Facilities Maintenance and Operations Management

z. NRRS 1441.1, NASA Records Retention Schedules

aa. MPD 1860.2, Radiation Safety Program

bb. MPD 8500.1, MSFC Environmental Management Policy

c. MPR 1280.6, Management Systems Internal Audits

dd. MPR 1280.10, Marshall Quality Management System

e. MPR 1410.2, Marshall Directives System

ff. MPR 1600.1, MSFC Security Program Procedural Requirements

gg. MPR 1600.4, MSFC Identity, Credential, and Access Management

hh. MPR 1800.3, MSFC Sanitation Program

ii. MPR 1810.2, Automated External Defibrillator (AED) Program

jj. MPR 1840.4, MSFC Asbestos Program

kk. MPR 1860.1, MSFC Radiation Safety Procedural Requirements

ll. MPR 1860.2, Nonionizing Radiation Safety

mm. MPR 3410.1, Training

nn. MPR 4000.2, Property Management

oo. MPR 5000.1, Purchasing
pp. MPR 6000.1, Transportation

qq. MPR 6430.1, Lifting Equipment and Operations

rr. MPR 8000.4, Mission Support Risk Management

ss. MPR 8500.1, MSFC Environmental Engineering and Occupational Health Program

tt. MPR 8500.2, MSFC Environmental Management System (EMS)

uu. MPR 8710.1, MSFC Requirements for Ground-Based Pressure Vessels and Pressurized Systems (PVS)

vv. MPR 8812.1, Request for Facility Services at MSFC

ww. MWI 1410.1, Processing Marshall Directives

xx. MWI 1800.1, MSFC Occupational Medicine

yy. MWI 1840.1, Industrial Hygiene Programs

zz. MWI 3410.1, Personnel Certification Program

aaa. MWI 5100.1, Initiating Procurement Requisitions

bbb. MWI 5115.2, Source Evaluation Board/Committee (SEB/C) Process

ccc. MWI 7120.6, Program, Project and Institutional Risk Management

ddd. MWI 8540.2, Green Purchasing Program

eee. MWI 8550.1, Waste Management

fff. MWI 8550.2, Stormwater & Wastewater Management

ggg. MWI 8550.4, Air Emissions Compliance

hhh. MWI 8550.5, Hazardous Material Management

iii. MWI 8621.1, Mishap and Close Call Reporting and Investigation Program

jjj. MWI 8715.1, Electrical Safety Program

kkk. MWI 8715.2, Control of Hazardous Energy (Lockout/Tagout) Program
Ill. MWI 8715.5, Area/Building Manager and Organization’s Safety, Health and Environmental (SHE) Point of Contact (POC) Program

mmm. MWI 8715.10, Explosives, Propellant, and Pyrotechnics Program

nnn. MWI 8715.11, Fire Safety Program

ooo. MWI 8715.12, Safety, Health and Environmental-Finding Tracking System (SHEtrak)

ppp. MWI 8715.13, Safety Concerns Reporting System (SCRS)

qqq. MWI 8715.15, Ground Operations Safety Assessment Program

rrr. MWI 8715.17, Hazardous Operations Readiness Review Program

sss. MGM 3600.1, Attendance and Leave Guidance

ttt. MCP 1040.2, MSFC Emergency Plan

uuu. MCP 1040.4, MAF Emergency Plan

vvv. MCP 8715.1, Annual Safety, Health and Environmental (SHE) Program Plan

www. MC-12, MSFC Safety, Health and Environmental (SHE) Committee

xxx. NASA STD 8709.20, Management of Safety and Mission Assurance Technical Authority (TA) Requirements

yyy. NASA STD 8719.7, Facility System Safety Guidebook

zzz. NASA STD 8719.9, Lifting Standard

aaaa. NASA STD 8719.11, Safety Standard for Fire Protection

bbbb. NASA STD 8719.12, Safety Standard for Explosives, Propellants, and Pyrotechnics

cccc. NASA STD 8719.17, NASA Requirements for Ground-Based Pressure Vessels and Pressurized Systems (PVS)

dddd. AS60-OI-002, MAF Environmental Management System (EMS)

eeee. AS60-OI-003, MAF Environmental Management Program

ffff. QD-IS-009, Mishap and Close Call Reporting, Response, Notification and Investigation Process
gggg. ANSI/ISEA Z358.1, American National Standard for Emergency Eyewash and Shower Equipment

hhhh. ANSI/ASSE Z359.1, Standard Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components

iiii. ANSI/ASSE Z359.2, Minimum Requirements for a Comprehensive Managed Fall Protection Program

jjjj. ANSI Z535.2, Environmental and Facility Safety Signs

kkkk. ANSI Z535.3, Criteria for Safety Symbols

llll. ANSI Z535.4, Product Safety Signs and Labels

mmmm. ANSI Z535.5, Safety Tags and Barricade Tapes (for Temporary Hazards)

nnnn. ASME A17.1, Safety Code for Elevators and Escalators

oooo. National Fire Protection Association Codes

pppp. National Archives and Records Administration

P.5 MEASUREMENT/VERIFICATION

See Appendix C of this MPR.

P.6 CANCELLATION


Original signed by

Todd A. May
Director
CHAPTER 1
RESPONSIBILITIES

1.1 Center Director: The senior person authorized by NASA to implement and direct the Center’s SHE Program at MSFC and MAF, and is responsible and accountable for all activities assigned to the Center to ensure the following:

1.1.1 A workplace is provided for all employees that has safe and healthful working conditions free from recognized hazardous conditions and is incident and injury free by (a) preventing employee fatalities; (b) reducing the number and severity of employee injuries and illnesses; and (c) providing equal and high quality safety and health protection to all employees following the processes described in Occupational Safety and Health Act of 1970, 29 United States Code (U.S.C.) § 651, NPD 1000.3, NPD 8700.1, NPR 1000.0, and NPR 8715.1.

1.1.2 Federal, state, local and NASA SHE-related policies, programs, standards and requirements are flowed-down, implemented, and continual compliance is maintained following the processes described NPD 8500.1, NPD 8700.1, NPR 1800.1, NPR 8715.1, and NPR 8715.3.

1.1.3 A safety and health program that is equivalent to the OSHA VPP Core Program Requirement (CPR) is developed, implemented, and monitored following the processes described in NPR 8715.3 and Marshall Center Plan (MCP) 8715.1.

1.1.4 The Center’s SHE Program is evaluated to determine its effectiveness by measuring, analyzing, recording safety, health and environmental trends, and the general status of the Center’s SHE Program following the processes described in 40 Code of Federal Regulations (CFR), NPD 8500.1, and NPR 8715.3, and MCP 8715.1.

1.1.5 Adequate levels of authority and resources (funding, training, and personnel) are identified and provided to the organizations assigned responsibilities to implement and carry out the Center’s SHE goals, objectives, and activities following the processes described in NPD 1000.3 and NPR 8715.1.

1.1.6 The annual Center operating budget includes plans for typical, as well as unusual/emergency SHE-related expenditures, and funding for prompt correction of uncontrolled hazards, when necessary.

1.1.7 Center organizations are provided with methods to integrate Center SHE-related requirements into the planning, construction and purchasing of new equipment, buildings, and operations.

1.1.8 Contractor safety, health, and environmental performance is considered prior to selecting the contractor to perform work.

1.1.9 A Center Committee is formed to provide a forum for meaningful discussion of Center SHE-related matters; a method to channel input from Center employees to Center Management.
and from Center Management to Center employees; to communicate and monitor the progress of achieving the Center’s SHE goals and objectives; address Center SHE-related issues and concerns; review evaluations of the Center’s SHE Program and explain the Center’s disposition of SHE-related recommendations; provide feedback when necessary; and integrate these issues/concerns into the total Center SHE management system following the frequency and processes described in NPR 8715.3 and Marshall Charter (MC)-12.

1.1.10 Center-related incidents and employee concerns are reported to Center management and the Center’s Safety Office, and are investigated by the appropriate type of Investigation Authority to the extent necessary to determine the root or proximate causes, corrective actions are developed to prevent recurrence, as needed, and the status of these investigations are reported periodically to Center management following the processes described in NPR 8621.1, NPR 8715.1, and MWI 8621.1.

1.1.11 SHE-related inspections/surveys/audits/reviews of the Center’s buildings, operations, work areas are performed to identify unsafe/unhealthful working conditions, and hazardous, environmental noncompliant conditions, and compliance with Center SHE-related programs in accordance with 29 CFR Part (pt.) 1960.26, and 40 CFR, following the processes described NPD 8500.1, NPR 1800.1, NPR 8715.1, and NPR 8715.3. (See section 3.2 of this MPR for more information.)

1.1.12 Buildings/Facilities and operations are evaluated for unsafe/unhealthful working conditions, and hazardous conditions and risks, and the hazardous conditions and risks are tracked through a closed-loop corrective action system until the hazardous condition has been corrected, and residual risk has been accepted prior to their initial startup and restart of the building/facility and operation following the processes described in NPD 8700.1, NPR 8715.1, NPR 8715.3, MWI 8715.12, MWI 8715.15, and MWI 8715.17.

1.1.13 Continuous risk management process is implemented that continually evaluates risk and accepts residual risk based on a formal risk-informed decision-making process following the processes described in NPR 8000.4 and NPD 8700.1.

1.1.14 Organizational supervisors make regular visits to their employee work areas following the processes described in Appendix E of this MPR.

1.1.15 Employees are provided with monthly SHE meetings and awareness training following the processes described in section 2.10 of this MPR.

1.1.16 Employees are provided with reasonable access to Center management to identify issues and concerns that have the potential to create unsafe/unhealthy working conditions, hazardous conditions, or harm to human safety and health or the environment, and problems or situations that, if not corrected, may result in an injury or illness to personnel and/or damage to property without the fear of reprisal and receive feedback explaining the status of their issue/concern in accordance with 29 CFR pt. 1960.28 and 1960.46. These issues/concerns are evaluated by Center management, investigated, corrected, and tracked to closure following the processes
1.1.17 Employees are allowed and encouraged to become actively involved and engaged in the Center’s SHE program.

1.1.18 Employees are informed and knowledgeable that they are authorized to halt or stop activities/operations where they believe an increased level of risk exists to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment following the processes described in NPR 8715.1.

1.1.19 Employees are encouraged to identify unsafe/unhealthful and hazardous conditions, and to take actions to correct these conditions on-the-spot or communicate and identify these conditions by use of signs, barricades, or other methods necessary to alert employees in the area of these conditions until they are corrected in accordance with 29 CFR pt. 1910.144 and 145 following the processes described in NPR 8715.1 Chapter 2, MWI 8715.13, and American National Standards Institute (ANSI) Z535.2, Z535.3, Z535.4 and Z535.5, and Chapter 15 of this MPR.

1.1.20 Employees are informed and knowledgeable of the disciplinary process and actions that can be taken when it is determined an employee intentionally violates the Center’s SHE-related rules and requirements following the processes described in NASA Desk Guide for Table of Disciplinary Offenses and Penalties.

1.1.21 Employees are designated to perform SHE collateral duties [Organization’s SHE POC, Area Manager, Building Manager (BM), Assistant Building Manager (ABM), and Organization’s NASA Mishap Information System (NMIS) POCs] to provide assistance to the Center’s SHE Offices in implementing and managing the Center’s SHE program within their organizations following the processes described in this MPR, MWI 8715.5, MWI 8715.12, and MWI 8715.13.

1.1.22 Employees are provided with training that is specific to the type job or operation they are assigned to perform that provides them with the knowledge and skills necessary for them to be considered as trained, competent and qualified to perform the job, task, or process in a safe and healthful manner following the processes described in NPR 8715.3, MPR 3410.1, and MWI 3410.1.

1.1.23 Employees are formally designated, when required, to serve at the Center level for SHE-relate roles identified in an NPD/NPR or NASA Standard (STD) [e.g., Authority Having Jurisdiction, Fall Protection Program Administrator, Pressure Systems Manager, Explosives Safety Officer, Lifting Device and Equipment Manager, Medical Review Officer, and Environmental Manager] following the processes described in NASA STD 8719.11, NPR 8715.3, NASA STD 8719.17, NASA STD 8719.12, NASA STD 8719.9, NPR 1800.1 Chapter 1, and NPD 8500.1.

1.1.24 Employees receive a Center certification for jobs and operations that have been identified...
by the Center’s Safety Office, Center’s Occupational Health Office and Center’s Environmental Office to require a Center certification following the processes described in NPR 8715.3, MPR 3410.1, and MWI 3410.1.

1.1.25 Center SHE-related data identified in 29 CFR pt. 1960.71 and Executive Order (E.O.) 12196 is provided to NASA Chief Health and Medical Officer and NASA Chief/SMA following the frequency and processes described in NPR 8715.1.

1.1.26 Employees are provided with a summary of Center occupational injuries and illnesses and other SHE-related information such as SHE inspection reports, safety assessments, Center mishap information following the frequency and processes described in NPR 8715.1.

1.1.27 Employees are provided with site specific SHE-related directions or a specific SHE plan when they are engaged in work as part of an international partnership following the process described in NPR 8715.1.

1.1.28 Center organizations comply with the most current federal, NASA, MSFC, national consensus codes, and Presidential initiatives, rules and regulations unless formally requested and approved otherwise following the processes described in NPD 1000.3 and NPR 8715.1. (See Chapter 12 of this MPR for relief from safety requirements and MPR 1410.2 for more information.)

1.1.29 Center representatives are provided the opportunity to participate in OSHA, NASA and other SHE recognized SHE-related committees and councils in accordance with 29 CFR pt. 1960.85 following the processes described in NPR 8715.1.

1.1.30 Information, such as OSHA “It’s the Law” and NASA “Safety and Health Protection for Federal Employees,” are conspicuously posted throughout the Center or available to employees in accordance with 29 CFR pt. 1960.68 following the processes described in NPR 8715.1.

1.1.31 NASA Headquarters is notified when resource assistance is needed to correct a hazardous condition on the Center or within a Center leased space cannot be corrected or abated without assistance or funding from NASA Headquarters or another Federal Agency following the processes described in NPR 8715.1.

1.1.32 Center employees cooperate with Center SHE and external inspectors and auditors during inspections, audits and investigations following the processes described in NPR 8715.1.

1.1.33 Center organizations are provided with methods to acquire and provide SHE-related equipment to employees for them to protect and isolate themselves from hazardous conditions following the processes described in NPR 8715.3.

1.1.34 NASA Chief Health and Medical Officer and NASA Chief/SMA are notified when the Center is visited by OSHA or other regulatory agency following the process and frequency described in NPR 8715.1.

DIRECTIVE IS UNCONTROLLED WHEN PRINTED
Verify current version before use at https://dml.msfc.nasa.gov/directives
1.1.35 Center-owned and leased facilities are maintained in a safe and healthful working condition and free of recognized hazardous conditions, including when provided as work areas to contractors or tenants through a contract, lease, Space Act or Cooperative Agreement, or grant.

1.1.36 Center-owned motor vehicles and Center controlled roadways comply with federal, state and local regulations in accordance with NPR 8715.3 following the processes described in MPR 1600.1.

1.1.37 Employees are provided with the necessary equipment, such as Personal Protective Equipment (PPE) meeting federal regulations and industrial standards in situations where engineering controls or administrative controls have not reduced the hazardous condition to a safe working level following the processes described in NPR 8715.3.

1.1.38 Center buildings are constructed to the current building regulations, including SHE-related, fire protection, life safety requirements, and building/facility infrastructure systems, following the processes described in NPR 8715.3 and NASA STD 8719.11.

    NOTE: In situations where requirements are conflicting the most stringent requirement applies.

1.1.39 Assessments are performed on a case-by-case bases on existing buildings to determine if newer requirements need to be incorporated based on updated or superseded requirements that are more stringent than those in place when the building was originally constructed following the process described in NPR 8715.3.

1.1.40 Federal, state, and NASA SHE-related requirements are not duplicated in Center-level directives following the processes described in NPR 1400.1 and MWI 1410.1.

    NOTE: SHE-related Center-level directives may be developed to supplement, clarify or identify more stringent Center-level requirements than those identified in federal, state or NASA directives. A Center level instruction/procedure is not normally developed for activities/operations where sufficient details and requirements for the activity/operation are contained in the federal, state or NASA directive for the activity/operation.

1.1.41 Safety stand-downs are planned and executed for safety and health awareness activities following the process described in NPR 8715.3.

1.1.42 An emergency management system is implemented that provides the Center with emergency preparedness and protection for employees during severe weather, tornados, and other emergency situations that may occur at the Center following the process described in NPR 8715.2.

1.2 Directorate/Office Director/Manager: The senior person(s) of each organization that provides to assistance to the Center Director in implementing the Center’s SHE Program and
managing the Center’s SHE Program within their organizations, and is responsible and accountable for all activities assigned to their organization to ensure the following:

1.2.1 The Center’s SHE goals and objectives within their organization are supported and implemented as needed.

1.2.2 Actions in the Center’s Annual SHE Program Plan that are applicable to their organization are assigned and implemented as needed. Annual SHE Program Plans for MSFC and MAF are available on NASA’s “Explornet page,” select “Center,” select “Marshall,” select “Marshall Integrated Document Library (MIDL),” select “MSFC Directive Master List” to view MSFC’s plan or select “MSFC Center-wide Charters and Plans,” select “Center-wide Plans” to view MAF’s plan.

1.2.3 Monthly SHE meetings and awareness training is provided to employees and documented.

NOTE: The SHE meetings and awareness training can be conducted at directorate, department, branch or team levels. These meetings normally include discussing the monthly SHE Focus topic, but may be an organization developed topic if the SHE Focus topic is not identified as mandatory or is not deemed as relevant to the specific working conditions of the organization.

1.2.4 Monthly SHE work site visits to their assigned areas are performed and documented following the processes described in section 3.2 and Appendix E of this MPR. The purpose of these visits is ensure employees are provided with safe and healthful working conditions free from recognized hazardous conditions. Frequent visits to the employee work areas is encouraged. (See section 3.2 and Appendix E of this MPR for more information.)

NOTE 1: SHE-related checklists may be obtained from MSFC’s “Inside Marshall,” select “Organizational Websites,” locate “Safety and Mission Assurance Directorate,” select “Safety, Health and Environmental,” select “Safety Information,” select “Safety Assessments,” Select “Safety Checklists.” Checklists for various work areas are available for BM’s use in performing their visit, if desired. A checklist is not required for these visits, but may be a useful tool for guidance.

NOTE 2: MSFC’s “Inside Marshall” is located on NASA’s Explornet page.

1.2.5 Organization support is provided to the Center’s SHE Committee and an organization representative is designated following the processes described in MC-12.

1.2.6 Safety assessment and readiness reviews of the appropriate level are performed for facility and operations in order to identify hazardous conditions and risks, and implement the necessary controls prior to initial startup or restart of the facility or operation following the processes described in MWI 8715.15 and MWI 8715.17.

1.2.7 Jobs, operations, and facilities are evaluated to identify hazardous conditions and risks,
and implement the necessary controls prior to job or operation being performed by the employee following the processes described in MWI 8715.15.

1.2.8 Operating procedures for facilities, jobs, and operations are evaluated to determine if they are hazardous, safety critical, or have an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of the work being performed are developed, and implemented to ensure the operation is performed within safe operating limits, and are maintained following the processes described in MWI 8715.15.

1.2.9 Employees are informed of the hazardous conditions identified in safety assessments and operating procedures that they may be exposed to while performing a job or operation and of the methods to eliminate, reduce or control the hazardous condition to a safe working level, and these documents are made readily available (hardcopy or electronic) to the employee as needed following the processes described in MWI 8715.15.

1.2.10 Operating procedures and hazard analysis are reviewed and updated as needed when significant changes are made to facilities, operations and jobs that introduce new hazardous conditions or affect existing hazard controls following the processes described in MWI 8715.15.

1.2.11 SHE-related issues and concerns assigned to the organization are evaluated, corrected, and tracked to closure following the processes described in MWI 8715.12 and MWI 8715.13.

1.2.12 Organization-owned equipment and systems are identified, evaluated and placed on a preventive and predictive maintenance schedule following the equipment manufacturer’s recommendations and monitor the equipment to prevent it from failing or creating a hazardous condition, as needed.

1.2.13 PPE and other types of emergency, protective, and monitoring systems are acquired and provided to employees when identified by a safety assessment (e.g., hazard analysis, job hazard analysis, workplace safety assessment), operating procedure or similar assessment to protect employees from potential exposure to hazardous conditions, the PPE is maintained in safe and reliable condition for employee use, and the requirements for when PPE is required, and the type of PPE to be worn is clearly communicated, and understood by employees and visitors to the area in accordance with 29 CFR pt. 1910.132 following the processes described in MWI 8715.15.

   **NOTE**: This includes issuing and recovering PPE to visitors and transients in their work areas.

1.2.14 Employees are encouraged to report incidents, not disturb the incident site, and participate in the investigation of these incidents to the extent necessary following the processes described MWI 8621.1 and sections 3.3 and 3.5 of this MPR.

1.2.15 Employees, including visitors, contractors, and researchers, are informed and encouraged to perform their jobs and tasks following the processes described in federal, state, local, NASA,
and Center SHE-related requirements.

1.2.16 Employees are provided with and successfully complete the training necessary for them to be designated as trained, qualified, and competent to perform their jobs and operations in a safe and healthful manner following the processes described in MPR 3410.1, MWI 3410.1 and Chapter 5 of this MPR.

1.2.17 Employees receive a Center certification for jobs and operations identified to require a Center certification following the processes described in MWI 3410.1.

1.2.18 Employees are encouraged to halt or stop activities/operations where they believe an increased level of risk exists to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment and not to restart an activity/operation until the hazardous condition has been corrected following the processes described in section 2.4 of this MPR and MWI 8715.13.

1.2.19 Employees are informed and knowledgeable of the disciplinary process and actions that can be taken when it is determined an employee intentionally violates Center SHE-related rules and regulations, as needed. (See NASA Desk Guide for Table of Disciplinary Offenses and Penalties for more information.)

1.2.20 Employees are informed and knowledgeable of their roles and responsibilities in the event of an emergency (e.g., fire, severe weather, tornado, accident, or terrorist threat) following the processes described in MCP 1040.2, MWI 8715.11, AS50-Handbook (HBK)-001, and at MAF MCP 1040.4.

1.2.21 Employees are designated to perform SHE collateral duties within their organization (organization’s SHE POC, Area Manager, BM, ABM, and organization’s NMIS POC) to assist the Center’s SHE Offices implement and manage the Center’s SHE program within their organization following the processes described in sections 1.9 and 2.3.2 of this MPR, MWI 8715.5, MWI 8715.12, and MWI 8715.13.

1.2.22 Employees successfully complete mandatory and required SHE-related training, and collateral duty training when the employee is designated to serve in a SHE collateral duty role following the process described in Chapter 5 of this MPR.

1.2.23 Employees and visitors are provided assistance in evacuating the building in the event of an emergency as needed. (See AS50-HBK-001 and building’s Emergency/Evacuation Plan posted in building lobby for more information.)

1.2.24 Employees are encouraged to identify unsafe/unhealthful and hazardous conditions and to take actions to correct these condition on-the-spot or communicate and identify these conditions by the use of signs, barricades, or other methods necessary to alert employees in the area of the potentially-hazardous conditions until they can be corrected in accordance with 29 CFR pt. 1910.144 and 145 following the processes described in NPR 8715.1 Chapter 2, MWI 8715.13,
1.2.25 Employees are provided with appropriate work-rest cycles during periods of unusual shifts and prolonged work-hours, and when driving motor vehicles for Center-related business following the processes described in NPR 1800.1 and NPR 8715.3. (See NPR 1800.1 Chapter 2 for NASA’s guidance for maximum work-hours, shift work hours and balancing employee work-rest cycles. Marshall Guidance Manual (MGM) 3600.1 provides guidance for MSFC.)

1.2.26 Employees operate equipment and systems in accordance with processes described in federal, state, NASA, and Center level directives following the processes described in NASA STD 8719.9, NASA STD 8719.11, NASA STD 8719.17, MPR 6430.1, MPR 8710.1, and MWI 8715.11.

1.2.27 Facilities and areas under their direction and control are maintained in a safe and healthful working condition and free of recognized hazardous conditions in accordance with section 5 of Public Law (Pub. L.) 91-596, including when provided as work areas to contractors or tenants through a contract, lease, Space Act or Cooperative Agreement, or grant.

1.2.28 Test and development systems are designed and constructed so that no credible single point failure that could result in injury to personnel or loss of critical hardware/systems following the processes described in NPR 8715.3.

1.2.29 Test controls are established and clearly identified in supporting test documentation, such as test drawings and procedures following the processes described in NPR 8715.3.

1.2.30 Employees are provided with specific SHE requirements for the location when they are engaged in work as part of an international partnership and perform work at the location of the international partner following the process described in NPR 8715.1.

1.2.31 Supervisors directly responsible for areas/activities where the incident occur provide assistance to the Center’s Safety Office in performing incident investigations following the process described in NPR 8621.1 and MWI 8621.1, when requested.

1.2.32 Collaboration with the Center’s Safety Office in the development of a Memorandum of Agreement (MOA) between NASA Centers upon awareness of another NASA Center awarding a contract for work to be performed on the Center. The MOA is the recommended method to formally document the Center’s role when interfacing with the contractor. The MOA will also identify the methods for reporting, investigating and documenting contractor mishaps/close calls that occur on Center when the contract has been awarded by another NASA Center. The Center’s Safety Office will provide assistance in the development of the MOA to the Center organization being supported by the contractor following the processes described in MWI 8621.1.

1.3 SMA: An organization that serves as the Center’s Safety Office and provides assistance to
the Center Director in implementing and managing the safety-related portion of the Center’s SHE Program, and is responsible and accountable for ensuring the following:

\[NOTE:\ See Appendix A of this MPR for the organizations that serve in the roles of the Center’s Safety Office at MSFC and MAF. The Center’s Safety Office when combined with the Center’s Occupational Health Office and Center’s Environmental Office in this MPR form Center’s SHE Offices.\]

1.3.1 Providing oversight and verification of Center compliance with applicable OSHA, NFPA, NASA safety-related policies, regulations, and standards that includes surveillance, assessments, evaluations, and inspections following the processes described in 29 CFR 1960.26, NPR 8715.1, and NPR 8715.3.

1.3.2 Providing oversight of safety-related activities performed by other Center organizations and Contractors that fall under the responsibility of a Center Safety Office program following the processes described in NPD 8700.1.

1.3.3 Developing Center specific safety-related policies, standards, and procedures to implement OSHA and NASA safety requirements at the Center, as necessary.

1.3.4 Providing overview and surveillance are for jobs, facilities and operations that have an increased level of risk of employee injury or illness or property damage or are identified as, hazardous or safety critical following the processes described in MWI 8715.15.

1.3.5 Receiving, evaluating, and documenting reports of unsafe/unhealthful working conditions, safety-related issues and concerns reported by employees in accordance with 29 CFR pt. 1960.28 following the processes described in MWI 8715.12 and MWI 8715.13.

1.3.6 Measuring, evaluating, analyzing, and recording safety-related trends and general status of the Center’s Safety Program, and identify any significant trends to Center management following the processes described in this MPR.

1.3.7 Providing safety-related training to Center employees by employees that are knowledgeable in the subject matter and the training material is maintained up-to-date. (See MPR 3410.1 for more information.)

1.3.8 Providing trained and qualified employees to perform safety-related inspections and incident investigations, hazard analysis, and review of safety-related procedures and plans following the processes described in MPR 3410.1.

1.3.9 Providing close collaboration with the Procurement Office to include safety and risk management consideration during the development, evaluation, and selection process for Center contracts following the processes described in NPR 8715.3, sections 1.5 and 2.6 of this MPR, MPR 5000.1, and MWI 5115.2.
1.3.10 Developing and providing industrial safety and fire prevention training to managers, supervisors, employees, employee representatives, and safety and SHE collateral duty personnel in accordance with 29 CFR pt. 1960.58.

1.3.11 Reviewing and concurring on safety-related plans, written operating procedures for hazardous or safety critical operations, safety assessments, and other safety-sensitive documents and construction and test drawings for all Center facilities and all facilities owned or leased by MSFC or occupied by MSFC civil service employees within the Huntsville, Alabama area following the processes described in NPR 8715.3 and MWI 8715.15.

NOTE: This review and concurrence includes all Center facilities and all facilities owned or leased by MSFC or occupied by MSFC civil service employees within the Huntsville, Alabama area.

1.3.12 Inspecting/monitoring buildings, construction sites, jobs, and operations for unsafe/unhealthful working conditions or fire-related issues that can pose a significant condition that can ignite or contribute to the ignition of a fire following the processes described in NPD 8820.2 and NPR 8715.3, MWI 8715.11, and MWI 8715.12.

1.3.13 Investigating incidents (mishaps/close calls) and entering them into the NMIS and tracking these entries until they are closed following the processes described in NPR 8621.1 and MWI 8621.1.

1.3.14 Providing reports and summaries of Center OSHA recordable occupational injuries and illnesses including Days Away From Work Injury and Illness (DAFWII), Total Case Rate (TCR), and other employee injury and illness information to NASA Headquarters and OSHA in accordance with 29 CFR pt. 1960 Subpart I following the processes described NPR 8715.1.

1.3.15 Receiving, recording, evaluating, posting and maintaining records of all Center Civil Service employee occupational injuries and illnesses, and communicate the annual summary of occupational injuries and illnesses (OSHA Form 300 Log) to Center employees in accordance with 29 CFR pt. 1904, 29 CFR pt. 1960 following the processes described in NPR 8715.1 and section 3.6 of this MPR.

1.3.16 Providing support to the Center’s SHE Committee following the processes described in MC-12.

1.3.17 Developing, implementing, and monitoring safety-related programs in accordance with the applicable OSHA, National Fire Protection Association (NFPA), ANSI, International Safety Equipment Association (ISEA) or NASA requirements (e.g., fire protection, electrical safety, safety assessments, operational readiness review, personal protective equipment, construction
safety, fall protection, or explosive safety).

1.3.18 Implementing a Center certification program for jobs and operations identified to require a safety-related Center certification following the processes described in NPR 8715.3 and MWI 3410.1.

1.3.19 Implementing a Center program for employees to notify the appropriate Center management of potential hazardous or unsafe/unhealthy working conditions and concerns and receive a timely and appropriate response to resolve the reported hazardous conditions or concerns in accordance with 29 CFR pt. 1960.28 following the processes described in section 3.3 of this MPR, NPR 8715.1, and MWI 8715.13.

1.3.20 Implementing a Center program to assess jobs, operations, and facilities for hazardous conditions, implement the controls to eliminate, reduce or control the hazardous condition and receive the appropriate level of management review prior to their startup or restart following the processes described in MWI 8715.15 and MWI 8715.17.

1.3.21 Providing a method to periodically status Center management of open mishap/close call cases.

1.3.22 Notifying the Center Director, NASA Headquarters Chief/SMA and Chief Health and Medical Officer of any visits to the Center by OSHA or other regulatory agency including any finding identified during the visit following the timeline and process described in NPR 8715.1.

1.3.23 Providing assistance and support to organization employees designated to serve in SHE collateral duty roles (Area Manager, BM, ABM, organization’s SHE POC, and organization’s NMIS POC) in the implementation and management of the Center’s safety-related policies, standards, and procedures within their organizations following the processes described in section 2.3.2 in this MPR, MWI 8715.5, MWI 8715.12, and MWI 8715.13.

1.3.24 Providing feedback to Center management of the status of Center organizations and contractors implementation of safety-related activities within their areas that fall under the responsibility of a Center’s Safety Office program, when requested.

1.3.25 Providing assistance to Center organizations in identifying safety-related hazardous conditions that employees may be exposed to while performing a job or operation and identifying the methods to eliminate, reduce or control the hazardous condition to a safe working level.

1.3.26 Designating an employee to serve as the Center’s Mishap Investigation Program Manager to provide oversight in the implementation and day-to-day operations of the Center’s mishap/close call investigation program following the processes described in NPR 8621.1 and MWI 8621.1.
1.3.27  Collaborating with Center Directorates/Offices in the development of an MOA between NASA Centers upon awareness of another NASA Center awarding a contract for work to be performed on the Center. The MOA will identify the methods for reporting, investigating and documenting contractor mishaps/close calls that occur on Center when the contract has been awarded by another NASA Center. The Center’s Directorate/Office being supported by the contractor will provide assistance in the development of the MOA following the processes described in MWI 8621.1.

1.3.28  Monitoring activities identified as safety critical, hazardous or contain an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed as required.

1.4  Office of Center Operations: An organization that includes offices for the Center’s Environmental Engineering, Occupational Health, Facilities Management, Protective Services, and Emergency Management and provides assistance to the Center Director in implementing and managing the environmental-related, occupational health-related, facility management-related, protective services-related and emergency management-related portions of the Center’s SHE Program and is responsible and accountable for ensuring the following:

NOTE: See Appendix A of this MPR for the organizations that serve in the roles of the Center’s Occupational Health Office, Center’s Environmental Office and Center’s Facility Management Office (FMO) at MSFC and MAF. The Center’s Occupational Health Office and Center’s Environmental Office when combined with the Center’s Safety Office in this MPR form Center’s SHE Offices.

1.4.1  Providing oversight and verification of Center compliance with applicable OSHA, Alabama Department of Environmental Management, EPA, Nuclear Regulatory Commission (NRC), NASA, and MSFC occupational health and environmental policies, regulations, and standards and to develop Center specific health and environmental-related policies as needed that includes surveillance, assessments, evaluations, and inspections, as needed.

1.4.2  Providing oversight of health-related and environmental-related activities performed by other Center organizations and Contractors that fall under the responsibility of a Center’s Occupational Health Office and Center’s Environmental Office program.

1.4.3  Developing Center specific health and environmental-related policies, standards, and procedures to implement OSHA, EPA, NRC, and NASA safety requirements at the Center, as needed.

1.4.4  Providing overview and surveillance of activities that have an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed.

1.4.5  Receiving, evaluating, and documenting reports of unsafe/unhealthful working conditions and occupational health-related and environmental-related issues and concerns reported by
employees in accordance with 29 CFR pt. 1960.28 following the processes described in MWI 8715.13.

1.4.6 Measuring, evaluating, analyzing, and recording health and environmental-related trends and general status of the Center’s Occupational Health and Environmental Programs, and identifying any significant trends to Center management.

1.4.7 Providing occupational health and environmental-related training to Center employees by employees that are knowledgeable in the subject matter and the training material is maintained up-to-date. (See MPR 3410.1 for more information.)

1.4.8 Providing employees that perform occupational health-related and environmental-related inspections with the training to be knowledgeable in the subject matter following the processes described in MPR 3410.1.

1.4.9 Providing close collaboration with the Procurement Office to include occupational health and environmental management consideration during the development, evaluation, and selection process for Center contracts following the processes described in MPR 5000.1 and MWI 5115.2.

   NOTE: The collaboration also includes the CDRM during the development of the solicitation or Purchase Request to verify the appropriate DRDs for health and environmental are included.

1.4.10 Developing, implementing, and monitoring occupational health and environmental-related programs in accordance with the applicable OSHA, EPA, NRC, ANSI or NASA requirements [e.g., hazardous material management, blood-borne pathogens, ergonomics, occupational medicine, confined spaces, radiation safety, hearing conservation, respiratory protection, or Environmental Management System (EMS)] following the processes described in MPR 8500.2, MWI 8550.5, MWI 1800.1, and MWI 1840.1.

1.4.11 Designing, constructing, operating, and maintaining Center buildings and facilities in accordance with the most current applicable building codes, regulations, standards, ANSI, NFPA, and international standards, as applicable for SHE-related, fire protection, life safety requirements, and building/facility infrastructure systems following the processes described in NPR 8715.3.

   NOTE: Where conflicting requirements exist, the most stringent requirement is used.

1.4.12 Maintaining drawings of current building configurations.

1.4.13 Evaluating infrastructure-related equipment and systems, and place them on a preventive and predictive maintenance schedule and monitor to prevent it from failing or creating a hazardous condition, as needed.

1.4.14 Providing fire protection systems and equipment for Center buildings for the purposes of
detecting and suppressing/extinguishing a fire, and notify employees in the event of a fire that includes designing, equipping, installing, inspecting, testing, and maintaining the system and equipment in accordance with the applicable NFPA Codes for the building occupancy, 29 CFR pt. 1910.155 through 165, NASA STD 8719.11, American Society of Safety Engineers (ASSE) A17.1, and general consensus standard requirements applicable for the system.

1.4.15 Providing fire protection systems that are installed, configured, and maintained, so that they reduce the likelihood of false and nuisance alarms that signal emergency personnel to respond to the building or for building occupants to evacuate following the processes described in NFPA 72 and MWI 8715.11.

1.4.16 Administering procedures that provides security program that includes personnel identity and credentials, access management, NASA critical infrastructures, and traffic following the processes described in MPR 1600.1 and MPR 1600.4.

1.4.17 Administering procedures for maintaining a state of readiness with respect to disastrous situations that could confront the Center and the surrounding area following the processes described in MCP 1040.2 at MSFC and at MAF MCP 1040.4.

1.4.18 Implementing a Center certification program for jobs and operations identified to require an occupational health-related or environmental-related Center certification following the processes described in MWI 3410.1.

1.4.19 Notifying the Center Director and NASA Chief Health and Medical Officer of any visits to the Center by OSHA or an evaluation by NRC, or other regulatory agency, including any finding identified during the visit following the frequency and process described in NPR 8715.1.

1.4.20 Performing assessments on a case-by-case bases on existing buildings to determine if newer requirements need to be incorporated based on updated or superseded requirements that are more stringent than those in place when the building was originally constructed following the process described in NPR 8715.3.

1.4.21 Providing assistance and support to employees designated to serve in SHE collateral duty roles (Area Manager, BM, ABM, organization’s SHE POC, and organization’s NMIS POC) in the implementation and management of the Center’s health and environmental-related policies, standards, and procedures within their organizations following the processes described in section 2.3.2 of this MPR, MWI 8715.5, MWI 8715.12, and MWI 8715.13.

1.4.22 Providing feedback to Center management of the status of Center organizations and contractors implementation of health-related and environmental-related activities within their areas that fall under the responsibility of a Center’s Occupational Health Office and Center’s Environmental Office programs, when requested.

1.4.23 Providing assistance to Center organizations in identifying health-related and environmental-related hazardous conditions that employees may be exposed to while performing
a job or operation and identifying the methods to eliminate, reduce or control the hazardous condition to a safe working level.

1.4.24 Providing oversight in the implementation and day-to-day operations of the Center’s emergency management system and protective services.

1.5 Office of Procurement: An organization that provides assistance to the Center Director in implementing and managing the safety-related, occupational health-related and environmental-related portions of the Center’s SHE Program in contracts, agreements and grants, by working closely with the Center’s SHE Offices, and is responsible and accountable for ensuring the following:

1.5.1 The Directors of the Center’s SHE Offices are notified when appropriate of new acquisitions, including but not limited to, those utilizing Procurement Development Team (PDT)/Source Evaluation Board (SEB) procedures to determine if representatives from their organizations are to be involved and, if necessary, the level of their involvement following the processes described in MPR 5000.1 and MWI 5115.2.

1.5.2 The Center’s SHE program requirements and objectives are clearly delineated in the solicitation and contract specifications, as needed.

1.5.3 Contractor past performance safety and health evaluation criteria and evaluation methods are identified and included in the solicitation.

1.5.4 Safety performance criteria for the term or period of performance of the contract is identified.

1.5.5 The current revision of SHE-related DRD are included in the solicitation and contract, agreement, or grant.

1.5.6 Modification to SHE-related DRDs specific to a Statement of Work (SOW) are coordinated with DRD Organization of Office of Primary Responsibility Designee (OPRD) and CDRM. (See MGM 7120.3 for more information.)

**NOTE 1:** The CDRM, Contracting Officer, and respective Center’s SHE Office determine what DRD(s) are applicable to the solicitation and proposed contract, agreement, or grant, and if the standard DRD needs to be modified based on the SOW and type of work or activities that are expected to be performed by the Contractor in the performance of the award.

**NOTE 2:** The CDRM coordinates internal data requirement activities with the PDT/SEB during the development of the solicitation and coordinates changes to the standard DRDs with the DRD OPRD.

1.5.7 The required Federal Acquisition Regulation (FAR), NASA FAR Supplement (NFS) and
MSFC provisions and clauses associated with SHE requirements, are included in the solicitation following the processes described in their respective prescriptions for use.

**NOTE 1:** The Center’s SHE Offices provide assistance to the Contracting Officer in identifying specific FAR, NFS and Center-unique provisions and clauses specific to the SOW and/or specifications. These MSFC clauses include, but are not limited to, the following: MSFC 52.223-90, “Asbestos Material”; MSFC 52.223-91, “Hazardous Material Reporting”; MSFC 52.223-92; “Environmental –General Clause”; MSFC 52.223-96, “Medical Services”; and MSFC 52.223-97 “Mandatory and Required Training.”

**NOTE 2:** The use of a MSFC clause may vary depending on the solicitation or contract type and the length of the anticipated contract period of performance.

1.5.8 SHE Plans and any revisions thereto are provided the respective Center’s SHE Office for review, comment, and concurrence. SHE Plans are reviewed within the time period specified in the DRD or other Center specifications such as the MSFC Technical Specifications for Repair and Construction or Center SpecsIntact for Construction of Facilities.

1.5.9 Concurrence with the Contractor’s SHE Plan and any revisions thereto are obtained from each Center’s SHE Office following the processes described in NFS subpart 1823.70, NFS 1823.7001, NFS 1852.223-70, NFS 1852.223-73, FAR 52.236-13, and FAR 36.513.

**NOTE:** At MSFC, the Center’s Environmental Office reviews and concurs with Contractor SHE Plans where the SOW or specifications contains environmental requirements and regulations.

1.5.10 Contractor SHE Plans are reviewed for concurrence only by representatives of the Center’s SHE Offices that have been designated to review and concur with a Contractor’s SHE Plan.

1.5.11 General wording is added to solicitation in cases where the Contractor is expected to perform work at another NASA Center under a MSFC contract. The contract will include a statement for the Contractor to contact the Center(s) where the work will be performed after contract award to obtain any additional Center-specific requirements.

1.5.12 Any matter regarding proposed request for relief to safety requirements of 48 CFR Subpart 1823.70 are coordinated with the Center’s Safety Office and NASA Headquarters Office of SMA following the processes described in NPR 8715.3.

1.5.13 Contracts include requirements for contractors to provide PPE to their employees when the hazardous conditions cannot be reduced to a safe working level following the process described in NPR 8715.3.

1.6 Office of Human Capital: An organization that provides assistance to the Center Director in implementing and managing the safety-related, occupational health-related and environmental-
related portions of the Center’s SHE Program, by working closely with the Center’s SHE Offices to develop and provide SHE-related training to Center employees and is responsible and accountable for ensuring the following:

1.6.1 The Center’s SHE Offices are notified of upcoming SHE-related training courses being taught at the Center following the processes described in MPR 3410.1.

1.6.2 Center training designated as mandatory or required for Center employees is posted and made available.


1.7 MAF: A NASA-owned facility that is managed by MSFC, is operated by the Synergy Achieving Consolidated Operations and Maintenance (SACOM) contract, and houses a variety of occupants from both the commercial and government sectors. The MAF Chief Operating Officer provides assistance to the Center Director in implementing and managing the Center’s SHE Program at MAF, and responsible and accountable for ensuring the Center SHE-related programs and processes listed in Chapter 1 of this MPR that have been identified as applicable to MAF in NASA NPD/NPRs and MSFC MPD/MPR/MWIs are implemented at MAF.

1.7.1 The MAF SMA Manager/QD12 ensures all of the safety-related responsibilities listed in this MPR for the Center’s Safety Office, SMA, or Industrial Safety Branch (ISB) that have been identified as applicable to MAF are performed following the processes described in section 1.3 of this MPR.

1.7.2 The MAF Environmental Lead/AS60 ensures all of the environmental-related responsibilities listed in this MPR for the Center’s Environmental Office or Environmental Engineering and Occupational Health (EEOH) that have been identified as applicable to MAF are performed following the processes described in section 1.4 of this MPR.

1.7.3 The MAF Emergency Management/Protective Services Office (PSO) Operations Manager/AS50 ensures all of the health-related listed in this MPR for the Center’s Occupational Health Office or EEOH, the emergency management-related responsibilities listed in this MPR for the Center’s Emergency Management Office, and security-related responsibilities listed in this MPR for the Center’s PSO that have been identified as applicable to MAF are performed following the processes described in section 1.4 of this MPR.

1.7.4 The MAF Operations Office/AS60 ensures all of the facility-related responsibilities listed in this MPR for the Center’s FMO that have been identified as applicable to MAF are performed following the processes described in section 1.4 of this MPR.

NOTE: At MAF, many of the day-to-day activities identified in this MPR (e.g., sections 1.6.2, 1.6.3, 1.6.4, and 1.6.5) for the Center’s SHE Offices, FMO, PSO, and Emergency
Management have been delegated to be performed by an equivalent department/office within the SACOM.

1.8 Center’s SHE Committee

1.8.1 The Center’s SHE Committee is a committee that serves as the Center’s organizational committee to assist the Center’s SHE Offices with providing a forum to channel SHE-related recommendations and information to Center management, promoting, and improving the Center’s SHE programs and is responsible and accountable for the following:

1.8.1.1 Fulfilling committee responsibilities listed in MC-12.

1.8.1.2 Reporting SHE-related concerns and issues to Center management.

1.8.1.3 Reviewing assessments of the Center’s SHE program that have been performed by both internal and external organizations.

1.8.1.4 Receiving feedback from Center Management to share with organization employees.

1.8.1.5 Providing trend analysis of the Center’s OSHA Recordable mishap (DAFWII and TCR) rates and status of Center mishaps/close calls to Center management.

1.8.2 At MAF, the Center’s SHE Committee is responsible for the following:

NOTE: At MAF, this committee is referred to as the Executive Safety Committee.

1.8.2.1 Implementing a committee similar to the Center’s SHE Committee with the roles, responsibilities, and operation equivalent to that of the Center’s SHE Committee following the processes described in MC-12, as determined by the MAF SMA Manager/QD12.

1.8.2.2 Providing information on the health and well-being of the SHE Program at MAF to the Center’s SHE Committee following the processes described in MC-12 and MCP 8715.1.

NOTE: This information is normally provided annually by MAF’s SHE Committee.

1.9 SHE Collateral Duty Roles

Employees designated to serve in a SHE collateral duty role provide assistance and support to the Center Director, their organizational Directorate/Office Director/Manager, and Center’s SHE Offices in implementing and managing the Center’s SHE Program within their organizations and are responsible and accountable for ensuring the activities identified in section 2.3.3 of this MPR are effective within their organization.
NOTE: The Center’s SHE collateral duty roles include Area Manager, BM, ABM, organization’s SHE POC, and organization’s NMIS POC.

1.10 Contractors/Tenants

1.10.1 Contractors/Tenants provide assistance in implementing and managing the Center’s SHE Program within their organizations, and are responsible and accountable for ensuring the following:

1.10.1.1 Work performed at the Center is in full compliance with federal, state, NASA, Center specific SHE-related requirements and regulations, and Center SHE CPRs to the extent specified in their contract/agreement.

1.10.1.2 Contractors comply with the requirements contained in section 2.6 of this MPR.

1.10.1.3 Tenants comply with the requirements contained in section 2.7 of this MPR.
CHAPTER 2
CPR 1 - MANAGEMENT LEADERSHIP AND EMPLOYEE INVOLVEMENT

2.1 Management Commitment

2.1.1 Management Commitment is demonstrated by committing to establishing, documenting, implementing, and communicating a safety and health management system that provides the following:

2.1.1.1 A workplace is provided for all employees that is incident and injury-free, provides protection against unsafe/unhealthful and hazardous conditions, and maintains a successful function of Center facilities and operations. (See 29 U.S.C § 651 for more information.)

2.1.1.2 Clear goals that are attainable and measurable.

2.1.1.3 Objectives that are relevant to workplace unsafe/unhealthful and hazardous conditions.

   NOTE: The Center goals, visions, and objectives are documented in the Center’s Annual SHE Program Plan. (See section 2.9 of this MPR and MCP 8715.1 for more information.)

2.1.1.4 Policies and procedures that indicate how the Center can accomplish these objectives and meet these goals.

2.1.1.5 Policies and procedures that flow-down federal, state, local and NASA SHE-related policies, programs, standards and requirements, and ensures continual compliance.

2.1.1.6 Policies and procedures that establish how federal unions at the Center agree to accomplish these objectives and meet the goals.

   NOTE: At MSFC, there are two federal unions, the Marshall Engineers and Scientists Association and the American Federation of Government Employees.

2.1.1.7 Policies and procedures that evaluate a contractor’s safety and health performance prior to being selected and awarded a contract for work at the Center.

2.1.1.8 Policies and procedures that integrate Center SHE-related requirements into the planning, construction and purchasing of new equipment and buildings, and operations.

2.1.1.9 Policies and procedures that establish a safety and health committee to communicate and monitor the progress achieving the Center’s safety and health goals and objectives.

2.1.1.10 Policies and procedures that identify personnel that have special safety and health needs due to a physical disability and provide assistance in emergency situations, as needed.

2.1.1.11 Policies and procedures that provide methods for employees to be involved and engaged in the Center’s SHE Program by serving in SHE Collateral Duty roles such as an Area Manager,
BM, organization’s SHE POC or other positions that provide direct support to the Center’s SHE Program.

2.1.1.12 Policies and procedures that establish methods for employees to report unsafe/unhealthful working conditions, concerns and incidents.

2.1.1.13 Policies and procedures that establish methods ensuring employees are provided with a work environment where employees are free to report an injury or illness to personnel, damage to property, and concerns of unsafe/unhealthful working conditions without the fear of reprisal from management.

2.1.1.14 Policies and procedures that report trends of workplace injuries and illnesses to Center management.

NOTE: Approval of this MPR by the Center Director signifies the Center’s management commitment to the Center’s SHE program at every level of Center management and communicates this commitment to all employees. Center management’s commitment to the Center’s SHE Program is also documented in each section of this MPR and the MSFC applicable documents listed in section P.4.

2.2 Employee Involvement

2.2.1 Employees are encouraged to actively participate and be engaged in the Center’s SHE Program in at least three meaningful, constructive ways.

NOTE 1: Employees’ involvement and engagement in the Center’s SHE Program can include, but not be limited to, any of the following: (1) attending monthly SHE Committee meetings; (2) membership on SHE Subcommittees or teams; (3) participating in SHE audits; (4) participating in supervisor worksite SHE visits; (5) participating in an incident investigation; (6) participating in the development of a hazard analysis, Job Hazard Analysis (JHA), Job Safety Analysis (JSA) or Safe Plan of Action (SPA); (7) participating in a readiness review for the startup of a facility or operation; (8) submitting safety concerns by use of the safety concern reporting system; (9) submitting suggestions for improvements to the Center’s SHE program by use of the employee feedback systems; (10) serving in a SHE collateral duty roles as an Area Manager, BM, ABM, organization’s SHE POC or organization’s NMIS POC; (11) providing presentations at SHE or safety meetings; (12) providing SHE training; or (13) participating in organization or team safety activities and initiatives.

NOTE 2: At MSFC, Civil servants, contractor employees, and their unions are encouraged to join the Marshall Safety Action Team to promote a safe and healthy work environment and to promote an attitude to accomplish our work safely. Additional information can be obtained from the Marshall Safety Action Team Web page. The Marshall Safety Action Team Web page can be accessed from the MSFC “Caring In Action” located on the MSFC’s “Inside Marshall.”
NOTE 3: Safety and health provisions for federal employee union members are listed in the agreements between George C. Marshall Space Flight Center and the federal unions, Marshall Engineers and Scientists Association Agreement Article 19 and the American Federation of Government Employees Agreement Article 39. The agreements can be viewed on the Office of Human Capital Webpage. Select the link to the Human Resources Services Office, then the Labor Relations link.

NOTE 4: At MAF, all employees (Civil Servants and contractor), and their unions are encouraged to join the Safety InstiGators Team to promote a safe and healthful work environment, and promote an attitude to accomplish work safely.

2.3 Responsibility and Accountability

NOTE: Pub. L. 91-596 section 5, sometimes referred to as the Occupational Safety and Health Act of 1970, directs employers to provide safe and healthful working conditions free from recognized hazardous conditions to their employees and also directs employees to comply with OSHA standards, rules, regulations, and orders that are applicable to their own actions and conduct. Both MSFC and MAF are proactive in implementing the necessary programs and actions necessary to provide employees with safe and healthful working conditions that are free from recognized hazardous conditions, and the implementation of Center-wide safety rules that promote employee safety. Safety at the Center is everyone’s responsibility. All employees are encouraged to take an active role in the Center’s SHE Program, follow the Center-wide safety rules, avoid performing unsafe acts, take responsibility for their individual safety and the safety of others, and cooperate with the Center’s SHE Offices during inspections/surveys, and investigations.

2.3.1 Managers and supervisors shall:

2.3.1.1 Be held responsible and accountable for meeting the Center’s SHE Program responsibilities identified throughout this MPR for all activities/areas assigned to their organization.

2.3.1.2 Comply with the specific activities identified as supervisors’ SHE responsibilities described in Chapter 7 and Center wide Safety Rules described in Chapter 9 of this MPR.

2.3.2 Employees shall:

NOTE: Employees include all Center employees (e.g., Civil Servant, contractor and tenants) regardless of their position.

2.3.2.1 Be held responsible and accountable for complying with the Center’s SHE Program rules and regulations identified throughout this MPR and for their individual safety and health by not performing unsafe acts or activities that may pose an increased level of risk of injury to themselves or other employees.
2.3.2.2 Comply with the specific activities identified as employee’s responsibilities described in Chapter 8 and Center wide Safety Rules described in Chapter 9 of this MPR.

2.3.3 SHE-Related Collateral Duty Employees shall:

2.3.3.1 Be designated by one of the following methods: 1) organization’s SHE POC by the organization’s Directorate/Office Director/Manager; 2) Area Manager by the organization identified to contain the most employees in the building as shown on the Facilities Geographic Information System (FacGIS); 3) BM by the Area Manager; 4) ABM by the BM; and 5) organization’s NMIS POC by the organization’s Directorate/Office Director/Manager. (See MWI 8715.5 for more information.)

2.3.3.2 Serve as the single POC for the organizational SHE-related issues identified during audits/inspections/surveys performed by the Center’s SHE Offices when designated the role of an organization’s SHE POC.

2.3.3.3 Provide assistance and support to their organizational Directorate/Office Director/Manager and Center’s SHE Offices in implementing and managing an effective Center SHE program within their organizations when designated the role of an organization’s SHE POC.

2.3.3.4 Provide periodic status and recommendations to their organizational management for SHE-related activities assigned or performed within their organization (e.g., inspection/audit findings; mishap/close call and employee-reported SHE concern investigations; abatement plans when the estimated completion date cannot be fulfilled; and actions listed in Corrective Action Plans assigned to their organization) when designated the role of an organization’s SHE POC. (See MWI 8621.1, MWI 8715.5, MWI 8715.12, and MWI 8715.13 for more information.)

NOTE: Current Center organization SHE status may be viewed on MSFC’s “Inside Marshall,” select “Organizational Websites,” locate “Safety and Mission Assurance Directorate,” select “Safety, Health and Environmental,” select “Safety Information,” select “Safety Search.” Assistance may be provided by the Center’s Safety Office in viewing the organization’s SHE status if needed.

2.3.3.5 Provide assistance and support in promoting the Center’s SHE Program and communicating SHE-related information within their organization or building when designated the role of an organization’s SHE POC or BM.

2.3.3.6 Attend and ensure information discussed during Center’s SHE Committee meeting is shared with organizational management and employees when designated the role of an organization’s SHE POC to attend the Center’s SHE Committee meeting.

2.3.3.7 Provide assistance and support to organization employees in reporting incidents and SHE-related concerns to the Center’s Safety Office in investigating these incidents and SHE-related concerns when designated the role of an organization’s SHE POC. (See section 3.5 of
this MPR, MWI 8621.1, and MWI 8715.13 for more information.)

2.3.3.8 Provide assistance and support to organizational supervisors in their performance of monthly inspections of their organizational areas following the processes described in section 3.2 of this MPR when designated the role of an organization’s SHE POC, when requested. (See MWI 8715.5 and MWI 8715.12 for more information.)

   NOTE: Supervisor work area visits and findings are documented in the Supervisor Safety Web Page (SSWP). If a supervisor serves in the role of a BM they will document the BM inspection in SHEtrak. These are separate Center SHE Program activities and are documented separately.

2.3.3.9 Provide assistance and support to organization employees in initiating Trouble Calls and Facilities Work Requests (FWRs) to correct concerns following the processes described in MPR 8812.1 when designated the role of an organization’s SHE POC or BM.

2.3.3.10 Provide assistance and support to organization employees in obtaining SHE-related training and certifications when designated the role of an organization’s SHE POC. (See MPR 3410.1 and MWI 3410.1 for more information.)

2.3.3.11 Provide assistance and support to organization employees in identifying unsafe/unhealthful or hazardous conditions and the methods to eliminate, reduce, resolve or control these conditions to a safe/healthful working level when designated the role of an organization’s SHE POC, BM or Area Manager. (See section 4.2 of this MPR, MWI 8715.5, MWI 8715.12, MWI 8715.13, and MWI 8715.15 for more information.)

2.3.3.12 Perform inspections of buildings following the processes described in MWI 8715.5 and this MPR when designated the role of a BM. These inspections and findings are documented in SHEtrak. (See section 3.2 of this MPR and MWI 8715.5 for more information.)

2.3.3.13 Initiate corrective actions to resolve SHEtrak findings and SCRS assigned to them following the processes described in MWI 8715.12 and MWI 8715.13 when designated the role of an organization’s SHE POC or BM. (See MWI 8715.5 for more information.)

   NOTE 1: Organization’s SHE POC’s resolve SHEtrak findings and SCRS that are program/project and organization-related.

   NOTE 2: BMs resolve SHEtrak findings and SCRS that are in building common areas, areas not assigned directly to a Center organization within the building, and areas outside the building that are adjacent to the building.

   NOTE 3: At MAF, Area supervisors are responsible to resolve SHEtrak findings and SCRS. Contact the MAF Safety Manager/QD12 for more information.
2.3.3.14 Perform or ensure inspections are performed following the processes described in section 4.2 of this MPR and MWI 8715.5 for building emergency equipment/systems [e.g., emergency shower/eyewashes, portable fire extinguishers, emergency egress lights (normally battery powered), Automated External Defibrillator (AED)] when designated the role of a BM.

   NOTE: These inspections may be performed by another Center organization, such as the Center organization assigned the area where the emergency equipment/system is located. (See MWI 8715.5 for additional information.)

2.3.3.15 Ensure building occupants are notified following the processes described MWI 8715.5 and MWI 8715.11 when a building emergency system, such as the building fire protection system is inoperable, when designated the role of BM.

2.3.3.16 Ensure at least one building entrance is identified as smoke free following the processes described in MWI 8715.5 for every building within their area of responsibility when designated the role of Area Manager. (See Chapter 9 of this MPR, E.O. 13058, and MWI 8715.5 for more information.)

2.3.3.17 Successfully complete training in the recognition, evaluation, resolution and control of unsafe/unhealthful and hazardous conditions in the workplace following the processes described in section 5.3 of this MPR and MWI 8715.5 when designated the role of BM, ABM and organization’s SHE POC.

2.4 Authority

2.4.1 Authority shall:

2.4.1.1 Be given to managers/supervisors to reduce the degree of unsafe/unhealthful and hazardous conditions that have an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed.

   NOTE: This authority allows managers/supervisors to implement interim controls or stop the job/operation when the hazardous conditions cannot be corrected in a reasonable time.

2.4.1.2 Be given to managers/supervisors to initiate the appropriate level of disciplinary actions when it is determined an employee intentionally violates Center SHE-related rules and regulations. (See section 4.7 of this MPR and NASA Desk Guide (DG)-03 for more information for disciplinary actions that may be taken toward Civil Servant Employees. Contractor and Tenants follow their company disciplinary polices.)

2.4.1.3 Be given to all employees to “halt or stop” any operation that they feel has an increased level of risk to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment and any test activity/operation due to receiving unexpected data outside the pre-established safety parameters for the test/operation.
NOTE: This authority allows employees 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.

2.4.1.4 Be given to all employees not to restart a test/operation that has been halted or stopped due to receiving unexpected data, until an investigation of some level is performed to determine the cause of the unexpected data.

NOTE: This authority is often referred to as “stop work authority or authority to halt” and is intended to only stop the portion of the operation where the increased level of risk of injury, unsafe act or condition exists.

2.5 Resources

2.5.1 Resources shall be provided by Center management to Center organizations to accomplish their typical day-to-day activities as well as those necessary for unexpected expenditures to correct conditions identified as unsafe/unhealthful or hazardous and pose an increased level of risk for employee injury or illness. These resources include for the correction of unsafe/unhealthful and hazardous conditions identified during SHE inspections/audits, employee-identified concerns and emergency conditions, as necessary.

NOTE 1: Unsafe/unhealthful and hazardous conditions directly related to maintenance of a building may be corrected by initiating a Trouble Call for minor repairs or a FWR to the Facilities Work Control. Contact the Center’s FMO or Work Control Center.

NOTE 2: At MFSC, details on the MSFC processes can be obtained from MSFC’s “Inside Marshal,” select “Organizational Websites,” select “Office of Center Operations.”

NOTE 3: Unsafe/unhealthful and hazardous conditions that are not related to maintenance of a Center building or a building’s infrastructure system are normally the responsibility of the Center organization assigned to the area or responsible for the job/operation. Funding for these situations may be obtained through the organization’s normal chain of command.

2.5.2 The Center’s SHE Committee shall be contacted for assistance in correcting unsafe/unhealthful and hazardous conditions that cannot be corrected or funded through the organization’s normal chain of command.

2.5.3 In cases where funding is unavailable to correct an unsafe/unhealthful or hazardous condition, the organization responsible for the condition shall determine if the condition is to be identified as an Institutional Risk and reported to Center management following the processes described in MWI 7120.6 and the MPR 8000.4.

2.6 Contractors

2.6.1 Contractors shall:
2.6.1.1 Be evaluated for their previous safety, health, and environmental performance prior to being selected to perform work following the process described in the solicitation.

2.6.1.2 Be selected following the process described in MWI 5100.1 and MWI 5115.2 and as described in the solicitation.

2.6.1.3 Report and provide safety statistics to the Center’s Safety Office as defined in their contract. At a minimum, the safety statistics include mishaps, injuries and illnesses, property damage, and man-hours worked (including subcontractors) on a monthly basis in support of the contracted effort. (See DRD for mishap and safety statistics reporting placed in the contract for more information.)

NOTE 1: Contractors provide monthly safety statistics to the Center’s Safety Office by one of the following methods: (1) direct entry into the NMIS; (2) submitting MSFC Form 4371; or (3) other method approved by the Center’s Safety Office. These monthly safety statistics are used to trend contractor monthly safety statistics for inclusion in Center trending metrics provided to Center management. Additional information related to mishaps reported on the MSFC Form 4371 may be requested by the Center’s Safety Office.

NOTE 2: Contact the Center’s NMIS Administrator for access to NMIS, if needed.

2.6.1.4 Report, investigate, document, provide assistance and cooperation, and relevant information in the possession of the Contractor regarding the incident to Government-authorized incident investigations as specified in their contract and defined in the contractor’s approved SHE Plan. (See NFS 1852.223-70, MWI 8621.1, and the DRD for mishap and safety statistics reporting placed in the contract for more information.)

NOTE 1: Contractors whose employees are involved in the incident or are directly responsible for the facility/operation where the incident occurred perform an investigation and provide the results of their investigation to the Center’s Safety Office, Center’s NMIS Administrator or organization’s NMIS POC for direct entry into NMIS, or provide assistance to the Center’s Safety Office in performing their investigation.

NOTE 2: Contractors investigation reports should, at a minimum, include the following: executive summary/narrative description of the incident (who, what, when, and where); Description of injuries and/or property damage; and Findings and recommendations that are clear, verifiable, achievable, measurable, and traceable to at least one cause to prevent recurrence of similar incidents in the future. Contractors are not required to use MSFC Form 4515 for their investigation report.

2.6.1.5 Provide access to the Contractor’s worksite for incident investigation performed by the Center’s Safety Office or Government-authorized investigators.
2.6.1.6 Provide a SHE Plan that is written specifically for the work expected to be performed on the Center under the contracted effort and complies with the Center specific SHE-related requirements and regulations identified in the solicitation, DRD, and contract to the Contracting Officer for concurrence prior to commencing work.

**NOTE 1:** The Contracting Officer normally forwards the Contractor’s SHE Plan to the Center’s SHE Offices for review and concurrence. (See section 1.5 of this MPR for more information.)

**NOTE 2:** Center-specific SHE-related requirements and regulations are normally identified and included in Center solicitations for service and/or support type work in a Center DRD or a Center specification developed for a specific type of work such as for construction. Contact the Center’s SHE Offices, or FMO for additional information for placing Center specific SHE-related requirements and regulations in Center solicitations.

2.6.1.7 Be held accountable to implement a similar responsibility and accountability processes as defined in their approved SHE Plan and this MPR.

2.6.1.8 Be held accountable to provide a workplace to their employees, including any subcontractors directly supporting the Contractor, free from recognized unsafe/unhealthful and hazardous conditions.

2.6.1.9 Comply with federal, state, NASA, and the Center’s specific SHE-related rules, requirements and regulations as defined in their contracts.

2.6.1.10 Obtain concurrence from the SHE-related process owner (Center’s SHE Offices) to use a SHE-related process other than the one specified in this MPR to document and track a Center specific SHE-related process.

**NOTE:** In some cases, a contractor may have a SHE-related process that may be considered as equivalent to a Center’s specific SHE-related process described in this MPR. In these cases, the Center organization that owns the SHE-related process will evaluate the contractor’s SHE-related process and provide concurrence, if the contractor’s SHE-related process may be used in lieu of the Center’s specific SHE-related process defined in this MPR. Examples include, but are not limited to, using NMIS, SCRS, SHEtrak, SSWP, Certification Tracking (CERTRAK), and Operations Tracking (OpsTrak).

2.6.1.11 Evaluate the jobs/operations performed by their employees following the processes described in Chapter 5 of this MPR, MPR 3410.1, and MWI 3410.1 to identify specific training and Center certification needs.

2.6.1.12 Provide training to employees as required by federal, state, NASA, Center specific SHE-related requirements and regulations.
NOTE: Center SHE Training material is developed as a method to communicate NASA and MSFC specific requirements to employees while working on the Center and is considered as “awareness training.” The Center SHE training material intended to fulfill training requirements specified by federal, state, NASA, and MSFC requirements for work performed at the Center and is not intended to fulfill specific federal, state, and local training requirements for use at other locations.

2.6.1.13 Provide trained and qualified employees to perform the jobs/operations in a safe/healthful manner as described in their contract.

NOTE: Awareness training for NASA or Center specific requirements or regulations will be provided by the Center office responsible for the implementation and oversight of the NASA or Center specific requirement or regulation.

2.6.1.14 Obtain concurrence from the SHE-related training owner (Center’s SHE Offices) following the processes described in Chapter 5 of this MPR, MPR 3410.1 and MWI 3410.1 for use of contractor provided training as equivalent training material in lieu of the training material provided by the Center’s SHE Offices for their respective areas.

2.6.1.15 Participate and be engaged in the Contractor Safety Forum, Center’s SHE Committee, or SHE Subcommittee to the extent specified in their contract.

2.6.1.16 Perform and document a self-evaluation of their SHE Program as specified in their contract. (See the DRD for the SHE Plan placed in their contract for more information.)

2.6.1.17 Record, post and maintain Contractor employee OSHA recordable work-related injuries and illness on an OSHA Form 300A for their company following the processed described in 29 CFR pt. 1904. (See section 3.6 of this MPR for more information.)

2.6.1.18 Maintain training records of their employees. (See MPR 3410.1 and applicable parts of OSHA that require the employer to maintain evidence of training for the specific job/activity performed by the employee for more information.)

2.6.1.19 Provide access to the Contractor’s worksite for periodic inspections/audits and incident investigations. (See MWI 8715.12, MWI 8715.13, and MWI 8621.1. for more information.)

NOTE: The Center’s SHE Offices may perform periodic inspections/audits of Contractor worksites with and without prior notice to the Contractor.

2.6.1.20 Acknowledge that NASA and MSFC assume no liability or responsibility for the Contractor’s compliance or non-compliance with any federal, state, NASA, or Center-specific requirements or regulations.
2.6.1.21 Acknowledge that fines and additional costs for violations levied against the Contractor as a result of federal, state, NASA, and MSFC violations are the sole responsibility of the Contractor and cannot be passed through to NASA or MSFC.

2.6.1.22 Procure and provide employees with the necessary equipment, such as PPE meeting federal regulation and industrial standards in situations where engineering controls or administrative controls have not reduced the hazardous condition to a safe working level. (See section 4.2 of this MPR and 29 CFR pt 1910 Subpart I for more information.)

2.6.1.23 Provide contractor developed hazard control instructions/procedures for operations identified as safety critical or hazardous, or contain an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed on the Center to the Center’s Safety Office for review and concurrence following the processes described in MWI 8715.15.

2.6.1.24 Assist internal and external organizations during inspections/audits of their assigned areas when requested.

2.6.1.25 Provide SHE-related documentation specified in the Contractor’s SHE Plan and DRD for the SHE Plan placed in their contract to the Government when requested.

2.7 Tenants

2.7.1 Tenants shall:

2.7.1.1 Be held responsible and accountable to comply with all federal, state, and local laws and regulations that are applicable to the type of activities/operations being performed by the tenant in their designated areas.

   NOTE: At MAF, there are several locations that have been leased to tenants through contracts, leases, Space Act or Cooperative Agreements or grant for commercial activities. Normally Center SHE requirements are not placed on tenants for activities/operations performed within their designated areas in support of the tenant’s non-NASA or commercial activities.

2.7.1.2 Comply with Center SHE rules and requirements when outside of their designated area.

2.7.1.3 Comply with the regulations and requirements specified in their contract, leases, Space Act or Cooperative Agreement or grant.

2.7.1.4 Report mishaps to the Center’s Safety Office as specified in their agreement.

2.7.1.5 Provide access to the Tenant’s worksite for periodic inspections/audits and incident investigations performed by the Center’s Safety Office or Government-authorized incident investigators as needed. (See MWI 8715.12, MWI 8715.13, and MWI 8621.1. for more
NOTE: The Center’s SHE Offices may perform periodic inspections/audits of Tenant worksites and investigate incidents that occurred within the Tenant worksite with and without prior notice to the Tenant.

2.7.1.6 Acknowledge that NASA and MSFC assume no liability or responsibility for the Tenant’s compliance or non-compliance with any federal, state, NASA, or Center-specific requirements or regulations.

2.7.1.7 Acknowledge that fines and additional costs for violations levied against the Tenant as a result of federal, state, NASA, and MSFC violations are the sole responsibility of the Tenant and cannot be passed through to NASA or MSFC.

2.7.1.8 Obtain awareness training for NASA or Center specific requirements or regulations when needed.

2.8 Center SHE Program Evaluation

2.8.1 The Center SHE Program evaluation:

2.8.1.1 Determines the overall effectiveness of the Center’s safety and health management system.

2.8.1.2 Is initiated at the request of the Center’s SHE Committee.

2.8.1.3 Is performed at least annually, but may be performed on a more frequent basis if determined necessary by the Center SHE Committee or Center Management.

2.8.1.4 Is a review of all or a portion of the Center SHE program elements.

NOTE 1: The Center’s SHE Committee recommends the Center SHE program elements be reviewed. Managers of the Center’s SHE Offices may also make recommendations of specific elements to be considered for review, as necessary.

NOTE 2: Environmental may be excluded from the safety and health evaluation if determined appropriate by Center management. The safety and health program evaluation is an element of the OSHA VPP and normally does not include environmental compliance.

2.8.1.5 Includes a review of any or all of the following: (1) data obtained from Center SHE-related activities such as (a) results from Inspections/surveys performed by Center’s SHE Offices, (b) internal and external audits of the SHE program, (c) inspections performed by BMs and supervisors, (d) feedback from employees, including those serving in SHE collateral duty positions, on their thoughts of the SHE program implementation, and (e) concerns entered into the Center’s safety concerns reporting system or brought to the SHE Committee; (2) walk-
through of the workplace and interviews with employees by Center management, managers or representatives from the Center’s SHE Offices; (3) results of incident investigations such as causes of mishaps/close calls and the lessons learned; (4) other SHE-related data as deemed as necessary for evaluating the Center’s SHE performance; and (5) review of the Center’s SHE-related performance metrics for each organization.

2.8.1.6 Have the evaluation results forwarded to the Center’s SHE Committee for inclusion into the Center’s Annual SHE Program Plan if determined appropriate by Center management and/or MSFC SMA. (See section 2.8 of this MPR and MCP 8715.1 for more information.)

**NOTE:** The Center’s SHE Program evaluation evaluates the Center’s SHE Program compliance with the VPP CPRs. OSHA safety and health program evaluation processes are described in Cooperative and State Program (CSP) 03-01-003. To reduce operational impact on the Center, internal audits of the Center’s SHE Program may be performed in conjunction with the Marshall Management System internal audits, when possible. (See NPR 8715.1, Chapter 8, CSP 03-01-003, and MPR 1280.6 for more information.)

2.8.2 Center organizations identified by an SHE-related audit/inspection/survey to not fully conform with Center SHE-related issues specific to their organization shall:

2.8.2.1 Establish Corrective Action Plans to address these issues.

2.8.2.2 Submit the Corrective Action Plans to the Center’s SHE Committee within 6 weeks of receiving the survey results.

**NOTE:** The Corrective Action Plans may be referred to as “get well plans.”

2.8.3 Corrective actions that are generic Center SHE-related issues affecting a cross-section of the Center shall be identified by the Center’s SHE Committee and included in the Center’s Annual SHE Program Plan. (See MCP 8715.1 for more information.)

2.8.4 Audits/inspections/surveys of Center’s SHE Program shall be performed to ensure compliance with the requirements contained in this MPR. The audits/inspections/surveys may be performed by the Center’s SHE Offices of their respective areas or included as part of the audits performed by the Center’s Internal Audit Team following the processes described in MPR 1280.6 and MPR 1280.10.

**NOTE:** The SHE audits may be performed in conjunction with other internal audits when deemed necessary.

2.8.5 Work areas are subject to additional Center’s SHE Office audits/inspections/surveys if they are identified to: (1) contain materials, substances, or activities that increase the likelihood of an accidental fire occurring; (2) include operations identified to contain an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed; or (3) perform operations that involve the use of hazardous materials or generate hazardous waste.
2.8.6 Employees are provided methods to provide their feedback and views on the effectiveness of the Center’s SHE program to the Center’s SHE Offices by use of the “What’s on your mind” located MSFC’s “Inside Marshall,” select “Organizational Websites,” locate “Safety and Mission Assurance Directorate,” select “Safety, Health and Environmental,” select “What’s on your mind” to submit a question or comment or select “Safety Messages,” select “write a blog post.”

2.9 Annual SHE Program Plan

2.9.1 Each year MSFC SMA prepares the Center’s Annual SHE Program Plan for the upcoming year with the support from the Center’s Office of Center Operations, Office of Human Capital, and the Center’s SHE Committee. (See MCP 8715.1 for more information.)

2.9.2 The Center’s Annual SHE Program Plan, at a minimum, includes the following:

2.9.2.1 Center SHE Program goals.

2.9.2.2 Center SHE Program audit findings discovered during the previous year’s Center SHE Program audit, including the proposed corrective action and assignee, as necessary.

2.9.2.3 Center SHE Program improvements, including the assignee, as necessary.

2.9.2.4 Is reviewed and approved following the process described in MWI 1410.1.

2.9.3 The Center’s Annual SHE Program Plan actions are tracked to closure, include the assignee, and target completion date. (See MCP 8715.1 for more information.)

   NOTE: These actions may be tracked and maintained in an electronic database.

2.10 Monthly SHE Meetings and Awareness Training

2.10.1 Monthly SHE meeting and awareness training shall be conducted by supervisors, at all levels, with those employees that report directly to them and documented.

   NOTE 1: SHE Monthly Meeting and awareness training may be incorporated into a regular staff meeting, or be combined with a manager’s or other supervisory meeting at the directorate, department, branch or team level, or in the form of a weekly toolbox or similar type meeting held with employees.

   NOTE 2: These meetings normally include discussing the monthly SHE Focus topic, but may be an organization developed topic if the SHE Focus topic is not identified as mandatory or is not deemed as relevant to the specific working conditions of the organization.
2.10.2 The SHE meeting and awareness training may include discussions on any of the following:

2.10.2.1 Topics developed by the organization that are relevant to the specific working conditions or non-working activities encountered by their employees.

2.10.2.2 SHE focus topics listed in the SSWP when identified as mandatory or required.

2.10.2.3 Recent incidents and corrective actions.

2.10.2.4 Results of SHE inspection findings and necessary corrective actions.

2.10.2.5 Recent safety bulletins or other information posted on MSFC’s “Inside Marshall,” select “Organizational Websites,” locate “Safety and Mission Assurance Directorate,” select “Safety, Health and Environmental.”

2.10.2.6 Current SHE issues and concerns, including subjects identified at other levels of the organization.

2.10.2.7 Specific SHE-related Training required for the work area(s) or operation(s).

NOTE: In cases where employees are assigned in an organization remote from their official supervisor, the employees can attend the SHE meetings and awareness training 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 Center’s Safety Office safety meeting this month.

2.10.3 If an employee is unable to attend organization’s monthly SHE meeting, the supervisor may provide the employee the SHE meeting presentation for review and receive acknowledgement from the employee of their review. This method allows for the employee to be identified in SSWP as having participated in the monthly SHE meeting.

2.10.4 Record of the SHE meeting and awareness training shall be maintained in the SSWP.

2.10.4.1 Supervisors that do not have access to SSWP shall maintain a record of the SHE meeting and awareness training.

NOTE: The use of SSWP may not be required for some contractor supervisors such as for the following: 1) construction contracts; 2) service and operation type contracts that do not exceed 12 months in duration; 3) grants and Cooperative or Space Act Agreements; and 4) contracts with < 5 employees. Contact the Center’s Safety Office for assistance.
CHAPTER 3
CPR 2 – WORKSITE ANALYSIS

3.1 Baseline Hazard Analysis

3.1.1 A safety assessment of the appropriate level (in-depth hazard analysis, JHA, JSA, SPA, workplace safety assessment or a similar method of assessment) shall be performed for all jobs, operations, and facilities at the Center.

NOTE 1: Work activities performed in the office/administrative environment are normally considered to be of a minimal level of risk. A documented safety assessment for office/administrative work activities is not required unless its use is desired by the supervisor. (See section MWI 8715.15 for more information.)

NOTE 2: Facilities/operations identified to have an increased level of risk (high, moderate and low) to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of the work being performed are normally entered into OpsTrak. The overall level of risk identified for a building may be entered into Electronic Project Online Risk Tool (ePort). Access to ePort is requested through the NASA Application Management System (NAMS).

3.1.2 Safety Assessment shall:

3.1.2.1 Be the appropriate level of assessment based on the level of risk selected for the job, operation or facility following the process described in MWI 8715.15.

NOTE 1: An in-depth hazard analysis is normally performed for jobs, operations and facilities considered to contain an increased level of risk (high or moderate) to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed.

NOTE 2: A JHA, JSA, SPA, workplace safety assessment or safety-related checklist is normally performed for jobs and operations considered to contain a low level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed.

NOTE 3: Safety-related checklists are normally used as a method to assess construction-related jobs and operations for hazardous conditions.

3.1.2.2 Be performed for all jobs, operations and facilities by the organization with overall responsibility for the job, operation or facility to identify unsafe/unhealthful and hazardous conditions, and develop control methods to reduce the hazardous conditions to a safe working leveling following the processes described in NPR 8715.3 and MWI 8715.15.

NOTE 1: The initial safety assessment performed for a job, operation, or facility, or
operation will be considered as the baseline assessment. The level of hazard analysis may be in the form or a JHA, JSA, SPA, workplace safety assessment or safety-related checklist, but may also be a more in-depth hazard analysis if desired. (See MWI 8715.15 for more information and SHE-related checklists may be obtained from MSFC’s “Inside Marshall,” select “Organizational Websites,” locate “Safety and Mission Assurance Directorate,” select “Safety, Health and Environmental,” select “Safety Information,” select “Safety Assessments,” Select “Safety Checklists.” Contact the Center’s Safety Office for assistance as needed.)

NOTE 2: The scope of the safety assessment may include ground support equipment and operations that support flight hardware, payloads and projects.

3.1.2.3 Be performed by employees that are trained and knowledgeable in hazard analysis process to recognize and evaluate unsafe/unhealthful and hazardous conditions, and provide adequate control methods to abate the hazardous condition.

3.1.2.4 Be performed for all new and existing jobs, operations and facilities.

3.1.2.5 Be performed for routine jobs and operations.

3.1.2.6 Be performed to the level necessary to ensure unsafe/unhealthful and hazardous conditions, and risks are identified, and the corresponding control methods to eliminate, control, or mitigate the unsafe/unhealthful and hazardous conditions, and risks are clearly identified.

3.1.2.7 Include a review of other supporting documentation, such as Safety Data Sheets, operating procedures and manufacturer’s instructions that are directly associated with the job or operation being assessed.

NOTE: If the PPE selected for use during the assessment is different than the PPE recommended in the supporting data or Safety Data Sheets contact the Center’s Occupational Health Office for assistance to ensure the selected PPE is sufficient to control the hazardous condition and note this concurrence in the safety assessment. (See NPR 8715.3 for more information.)

3.1.2.8 Be written in a manner where the control methods for a unsafe/unhealthful or hazardous condition are easily understood.

3.1.2.9 Clearly identify when PPE, emergency or monitoring equipment/systems, emergency showers/eyewashes, and other types of protective equipment/systems are necessary to control a unsafe/unhealthful or hazardous condition.

3.1.2.10 Be documented, communicated, and made readily available to employees so that they are aware of the hazardous conditions that may be encountered while in the workplace, or while performing a job or operation and the actions necessary reduce the unsafe/unhealthful or hazardous condition to a safe working level. (See MWI 8715.15 for more information.)
3.1.2.11 Be reviewed frequently for accuracy and updated when significant changes or modifications are made to the job, operation, or facility that have the potential to affect the following: its safe operation; the safety measures implemented by a previous safety assessment have been modified; changes affect existing control methods; or introduce new hazardous conditions. (See MWI 8715.15 for more information for frequency of review.)

NOTE: The JSA and SPA are similar forms and may serve the same purpose of a JHA if they are specific in identifying the hazardous conditions and the control methods. At MSFC, the MSFC Form 4390 is used by Center Civil Service organizations.

3.1.2.12 Consider all unsafe/unhealthful and hazardous conditions related to safety, health, and environmental.

3.1.2.13 Be reviewed by the Center’s SHE Offices following the processes described in MWI 8715.15, as needed.

3.2 Routine Self-Inspections

NOTE: Supervisor work area visits and BMs inspections of their buildings complement the inspections performed by the Center’s SHE Offices by involving more Center employees that routinely occupy the building in the recognition, evaluation, resolution and control of unsafe/unhealthful and hazardous conditions in the workplace.

3.2.1 Supervisors shall:

3.2.1.1 Perform routine safety visits to their employees assigned work areas following the processes described in Appendix E of this MPR. The work area visits are to ensure their employees are provided with a work environment free from recognized unsafe/unhealthful and hazardous conditions, and employees are complying with Center SHE-related rules and regulations in the performance of their jobs/operations. (See Chapter 7 of this MPR for more information.)

NOTE 1: The frequency of supervisor visits is dependent upon the supervisor’s level as shown in Appendix E. First line supervisors perform monthly visits to their employee’s assigned work areas. Supervisors may have employees located in multiple work locations where it is difficult to visit each work location on a monthly basis. In these cases the supervisor may visit a portion of their employee’s assigned work areas, so long as the supervisor is able to visit all of their employee’s assigned work areas within a yearly quarter (fiscal year 3 months).

NOTE 2: In cases where employees assigned to the organization are located at a remote location, such as MAF, the supervisor may elect to designate an employee at that location to perform the monthly visit and document the visit in SSWP or arrange for a supervisor from
Marshall Procedural Requirements
QD01

Marshall Safety, Health, and Environment (SHE) Program

MPR 8715.1

Date: July 7, 2017

Revision: O

Page 53 of 144

another organization at that location to perform the monthly visit and document the visit in SSWP.


3.2.1.2 Document the safety visit in SSWP.

3.2.1.3 Document findings (positive, negative, and observations) noted during the visit in the SSWP and track until corrected.

3.2.1.4 Maintain a record of their work site visit if they do not have access to SSWP.

NOTE 1: SSWP provides a method for a supervisor to view meeting, visit and finding status metrics for organizations that report directly to them.

NOTE 2: The use of SSWP may not be required for some contractor supervisors such as for the following: 1) construction contracts; 2) service and operation type contracts that do not exceed 12 months in duration; 3) grants and Cooperative or Space Act Agreements; and 4) contracts with < 5 employees. Contact the Center’s Safety Office for assistance.

3.2.1.5 If the supervisor also serves as the BM they will document their BM inspections in SHEtrak following the processes described in MWI 8715.5.

3.2.2 BMs perform inspections following the process and frequency described in MWI 8715.5. These inspections normally consists of walkthroughs of building areas looking for easily recognized unsafe/unhealthful and hazardous conditions. The walkthroughs are normally building areas not assigned to a Center organization such as building common areas, lobbies and entrances; outside areas adjacent to the building, parking lots and sidewalks. The walkthroughs may be expanded at the discretion of the BM to include more portions of the building. The inspection and findings are documented in SHEtrak.

3.2.2.1 BM may elect for ABM to participate in these inspections or have the ABM inspect areas they normally oversee and provide the results of their inspection to the BM for inclusion in the BM inspection report.

for BM’s use in performing their inspections, if desired. A checklist is not required for these inspections, but may be a useful tool for guidance.

3.2.3 The Center’s SHE Offices shall:

3.2.3.1 Perform comprehensive inspections/surveys of buildings, facilities operations, test activities, open areas, and construction/demolition sites for compliance with federal, state, NASA, MSFC, and general consensus standard codes, rules and regulations within their respective areas of responsibility in accordance with 29 CFR pt. 1960.26, NPR 8553.1, NPR 8715.1, NPR 1800.1, following the processes described in MPR 8500.2, MWI 8715.11, and MWI 8715.12.

NOTE 1: The Center’s Occupational Health Office does not inspect inactive buildings unless scheduled to be reactivated.

NOTE 2: See MWI 8715.12 for more information on the inspections of buildings owned or leased by NASA and are not located on the Center.

NOTE 3: A fire prevention inspection may be a standalone inspection or be included as part of an annual building safety inspection following the processes described in MWI 8715.12 and MWI 8715.11.

NOTE 4: Checklists for various types of work areas are available for inspector’s use in performing their inspections, if desired. A checklist is not required for these inspections, but may be a useful tool for guidance.

3.2.3.2 Perform announced and unannounced inspections/surveys of buildings, facilities, operations, test activities, open areas and construction/demolition sites.

NOTE 1: Announced inspections/surveys are normally performed annually. Unannounced inspections/surveys are performed randomly and may be performed within the same building, facility, operation, test, open area or construction/demolition site multiple times throughout the year.

NOTE 2: Announced inspections/surveys are scheduled individually by each Center’s SHE Office.

3.2.3.3 Communicate inspection/survey results to BM, organization’s SHE POC, or employees in the areas where the inspection/survey was performed or who accompanied the inspector during the inspection/survey.

NOTE: At MSFC, inspection results are communicated to employees via the SHEtrak system or may be posted in an area within the building where employees generally gather following the processes described in NPR 8715.1. The SHEtrak system is used to document and
communicate inspections and abatements as opposed to NASA Forms 1390 and 1584 described in NPR 8715.1 for safety-related issues.

3.2.3.4 Provide inspection/survey results to employees (e.g., BM, organization’s SHE POC, supervisor) assigned actions to correct the noncompliances in accordance with MWI 8715.12.

3.2.3.5 Perform more frequent inspections/surveys of buildings, facilities, operations, test activities, open areas, and construction/demolition sites identified to have an increased level of risk to cause/contribute to an accident, injury or illness, or damage to property or the environment due to the nature of work being performed in accordance with 29 CFR pt. 1960.26 and NPR 8715.1 following the processes described in MWI 8715.12.

NOTE 1: These inspections/surveys are unannounced inspections/surveys and are performed at the frequency determined individually by each Center’s SHE Office. (See MWI 8715.12 for more information.)

NOTE 2: The extent of Center’s Safety Office responsibilities and the frequency of the worksite inspections performed on construction/demolition sites where the construction/demolition has been awarded to another government agency, such as the Army Corps of Engineers is defined in the contract.

3.2.3.6 Identify noncompliances with federal, state, NASA, MSFC, and general consensus standard codes, rules, and regulations discovered during inspections/surveys, document and track the noncompliances to closure following the processes described in MWI 8715.12.

3.2.3.7 Attach supporting data to the SHEtrak finding such as photographs or other data as determined by the SHE inspector to provide a better description or location of the noncompliance following the processes described in MWI 8715.12.

NOTE: SHE inspectors are encouraged to attach supporting data, such as a photograph, to a SHEtrak finding, but this decision is at the discretion of the inspector and depends on if they feel the photograph will provide additional information that may assist the assignee in locating or correcting the noncompliance.

3.2.3.8 Provide assistance to SHEtrak assignees in resolving noncompliances as necessary.

NOTE: See MWI 8715.12 for more information when the BM, organization’s SHE POC, or building occupant has implemented actions to correct a hazardous condition prior to it being identified during an inspection/survey.

3.2.4 SHEtrak finding assignees initiate an abatement plan when it is determined a deficiency discovered during an inspection cannot be corrected within 30 calendar days following the frequency and processes described in NPR 8715.1 and MWI 8715.12.
3.3 Hazard Reporting System for Employees

3.3.1 Employees that witness or are involved in an emergency incident are encouraged to report the emergency by calling 911 and notify their immediate supervisor.

3.3.1.1 Emergency conditions include, but are not limited to the following: fire; explosions; chemical spills that are beyond an employee’s training or ability to control; discovery of discarded/buried chemical munitions; and incidents that require emergency response such as an ambulance or fire department. (See 29 CFR pt 1904, NPR 8621.1, NPR 8715.1, and MWI 8621.1 for more information.)

3.3.2 Employees that witness or are involved in a non-emergency incident or observe a condition that they believe has the potential to create any of the following: unsafe/unhealthful working condition; hazardous condition; or harm to human safety and health or the environment; and problems or situations that, if not corrected, increase the risk of resulting in an injury or illness to personnel and/or damage to property are encouraged to report the incident or condition by the reporting methods described in section 3.3.4 of this MPR in accordance with 29 CFR pt. 1960.28 following the processes described NPR 8715.1 and MWI 8715.13.

NOTE: Employees are permitted to use the Center’s SCRS to report conditions and concerns that may be considered as non SHE-related if the condition or concern cannot be corrected by using another Center process. The use of a SCRS is an acceptable method when the concern is of a significant level and Center Management should be notified. MWI 8715.13 describes the processes for evaluating and assigning SCRS for corrective actions.

3.3.3 Employees shall be free from discrimination or reprisal from management for filing a report of unsafe/unhealthy working condition or by submitting their concerns into Center’s SCRS in accordance with 29 CFR pt. 1960.46 and NPR 8715.1.

NOTE 1: Employees may elect to remain anonymous. The SCRS 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 Center’s SCRS system are tracked till closure. (See MWI 8715.13 for more information.)

NOTE 2: Employees are encouraged to use the appropriate Center process when reporting a hazardous condition or concern such as initiating a FWR if the hazardous condition or concern can be corrected by a FWR.

3.3.4 Employees are encouraged to report non-emergency unsafe/unhealthful or hazardous or working conditions and concerns by any of the following:

3.3.4.1 Contacting their immediate supervisor/management.

3.3.4.2 Contacting the organization/contractor safety representative for the area.
3.3.4.3 Contacting the Center’s Safety Office at MSFC 544-0046 or at MAF (504) 257-1340.

3.3.4.4 At MSFC, the MSFC Safety Hotline 544-HELP, “Safety Option” or 544-0046 At MAF, the MAF Safety Hotline 257-HELP, “Safety Option” or 257-OSAF (0723).

3.3.4.5 At MSFC, by submitting a SHE Report or SCRS electronically via the MSFC’s “Inside Marshall” or mail-in pamphlet (local bulletin boards).

3.3.5 NASA Headquarters is notified following the processes described in NPR 8715.1 when a safety concern is received at the Center that is related to a NASA program or activity.

3.3.6 Employees reports of unsafe/unhealthful or hazardous working conditions and concerns are investigated and resolved following the processes described in MWI 8715.13.

3.3.7 Unsafe/unhealthful work conditions identified to have contributed to an incident,
employee injury or illness, or damage to property or environment are investigated following the processes described in section 3.5 of this MPR and MWI 8621.1.

3.4 Industrial Hygiene Program

The Center’s Occupational Health Office ensures an Industrial Hygiene program is implemented at the Center following the processes described in MWI 1840.1 to provide employees with an environment in which occupational health hazardous conditions 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.

3.5 Investigation of Center Incidents

3.5.1 Center incidents shall be reported to the Center’s Safety Office within one (1) hour of occurrence or awareness by the organization where the incident occurred if they involve the following: 1) an occupational injury or illness resulting in a fatality, serious injury or potential hospitalization; 2) a potential total direct cost of mission failure or property damage equal to or greater than $500,000; or 3) may be considered as a high-visibility event for NASA.

3.5.2 Center incidents shall be reported to the Center’s Safety Office within four (4) hours of occurrence or awareness by the organization where the mishap/close call occurred if they involve the following: 1) an occupational injury or illness resulting in a non-serious injury or first aid treatment; 2) a potential total direct cost of mission failure or property damage less than $500,000; or 3) not considered as a high-visibility event for NASA.

3.5.3 All Center incidents shall:

3.5.3.1 Be reported to the Center’s Safety Office, Center’s Mishap Investigation Program Manager, Center management and organization Director/Manager or deputies of the organization where the incident occurred and documented in NMIS following the processes described in NPR 8621.1 and MWI 8621.1. The notifications are normally provided by the organization directly responsible for the facility/operation where the incident occurred.

NOTE: Failing to report an injury/illness that occurs within the work environment within a timely manner can lead to unforeseen problems if the injury/illness worsens over a period of time, but was not reported as occurring within the work environment.

3.5.3.2 Be investigated by the appropriate level Investigation Authority to the extent necessary to identify the cause/contributing factors of the incident, recommendations, findings, and corrective actions, if needed, following the processes described in NPR 8621.1 and MWI 8621.1.

NOTE: National studies have concluded that a majority of incidents are a result of an unsafe act or unsafe condition with a small percentage resulting from unknown factors. The Center’s Mishap Investigation Program Manager will apply professional judgment when evaluating each incident for the purpose of determining the appropriate NASA classification.
3.5.3.3 The Center’s Mishap Investigation Program Manager provides guidance to the Investigation Appointing Official in determining the appropriate level of Investigation Authority for the investigation following the process described in MWI 8621.1.

3.5.3.4 At MSFC, The Center’s Safety Office serves in the role of the Investigation Authority and performs a preliminary investigation following the processes described in MWI 8621.1 and QD-IS-009.

NOTE 1: Based on the facts and information gathered during the preliminary investigation performed by the Center’s Safety Office the Center’s Mishap Investigation Program Manager will determine if a formally appointed Investigation Authority may be needed to perform a more in-depth investigation of the incident.

NOTE 2: Preliminary investigations performed by the Center’s Safety Office are separate and independent from the investigations performed by any other Investigation Authority.

3.5.4 Center traffic-related incidents involving Government-owned or leased motor vehicles are investigated following the process described in MPR 6000.1.

3.5.4.1 The Center’s Safety Office may perform a separate investigation or gather facts for inclusion in NMIS if the traffic accident results in the following: a work-related injury such as an employee traveling from one work location to another work location; damage to government owned vehicles; or damage to government owned or controlled property. (See MWI 8621.1 for more information.)

3.5.5 The status of Center open incident cases are provided to Center Management periodically by the Center’s Mishap Investigation Program Manager.

3.5.5.1 The status of open incident cases may be presented to Center Management through a presentation to the Center’s SHE Committee. The status may be provided annually, or more frequently as determined by the Center Mishap Investigation Program Manager or Center’s SHE Committee.

3.5.6 Incidents are entered into NMIS and the organization identified as the “owning organization” is normally the directorate/office level of organization responsible for the operation/area where the incident occurred. Incidents involving contractor personnel are shown under the directorate/office they support.

3.5.6.1 Incidents entered into NMIS are normally limited to those meeting the definition of a NASA reportable mishap/close call unless determined otherwise by the Center Mishap Investigation Program Manager.
3.5.7 Contractors shall perform investigations as specified in their contract when their employees are involved in the incident or are directly responsible for the facility/operation where the incident occurred and provide the results of their investigation to the Center’s Safety Office, Center’s NMIS Administrator or organization’s NMIS POC for direct entry into NMIS. (See NFS 1852.223-70 and DRD for mishap and safety statistics reporting in their contract for more information.)

NOTE 1: OSHA strongly encourages employers to investigate all incidents in which their workers are injured, as well as close calls, in which a worker may have been injured if the circumstances had been slightly different. (See the OSHA webpage and enter “employer incident investigation” in the search bar for more information.)

NOTE 2: Investigations performed by Contractors directly responsible for the facility/operation are separate and independent from the investigations performed by the Center’s Safety Office or other Government-authorized Investigation Authority.

NOTE 3: Contractor investigation reports should, at a minimum, include the following: executive summary/narrative description of the incident (who, what, when and where); Description of injuries and/or property damage; and findings and recommendations that are clear, verifiable, achievable, measurable, and traceable to at least one cause to prevent recurrence of similar incidents in the future. Contractors are not required to use MSFC Form 4515 for their investigation report.

3.6 Trend Analysis of Injury, Illness, and Incidents

3.6.1 The Center’s Safety Office and Center’s Occupational Health Office ensures injury, illness, and close call data is analyzed and identify any significant trends to Center management.

3.6.1.1 Center SHE metrics may be shown to Center management as combined SHE team metrics which includes both NASA and Contractor injury, illness and incident trends or as SHE metrics separated for NASA and Contractor.

3.6.1.2 Center SHE team metrics are limited to only those contractors assigned to the Center and their man-hours worked on the Center are being provided to the Center’s Safety Office.

3.6.2 Center employee injury and illness information is made available and communicated in a timely manner to NASA Chief Health and Medical Officer, NASA Chief/SMA, Center management and employees following the frequency and processes described in NPR 8715.1 and NPR 8621.1.

3.6.2.1 The Center’s Civil Service employee injury and illness information is communicated to Center employees by posting the Center’s OSHA Form 300A in conspicuous locations. These locations are normally where other types of notices are customarily posted for employees, such as bulletin boards in building lobbies. At MSFC, the OSHA Form 300A is also posted on MSFC’s “Inside Marshall,” select “Organizational Websites,” locate “Safety and Mission
3.6.2.2 Contractors are responsible for communicating their employee injury and illness information to their employees. This information may be communicated by posting their OSHA Form 300A in conspicuous locations within their assigned areas where other types of notices are customarily posted for their employees.

3.6.2.3 Center team SHE metrics (Civil Service and Contractor) DAFWII and TCR is provided to Center employees and management through the SHE Committee monthly meeting minutes and by posting the Marshall safety metric pyramid chart, “MSFC Team Metrics Personnel Safety” on MSFC’s “Inside Marshall,” select “Organizational Websites,” locate “Safety and Mission Assurance Directorate,” select “Safety, Health and Environmental,” select “SHE Metrics.”

3.6.2.4 The Center’s SHE Committee chairperson(s) may elect to provide the Center’s DAFWII and TCR rates to Center management as Center Team SHE metrics or as separate rates for NASA and Contractor. (See section 1.8 of this MPR.)

3.6.3 Center organizations shown as less than “green” for three (3) consecutive months on the Integrated Management Systems Council metric charts are requested to present a corrective action plan detailing their approach to maintain a level of “green” to the Center Associate Director. (See SHE Committee minutes August and September 2012 for more information.)

3.6.3.1 Center organization metrics may be viewed at any time on MSFC’s “Inside Marshall,” select “Organizational Websites,” locate “Safety and Mission Assurance Directorate,” select “Safety, Health and Environmental,” select “Safety Information,” select “Safety Search.” Contact the Center’s Safety Office for assistance in locating the organization metrics.

3.6.3.2 The SHE metric information provided on “safety search” is considered as “live data” in the databases for SHEtrak, SCRS, Computerized Maintenance Management System and Integrated. These databases are automatically updated daily as items in each database are opened or closed.

3.6.4 Center Team SHE metrics are presented during the monthly SHE Committee and also at the Marshall Team Meeting as a status of the wellness of the Center organization. The Center’s SHE metrics presented may include any of the following: current Center’s DAWFII and TCR; NASA reportable classification for each incident (mishap type/close call); preliminary cause of the incident (e.g., unsafe act, unsafe condition, environment, unknown); number of employee reported SHE concerns; and number of unsafe conditions identified by employees, supervisors and Center’s SHE Offices.

3.6.4.1 This status provides the Center organization an opportunity to improve their SHE metrics prior to them being shown at the next Marshall Team Meeting. Center organizations are
not able to make adjustments to their SHE metrics after the last day of the month for SHE meetings and supervisor visits. (See SHE Committee minutes September 2012 for more information.)

3.6.5 At MSFC, the North American Industry Classification System (NAICS) 541712, “Guided Missile and Space Vehicle Engine Research and Development” is used by the Center for the Center’s OSHA Form 300A for Civil Servant employees and when comparing Center DAFWII and TCR to the Bureau of Labor Statistics.

NOTE: MAF Civil Servant work hours and OSHA reportable injuries/illnesses are reported to MSFC for inclusion in the MSFC OSHA Form 300A.

3.6.5.1 NAICS 541712 is a subset to NAICS 541 – “Professional and business services - Professional, scientific, and technical services Manufacturing” and is used by MSFC when comparing MSFC’s DAFWII and TCR to the Bureau of Labor Statistics (BLS).

3.6.6 At MAF, the NAICS 336414, “Guided missile and space vehicle manufacturing” is used by MAF when comparing MAF’s DAFWII and TCR to the BLS.

3.6.6.1 NAICS 336414 is a subset to NAICS 336 – “Manufacturing - Transportation equipment manufacturing.”

3.6.7 The NAICS is used to identify the type of work being performed at the Center for OSHA reporting and are also used to compare the Center’s safety performance rates in the areas of DAFWII and TCR to the BLS national average provided by general industry for the NAICS. (See 29 CFR pt. 1904 for more information.)

3.6.8 Center SHE trends/metrics of employee injuries and property damage are maintained independently at MSFC and MAF.

3.6.9 Center SHE metrics for MSFC organization employees located (permanent or temporary) at MAF are normally reported through the employee’s MSFC directorate/office.
CHAPTER 4
CPR 3 – HAZARD PREVENTION AND CONTROL

4.1 Professional Resources

A staff of trained and qualified SHE professionals, and licensed health care professionals are provided by the Center’s SHE Offices to ensure the effective implementation of systems for hazard prevention and control at the Center. (See 29 CFR 1960.2 and NPR 8715.3 for more information.)

NOTE 1: Support from SHE professionals may also be requested from NASA Headquarters and other NASA sites.

NOTE 2: Contractor organizations may also include SHE professionals. They may be required by contract or Center-approved Safety and Health Plan.

4.2 Hazard Elimination and Control Methods

4.2.1 Unsafe/Unhealthful and Hazardous conditions shall:

4.2.1.1 Be identified and evaluated to determine the probability of occurrence and severity, so the appropriate methods of prevention, elimination, and control may be selected and implemented.

NOTE: A risk assessment code table may be used for guidance in selecting the probability of occurrence and severity. (See MWI 8715.15 for more information with use of a risk assessment code.)

4.2.1.2 Be eliminated, reduced, or controlled by the following order: (1) engineering controls, such as changing the design or installing protective safety devices; (2) administrate controls, such as written operating procedures, training, barriers and signs where it is impractical to eliminate or reduce the unsafe/unhealthful and hazardous conditions or the initiating event through the design selection process; and (3) use of PPE.

4.2.1.3 Require the use of PPE when the hazardous conditions pose a risk of injury to personnel and cannot be eliminated by engineering design or by the incorporation of safety devices and guards in accordance with 29 CFR pt. 1910.132 following the processes described in MWI 8715.15.

4.2.1.4 Be communicated to employees in the immediate work area by using the appropriate hazardous condition warning system when they cannot be corrected on-the-spot and are temporary in nature in accordance with 29 CFR pts. 1910.144 and 145.

4.2.2 Signs/Tags used to communicate unsafe/unhealthful and hazardous conditions shall:
NOTE: Communicating an unsafe/unhealthful or hazardous condition may be accomplished by any method deemed appropriate for the unsafe/unhealthful or hazardous condition, such as placing cones or barricade pedestals with retractable barricade strap, or erecting a temporary barricade to alert other employees of wet floors.

4.2.2.1 Provide a clear and effective message communicating the unsafe/unhealthful or hazardous condition, so it is understood by employees and visitors.

4.2.2.2 Be specific in identifying the control methods needed to eliminate, control or reduce the unsafe/unhealthful or hazardous condition to a safe working level, such as identifying the specific requirements when PPE is required and/or the type of PPE to be worn. Example – Safety Glasses are required when operating this machine or performing this operation.

NOTE: See 29 CFR pt. 1910.144 and 145, and ANSI Z535.2, Z535.3, Z535.4, and Z535.5, and Chapter 15 of this MPR for more information on sign format, color combinations, signal words or symbols, and basic messages.

4.2.2.3 Be maintained in a legible condition, so that it is easily understood by all employees and visitors, and removed when the unsafe/unhealthful or hazardous conditions no longer exist.

NOTE: Signs are maintained and removed by the organization responsible for the area or operations that contain the unsafe/unhealthful or hazardous conditions.

4.2.2.4 Contain the format, color combinations, signal words or symbols, and basic messages specified in 29 CFR pt. 1910.144 and 145, and ANSI Z535.2, Z535.3, Z535.4, and Z535.5 and Chapter 15 of this MPR.

NOTE: Signs intended to communicate unsafe/unhealthful and hazardous conditions and/or control methods may be purchased from a vendor or computer-generated, so long as the signs comply with the ANSI requirements in section 4.2.2.4 of this MPR.

4.2.3 Barricades used to communicate unsafe/unhealthful and hazardous conditions shall:

4.2.3.1 Be substantial enough to alert employees of these conditions and when necessary, impede or deny access to the unsafe/unhealthful or hazardous area.

NOTE 1: Barricades are commonly erected around construction sites, testing activities, and similar type areas as a method to prevent unauthorized entry into the area.

NOTE 2: The type of unsafe/unhealthful or hazardous condition and period of time before it can be corrected will determine the type of barricade needed, such as plastic warning tape for minimal or low level of risk, and plastic mesh fencing or a more rigid type of barricade such as wood or concrete for moderate to high level of risk. (See MWI 8715.15 for more information on identifying level of risk.)
4.2.3.2 Be maintained and removed when the unsafe/unhealthful or hazardous condition no longer exists.

NOTE 1: Barricades are maintained and removed by the organization that erected the barricade. Organizations erecting barricades to limit access to specific areas are encouraged to monitor the area and notify PSO in cases where unauthorized employees are observed entering the barricaded area. (See sections 7.1.1.22 and 8.1.1.10 of this MPR for more information.)

NOTE 2: It is recommended that a sign or tag containing the contact information be attached to the barricade to identify why the barricade was erected, if the unsafe/unhealthful or hazardous condition is not readily noticeable.

4.2.4 PPE shall:

NOTE 1: Employees are encouraged to take time prior to using PPE to ensure the PPE is in a safe and reliable condition, and will provide the level of protection necessary to prevent exposure to the unsafe/unhealthful or hazardous condition.

NOTE 2: When the use of PPE is necessary the requirements for the type of PPE and when it should be worn should be clearly communicated to and understood by employees and visitors to the area.

4.2.4.1 Be selected for the job, operation, or work area in accordance with 29 CFR pt. 1910.132 through 138 (Subpart I) and following the processes described in MWI 8715.15.

4.2.4.2 Be stored in such a manner so that it is maintained in a safe, reliable, and good working condition and does not pose a unsafe/unhealthful or hazardous condition to the user when being worn.

NOTE 1: Examples include, but are not limited to, excessively scratched or broken lens on safety glasses, goggles or face shields; excessive stretching of head straps for goggles, cracked hard hat.

NOTE 2: PPE is recommended to be cleaned prior to and after each use, such as cleaning the lens of safety glasses, goggles, and face shields so that they do not obstruct your vision.

4.2.4.3 Be used and worn so it does not create a greater hazard than the hazard it is intended to control, such as impaired vision, mobility and communication.

NOTE 1: For any given situation, PPE should be selected to provide an adequate level of protection against the hazardous condition.

NOTE 2: If the PPE selected for use during the assessment is different than the PPE recommended in the supporting data or Safety Data Sheets, contact the Center’s
Occupational Health Office for assistance to ensure the selected PPE is sufficient to control the hazardous condition and note this concurrence in the safety assessment. (See NPR 8715.3 for more information.)

4.2.5 Hazardous facilities/operations/work areas shall:

4.2.5.1 Have the level of system safety assessment performed that is necessary to identify unsafe/unhealthful and hazardous conditions and methods of prevention, elimination, reduction, and control in accordance with NPR 8715.3 following the processes described in MWI 8715.15.

4.2.5.2 Have operating procedures developed, reviewed, and implemented if they are identified to be safety critical, hazardous or contain an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed following the processes described in MWI 8715.15.

NOTE: Operating procedures are developed for operations identified to have a high or moderate level of risk to cause the occurrence of an undesired event by the organization directly responsible for the operation. Operating procedures may be developed for facilities and operations identified to contain low or minimal level of risk, if needed.

4.2.5.3 Have an appropriate level of readiness review or supervisor review prior to startup/restart of the facility/operation following the processes described in MWI 8715.17.

4.2.5.4 Be kept isolated or separated from the general workforce and locations identified as office areas.

NOTE 1: Facilities/operations identified to contain a low risk for employee injury or illnesses are also recommended to be separated from locations identified as office areas.

NOTE 2: Contact the Center’s Safety Office for assistance as necessary.

4.2.5.5 Have a method to limit access to only those that have been authorized to enter or be within close proximity to the facility/operation/worksite.

NOTE: Organizations may elect to use locked doors or key card access doors, or place signs or barricades at obvious locations to alert unauthorized employees from entering an area where a hazardous operation may be ongoing. Organizations erecting barricades to limit access to specific areas are encouraged to monitor the area and notify PSO in cases where unauthorized employees are observed entering the barricaded area. (See sections 7.1.1.22 and 8.1.1.10 of this MPR for more information.)

4.2.5.6 Have a method to ensure adequate ventilation is provided in areas where toxic or harmful materials are used following the processes described in NPR 8715.3.

4.2.5.7 Have a method to ensure protection of personnel and property when explosives,
propellants or pyrotechnics are used in accordance with NPR 8715.3 following the processes described in MWI 8715.10.

4.2.6 Buddy System shall:

NOTE: A buddy system is where personnel work in pairs and one employee is delegated to watch the movements of the other employee and render emergency assistance if needed. When in doubt about when the buddy system is appropriate for use, contact the Center’s Safety Office for assistance.

4.2.6.1 Be used when performing operations identified to contain an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed, such as moderate and high risk operations. An example is working with exposed energized electrical circuits and parts. (See MWI 8715.15 for more information on identifying level of risk.)

4.2.6.2 Be encouraged 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 1: The use of the buddy system or a periodic contact arrangement is encouraged when employees are assigned work where they are out of sight or contact of other employees for an extended period of time.

NOTE 2: Assistance provided to a person with disabilities to evacuate a building in an emergency or reach a building rescue spot is sometimes referred to as a buddy system. (See MWI 8715.11 for more information on building evacuation.)

4.2.7 Emergency and Monitoring Equipment/Systems shall be located, installed, equipped, identified, maintained, tested, activated, and inspected to provide the necessary emergency or monitoring support following the processes described in federal, state, and local requirements, manufacture instructions, and consensus standards applicable to the specific emergency equipment/system. Emergency and monitoring equipment/systems include, but are not limited to the following: oxygen deficiency monitors; fire/heat detectors, alarms and suppression; emergency shower/eyewashes (plumbed and portable); AED; and other types of equipment/systems designed to detect/monitor hazardous atmospheres or conditions.

4.2.7.1 Organizations assigned the job/operation or work area shall determine if emergency or monitoring equipment/systems, (e.g., portable fire extinguisher, emergency shower/eyewash or oxygen deficiency monitors) are necessary for the jobs/operations being performed within the area.

NOTE 1: Organizations may perform a safety assessment of the job/operation or work area following the processes described in MWI 8715.15 to determine what type of emergency or monitoring equipment/system is needed for the job/operation or work area or contact the Center’s Safety Office and Center’s Occupational Health Office for assistance.
4.2.7.2 Organizations performing jobs/operations that require the installation/use of emergency and monitoring equipment/systems (e.g., portable fire extinguisher, emergency shower/eyewash or oxygen deficiency monitors) shall ensure the emergency and monitoring equipment/system is in a state of readiness prior to performing the job/operation.

NOTE 1: The state of readiness may be verified by performing an inspection/test/activation of the equipment/system or verifying the inspection/test/activation has been performed and is current.

NOTE 2: At MSFC, the inspection/test/activation may be performed by the Center’s FMO; Center organization assigned the area where the equipment/system is located; or BM. (See MWI 8715.5 and MWI 8715.11 for more information.)

NOTE 3: At MAF, these inspections may be performed by an organization designated to perform these inspections; the area supervisor; or designee of the organization assigned the area where the equipment/system is located.

NOTE 4: Organizations performing the job/operation are not responsible to determine if a building’s fire detection, notification and suppression/extinguishing systems are in a state of readiness prior to performing a job/operation.

4.2.8 Emergency Shower/Eyewashes shall:

4.2.8.1 Be located, installed, identified, maintained, tested, activated and inspected to provide the necessary emergency drenching and flushing of the eyes and body in accordance with the applicable sections of 29 CFR pts. 1910 and 1926, 29 CFR pt. 1910.1450, and NPR 8715.3 following the processes described in NASA regulations, applicable consensus standards, manufacturer instructions or ANSI/ISEA Z358.1 for emergency shower/eyewashes.

4.2.8.2 Provide the level of quick drenching and flushing of the eyes and body for which it was designed and intended in the event of an emergency.

NOTE: Personal Wash Units (eyewash bottles) are not replacements for an emergency shower/eyewash station, but are intended to provide a method for immediate flushing while the injured employee makes their way to an emergency shower/eyewash.

4.2.8.3 Have evidence of being inspected/tested/activated weekly and annually following processes described in ANSI/ISEA Z358.1.

4.2.8.4 Be removed from service if not needed to support a job/operation or discovered to not operate as designed and intended. Plumbed stations are disabled by turning the water off and placing a sign/tag that clearly identifies the station as being out of service or removed from the area. Portable stations are removed from the area. (See ANSI Z535.2, Z535.3, Z535.4, and Z535.5, and Chapter 15 of this MPR for more information for the sign/tag format, color combinations, signal words or symbols, and basic messages.)
4.2.8.5 Be provided, at a minimum, in work areas that include the following specific activities:

a. Hazardous Materials (Storage and handling of Anhydrous Ammonia) - 29 CFR pt. 1910.111(b)(10) (requires only an emergency shower);

b. Medical and First Aid (Exposure to injurious corrosive materials) - 29 CFR pt. 1910.151(c), 29 CFR 1926.50(g) and 29 CFR pt. 1910.1450 (requires emergency eyewash/shower in work area whenever the eyes or body of any person may be exposed to injurious corrosive materials);

c. Telecommunications (Handling batteries) - 29 CFR pt. 1910.268(b)(2) (requires emergency eyewash/shower when measuring storage battery specific gravity or handling electrolyte at telecommunications centers and telecommunications field installations);

d. Toxic and Hazardous Substances (Storage and handling of carcinogens [Nitro biphenyl]-Ethyleneimine or Beta-propiolactone) - 29 CFR pt. 1910.1003(d)(2) (requires emergency eyewash/shower when a direct exposure to Ethyleneimine or beta-Propiolactone only would be most likely as a result of equipment failure or improper work practice);

e. Bloodborne Pathogens (Exposure to Human Immunodeficiency Virus and Hepatitis B Virus) - 29 CFR pt. 1910.1030(e)(3) (requires an eye wash, but this requirement only applies for Human Immunodeficiency Virus and Hepatitis B Virus research and production laboratories);

f. Formaldehyde (Hygiene protection) - 29 CFR pt. 1910.1048(i)(3) (requires emergency shower if employees' skin may become splashed with solutions containing 1 percent or greater formaldehyde; requires emergency eyewash if there is any possibility that an employee's eyes may be splashed with solutions containing 0.1 percent or greater formaldehyde);

g. Methylene Chloride - 29 CFR pt. 1910.1052(i)(2) (requires emergency eyewash if it is reasonably foreseeable that an employee's eyes may contact solutions containing 0.1 percent or greater Methylene Chloride);

h. Electrical (Charging batteries) - 29 CFR pt. 1926.441(a)(6) (requires emergency eyewash within 25 feet of handling areas for batteries of the unsealed type);

i. When specified as a manufacturer’s recommendations in a Safety Data Sheet, except in those cases where Center’s Occupational Health Office has concurred that emergency shower/eyewash is not required.

4.2.9 Inspection/test/activation documentation may be maintained by either of the following: (1) a tag attached to the equipment/system that identifies the date of the inspection and initials of the inspector or the week and year the inspection was performed; (2) a spreadsheet located adjacent to the eyewash/shower station that captures the information in 1; or (3) a barcode attached to the equipment/system where the organization performing the inspection can provide evidence/database of when the inspection was performed.
4.2.10 Plumbed emergency shower/eyewashes are activated until clear water is provided. The activation will minimize microbial contamination due to sitting water and sediment build-up that may prevent an adequate nozzle spray pattern needed to provide the necessary flushing/drenching.

4.2.10.1 Portable emergency eyewashes are visually inspected.

4.2.10.2 Inspections/tests/activations are performed weekly by the Center organization assigned the area where the equipment/system is located, or BM.

4.2.10.3 At MSFC, the Center’s FMO may perform one weekly inspection/test/activation of plumbed stations a month. Contact the Center’s FMO to determine which plumbed stations within the organization’s area will receive one weekly inspection/test/activation by them.

4.2.10.4 Inspection/test/activation are performed annually by the Center’s FMO for plumbed stations or organization designated to replace the fluid in portable stations, at a minimum, to verify spray pattern and flow rate.

4.2.10.5 At MAF, the inspection for most plumbed units is performed by the SACOM FMO Department. Contact the MAF Work Control Center/Help Desk for additional information on monthly inspections.

4.2.11 Organizations performing jobs/operations that require the installation and ready access to suitable flushing facilities for the quick drenching of the eyes or body shall ensure the emergency shower/eyewash is readily accessible and is in a state of readiness prior to performing the job/operation.

   NOTE: The state of readiness may be verified by performing an inspection/test/activation or verifying the inspection/test/activation has been performed and is current, and the path to the emergency shower/eyewash is clear of obstructions.

4.3 Hazard Control Instructions/Procedures

4.3.1 Hazard control instructions/procedures are developed, implemented and maintained by the organization responsible for performing the job/operation following the processes described in NPR 8715.3 and MWI 8715.15.

   NOTE 1: These instructions/procedures may be in the form of Center-wide or Organization Work Instructions. At MSFC, these instructions may be located on the MIDL or an organization instruction/procedures written for a specific job/operation. (See section 4.3.5 of this MPR for more information on MSFC specific hazard control instructions.)

   NOTE 2: These instructions/procedures may be contractor developed if the contractor is responsible for performing the job/operation.
4.3.2 Hazard control instructions/procedures developed for operations identified as safety critical, hazardous or contain an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed shall receive concurrence from the Center’s Safety Office. (See MWI 8715.15 for more information for procedure concurrence.)

4.3.3 Hazardous conditions and control methods contained in hazard control instructions/procedures shall be communicated to employees, so that they are aware of the hazardous conditions that they may encounter and the actions necessary reduce these conditions to a safe working level.

4.3.4 Operating procedures and safety assessments (in-depth hazard analysis, JHA, JSA, SPA, workplace safety assessment or a similar method of assessment), Safety Data Sheets, and similar safety-related information (hard copy or electronic) specific for the job/operation being performed shall be made readily available to employees.

4.3.5 Center Specific Hazard Control Instructions/Procedures

NOTE 1: Center level instructions/procedures have been developed by Center organizations that administer and oversee these programs. The Center specific instructions/procedures were developed to supplement and clarify the processes and requirements contained in the NASA directives and standards for the applicable subject. In some cases the Center level instruction will identify more stringent Center-level requirements than those in the NASA directive or standard.

NOTE 2: A Center level instruction/procedure may not be developed for activities/operations where sufficient details and requirements for the activity/operation are contained in the federal, state or NASA directive for the activity/operation.

4.3.5.1 The processes for implementing traffic control and motor vehicle safety in accordance with NPR 8715.3 are described in MPR 1600.1.

4.3.5.2 The processes for implementing respiratory protection, confined spaces, indoor air quality, special emphasis metal, ergonomics, biohazardous materials and hearing conservation in accordance with NPR 1800.1 are described in MPR 8500.1 and MWI 1840.1.

4.3.5.3 The processes for handling, maintenance, use, removal and disposal of asbestos-containing materials in accordance with NPR 1800.1 are described in MPR 1840.1.

4.3.5.4 The processes for controlling radiation sources to prevent adverse effects on the health and safety of employees in accordance NPR 1800.1 and NPR 8715.3 are described in MPR 1860.1 and MPD 1860.2.

4.3.5.5 The processes for controlling exposure to lasers and nonionizing radiation sources to prevent adverse effects on the health and safety of employees in accordance with NPR 1800.1 and
NPR 8715.3 are described in MPR 1860.2.

4.3.5.6 The processes for inspection and certification of pressure vessels and systems in accordance with NPD 8710.5 and NPR 8715.3 are described in MPR 8710.1. (See NASA STD 8719.17 for additional information.)

4.3.5.7 The processes for electrical safety practices being implemented in accordance with NPR 8715.3 are described in MWI 8715.1.

4.3.5.8 The processes for protecting employees from the unexpected energization, start-up, or release of stored energy in accordance with NPR 8715.3 are described in MWI 8715.2.

4.3.5.9 The processes for the use of explosives, propellants and pyrotechnics in accordance with NPR 8715.3 are described in MWI 8715.10. (See NASA STD 8719.12 for additional information.)

4.3.5.10 The processes for fire safety measures being provided to reduce the risk of fire-related hazards in accordance with NFPA codes, OSHA requirements, and NPR 8715.3 are described in MWI 8715.11. (See NASA STD 8719.11 for additional information.)

4.3.5.11 The processes for building inspections being performed to identify unsafe/unhealthful and hazardous conditions and track the correction of these conditions in accordance with NPR 8715.1 are described in MWI 8715.12.

4.3.5.12 The processes for safety assessment of ground operations being performed to identify the unsafe/unhealthful or hazardous conditions and their control methods in accordance with NPR 8715.3 are described in MWI 8715.15. (See NASA STD 8719.7 for additional information.)

4.3.5.13 The processes for performing a systematic review for mission readiness prior to the startup of facilities/operations/test in accordance with NPD 8700.1 and NPR 8715.3 are described in MWI 8715.17.

4.3.5.14 The processes for employee training and SHE certifications in accordance with NPR 8715.3 are described in MPR 3410.1 and MWI 3410.1.

4.3.5.15 The processes for lifting equipment and devices in accordance with NPR 8715.3 are described in MPR 6430.1. (See NASA STD 8719.9 for additional information.)

4.3.5.16 The processes for fall protection systems being provided to employee performing work on elevated surfaces in accordance with NPR 8715.3 are described in Chapter 16 of this MPR.

4.3.5.17 The processes for including Center SHE-related requirements in the construction projects are described in the MSFC Technical Specifications for Repair and Construction or Center SpecsIntact for Construction of Facilities.
4.4 Occupational Health Care Program

4.4.1 The Center’s Occupational Health Office ensures a Occupational Health Care Program is implemented to prevent, provide diagnosis, treatment, and care of illnesses and injuries caused or aggravated by the work environment, and provides emergency medical services to employees at the Center.

4.4.1.1 The processes for providing employees with evaluation and treatment for non-life threatening occupational illnesses or injuries occurring at the Center in accordance with NPR 1800.1 are described in MWI 1800.1.

4.4.1.2 The processes for providing sanitary conditions at the Center in accordance with NPR 1800.1 are described in MPR 1800.3.

4.4.1.3 The processes for providing an AED for a timely response to Center employees that may be victim of a sudden cardiac arrest in accordance with NPR 1800.1 are described in MPR 1810.2.

NOTE 1: At MSFC, 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. Offsite emergency medical services are available by calling 911.

NOTE 2: At MAF, emergency medical services are provided onsite and ambulance service is obtained from a nearby hospital. The New Orleans Fire Department located on MAF may provide first response until an ambulance arrives. Offsite emergency medical services are available by calling 911 or (504) 257-2333.

NOTE 3: When calling 911 from a non-Center network phone, inform the operator where you are located (MSFC or MAF) and provide a location such as a building number or street name and wait at the scene until emergency services have arrived. At MAF, also call (504) 257-2333 when using a non-MAF network phone.

NOTE 4: AEDs are also available in some Center buildings. If the building has AEDs, the location is identified on the building’s Evacuation/Emergency Plan located in the building’s lobby. Center employees are provided AED training on a voluntary basis.

NOTE 5: 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 nearby hospital.

4.4.2 The processes for providing medical examinations to Center employees for job/operations identified to require a Center certification, medical monitoring, or surveillance from the Center’s
Medical Center in accordance with NPR 1800.1 and NPR 8715.3 are described in MWI 1800.1 and MWI 3410.1.

4.4.2.1 Contractor employees shall obtain the medical examinations as specified in their contract.

NOTE 1: Contractor employees performing jobs/operations that require a Center certification, medical monitoring or surveillance are permitted to use the Center’s Medical Center for their medical examinations. (See section 5 of this MPR, MWI 8550.1, MWI 1840.1, and MWI 3410.1 for more information.)

NOTE 2: The depth, scope, frequency, and criteria for the medical examinations for safety certifications have been established by the MSFC medical and health officials. (See NPR 1800.1, NPR 8715.3, MWI 1800.1, and MWI 3410.1 for more information.)

NOTE 3: MSFC 52.223-96 may be added to solicitations and contracts to identify the requirement to obtain the medical monitoring or surveillance from the Center’s Medical Center when needed. (See section 1.5 of this MPR for more information.)

4.4.3 When a contractor employee does not obtain medical monitoring or surveillance from the Center’s Medical Center, a medical certificate or documentation from a medical services provider shall be provided that clearly states the contractor employee is medically fit to perform the type job/operation requiring the Center certification.

NOTE 1: Employees working on the Center may not be required to use the Center’s Medical Center for medical examination if they are on the Center by any of the following: 1) construction contracts; 2) service and operation type contracts that do not exceed 12 months in duration; 3) grants and Cooperative or Space Act Agreements; and 4) contracts with < 5 employees.

NOTE 2: Contact the “Center’s Certifying Officer for safety certifications” or “Center’s Occupational Health Office for health certifications” for more information. (See MWI 3410.1 for more information.)

4.4.4 The Center does not provide first aid kits in the work areas and encourages all employees to report to the Center’s Medical Center for evaluation of non-life threatening occupational illnesses or injuries received while at work following the processes described in MWI 1800.1.

4.5 Preventive Maintenance of Equipment

4.5.1 Equipment/systems shall be operated in accordance with their intended design and applicable requirements and a manner that does not affect the safety integrity of the equipment/system.

4.5.2 Modifications or additions to commercially available off the self-equipment/systems shall
not be made that may compromise or affect the safety integrity of the equipment/system without contacting the manufacturer to gain an understanding of the effects and risks that may be encountered if the modification or additions are made.

4.5.2.1 The acceptance of risk for a modification to equipment/system shall depend on the overall level of risk identified for the equipment/system following the processes described in MWI 8715.15.

4.5.3 A maintenance and repair program for buildings and their infrastructure equipment/systems that includes the monitoring, replacing and repairing of building and infrastructure equipment to prevent it from failing or creating a hazardous condition shall be implemented and maintained by the Center’s FMO. (See NPR 8831.2 for more information.)

4.5.3.1 The building’s emergency and fire-related equipment and systems to prevent them from failing in the event of an emergency or fire shall be included in the Center’s maintenance and repair program.

4.5.4 The maintenance and repair of equipment not owned by the Center’s FMO to prevent it from failing or creating a hazardous condition is the responsibility of the equipment owner.

4.5.5 Critical maintenance equipment/systems shall be identified by the equipment/system owners and tracked to ensure maintenance schedules are maintained.

4.6 Tracking of Hazard Correction

Unsafe/Unhealthful and hazardous conditions reported by employees or discovered by a Center’s SHE Office shall be recorded, corrected, verified as corrected, and tracked to closure in accordance with NPR 8715.1 following the appropriate process for the type hazardous condition described in MWI 8715.12, MWI 8715.13, MWI 8715.15, MWI 8715.17, and this MPR.

NOTE: At MAF, the MSFC’s “Inside Marshall” may not be available to all MAF employees which means the SHE-related databases may not be available for use. In these cases, the contractor may have their own processes for documenting and tracking the SHE-related information required by the documents listed in section 4.6 of this MPR. (See section 2.6 of this MPR for more information.)

4.7 Disciplinary System

4.7.1 All Center employees shall be subject to disciplinary actions if they are discovered violating Center SHE policies, procedures, and rules.

4.7.2 The level of disciplinary actions shall be determined by the supervisor based on violations of the safety and health policies, procedures, and rules.
4.7.3 In situations where contractor personnel are discovered not following Center SHE policies, procedures, and rules the appropriate Contracting Officer shall be notified.

4.7.3.1 The contractor employee shall be subject to the disciplinary system described in their respective company policies or the NASA disciplinary program as determined by the Contracting Officer and the respective company.

NOTE 1: For civil service employees, the disciplinary system requirements are described in NASA DG-03. A current copy of the requirements are maintained for employee awareness MSFC’s “Inside Marshall,” select “Organizational Websites,” locate “Safety and Mission Assurance Directorate,” select “Safety, Health and Environmental,” select “SHE Policies & Procedures.”

NOTE 2: Disciplinary penalties for contractor employees will be described in their respective company policies.

NOTE 3: See NOTE in section 5.6 of this MPR.

4.8 Emergency Preparedness and Response

4.8.1 The Center’s Emergency Management Office ensures an emergency preparedness and response program is implemented at the Center.

NOTE 1: The MSFC emergency program is described in MCP 1040.2 and AS50-HBK-001 that is provided to employees by the MSFC Emergency Management Office.

NOTE 2: The MAF emergency program is described in MCP 1040.4.

4.8.2 Fire evacuation drills of Center buildings shall be performed, at least annually, for buildings with 10 or more occupants in accordance with NASA STD 8719.11 following the processes described in MWI 8715.11.

4.8.3 Emergency preparedness tests and drills, such as tests/drills for severe weather, shall be performed on a frequency determined by the Center’s Emergency Preparedness Officer.

NOTE: Building Emergency/Evacuation Plans are normally posted in the common areas of buildings such as at the entrances, building lobbies, and in the elevator lobby on each floor of multistory buildings and are also provided on NASA’s “Explornet page,” select “Center,” select “Marshall,” select “A-Z Index,” select “Facilities Geographic Information System.”

4.8.4 Emergency plans shall be developed by Center organizations that perform operations identified as safety critical, hazardous or contain an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed when requested by the Center’s Safety Office.
NOTE: The plans should include any special evacuation procedures necessary to evacuate the area in the event of an emergency.

4.8.4.1 The emergency plans shall be maintained up-to-date, discussed with the affected personnel, and exercised periodically. This exercise may be included with fire and severe weather drills.

4.8.5 Emergency drills performed by local authorities may be permitted to serve as the formal emergency drill in cases where Center Civil Service employees are located on property that is not owned or leased by NASA or MSFC through a contract, lease, Space Act or Cooperative Agreement or grant, so long as the drill is performed following a processes similar to the processes required by the Center. Contact the Center’s Safety Office or Center’s Emergency Preparedness Officer.

4.8.5.1 A copy of the local SHE authority’s emergency drill report will be needed in this situation.

4.8.6 Ready access to building protective areas shall be provided to employees at all times, especially when local weather forecasts predict the potential for severe weather/tornados.

4.8.7 Employees are encouraged to maintain their personal contact data current in the Center’s emergency notification system.
CHAPTER 5
CPR 4 - SHE TRAINING

5.1  SHE Training

NOTE: A successful Center SHE Program is dependent on employees and supervisors having the basic knowledge and skills necessary to ensure the following: (1) Identify hazardous conditions they may encounter while performing their jobs/operations; (2) Recognize the signs and symptoms of work-related illnesses and injuries; (3) Implement appropriate hazard reduction controls; and (4) What to do in the event of an emergency.

5.1.1  Select SHE training courses have been identified as being mandatory and required for employees, supervisors, and managers. These training courses are listed on the Office of Human Capital Explornet page.


NOTE 2: At MAF, the MSFC’s “Inside Marshall” may not be available to identify mandatory and required training. Contact the MAF training office.

5.1.2  The Center’s SHE Offices shall:

5.1.2.1  Ensure SHE-related inspections/surveys are performed by employees that have received training in the recognition, evaluation, resolution and control of unsafe/unhealthful and hazardous conditions. (See NPR 8715.1 for more information.)

5.1.2.2  Ensure SHE-related activities (e.g., investigations, process/procedure reviews) are performed by employees that have received the necessary training and are knowledgeable in the subject matter.

5.1.2.3  Ensure SHE-related training requirements for specific jobs/operations are identified.

NOTE: At MAF, SHE training will be equivalent to the requirements established in this MPR, or as determined between NASA and the tenant in their respective Space Act Agreement or contract. Contact the MAF Safety Manager/QD12 for more information.

5.1.2.4  Ensure SHE-related certification requirements are identified in MWI 3410.1.

5.1.2.5  Coordinate SHE-related training with the Center’s Training Office.

5.1.2.6  Ensure employees providing SHE-related training are knowledgeable and trained in the subject matter they are expected to provide to Center employees.
5.1.2.7 Ensure SHE-related training provided to Center employees is maintained up-to-date, is thorough comprehensive and provides the necessary SHE-related information to the employee for the subject matter.

5.1.3 Supervisors shall:

5.1.3.1 Ensure jobs/operations performed by their employees are evaluated to determine the specific training needed for the employee to perform the job/operation in a safe and healthful manner and the employees successfully complete the specific training in accordance with NPD 3410.2, MPR 3410.1 and Chapter 5 of this MPR.

5.1.3.2 Complete the Center’s SHE Training Assessment to ensure SHE-related training specific to the job/operation performed by their employees are identified and documented for each employee following the processes described in MPR 3410.1.

   NOTE 1: The Center’s SHE Training Assessment is located within the SSWP. If access to the Center’s SHE Training Assessment is not available, an equivalent method of assessing the employee training needs should be identified and documented. (See OSHA 2254 for more information). If a supervisor does not have access to the SSWP, contact the appropriate Center’s SHE Office for assistance.

   NOTE 2: The use of SSWP may not be required for some contractor supervisors such as for the following: 1) construction contracts; 2) service and operation type contracts that do not exceed 12 months in duration; 3) grants and Cooperative or Space Act Agreements; 4) and contracts with < 5 employees. Contact the Center’s Safety Office for assistance.

5.1.3.3 Ensure when the Center’s SHE Training Assessment is completed by someone other than the employee’s supervisor, the person completing the assessment is knowledgeable of the employee’s job/operation assignments, and the specific training needed to perform the job/operation in a safe and healthful manner.

   NOTE: In cases where a contractor’s supervisor does not have access to SSWP and the SHE Training Assessment, the civil supervisor having oversight of the contractor’s function may complete the Center’s SHE Training Assessment for them.

5.1.3.4 Ensure employees successfully complete the SHE-related training identified in the SHE Training Assessment and their Individual Development Plan.

5.1.3.5 Ensure only employees that have successfully completed training and have been designated as qualified perform jobs/operations identified as hazardous, or contain an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of the work being performed.

   NOTE: Summer intern students are not permitted to perform job/operations identified as hazardous, or contain an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of the work being performed.
5.1.3.6 Ensure employees that perform jobs/operations requiring a Center certification are identified and the employee obtains the Center certification following the process described in MWI 3410.1.

5.1.3.7 Ensure employees designated to serve in a SHE collateral duty role successfully complete training identified for that role. (See MWI 8715.5 and section 5.3 of this MPR for more information.)

5.1.3.8 Ensure employees successfully complete mandatory and required SHE-related training maintained by the Center’s Office of Human Capital. A list of mandatory and required training may be viewed on the MSFC’s “Inside Marshall” by searching “mandatory and required training.”

5.1.3.9 Ensure employees requiring a Center certification obtain the level of medical examination identified for the job/operation they are expected to perform in accordance with NPR 8715.3 following the process described in MWI 1800.1 and MWI 3410.1, if needed.

**NOTE 1:** The Center’s SHE Training Assessment provides assistance in determining if a medical examination is needed for the type job/operation being performed by the employee and the medical examination requirements. (See MWI 1800.1 for more information.)

**NOTE 2:** Medical examinations for Center certifications are available from the Center’s Medical Center. (See MWI 1800.1 and section 4.4.2 of this MPR for more information.)

**NOTE 3:** Employees on Center through a service and operation type contract that does not exceed 12 months in duration, grants and Cooperative or Space Act Agreements, are permitted to use the Center’s Medical Center for a medical examination when performing jobs/operations that require a Center certification or medical monitoring required by OSHA. Contact the Center’s Safety Office or Center’s Occupational Health Office for more information.

**NOTE 4:** The SHE Training Catalog provides information on all SHE-related training offered and/or required of Center personnel. The catalog is located on MSFC’s “Inside Marshall,” select “Organizational Websites,” select “Safety and Mission Assurance Directorate,” select “Safety, Health and Environmental,” select “Safety Training.” 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.

**NOTE 5:** Center SHE Training material is developed as a method to communicate NASA and MSFC specific requirements to employees while working on the Center and is considered as “awareness training.” The Center SHE training material intended to fulfill training requirements specified by federal, state, NASA and MSFC requirements for work performed at the Center and is not intended to fulfill specific federal, state and local training requirements for use at other locations.
5.2 Minimum Training for All Center Employees

NOTE: A majority of the topics below are addressed in the SHE 101 and SHE 102 training courses.

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

5.2.1.1 General awareness and the fundamental principles of the Center’s SHE Program.

5.2.1.2 Roles and responsibilities in the Center’s SHE Program.

5.2.1.3 Center SHE rules applicable to their worksite.

5.2.1.4 How to recognize, avoid, prevent, and report hazardous conditions in their worksite.

5.2.1.5 Center and worksite-specific emergency procedures including where to obtain emergency medical treatment.

5.2.1.6 How to recognize the signs and symptoms of workplace-related illnesses and how to obtain medical services (e.g., Building 4249, MSFC Medical Center).

5.2.1.7 Specific job/operation-related training that identifies the hazardous conditions, risks, and processes for performing a specific job/operation in a safe and healthful manner.

NOTE: This training may be accomplished by on-the-job training and being familiar with the hazardous conditions and control methods identified in the safety assessment and procedures written specifically for the job/operation.

5.2.1.8 When PPE is required for the job/operation, why PPE is required, the PPE limitations, how to properly use the PPE, how to properly maintain the PPE, and the method to clearly communicate to employees when the PPE is to be worn. (See 29 CFR pt. 1910.132 for more information.)

5.2.1.9 Employees’ rights under OSHA 29 CFR 1960.

5.2.1.10 Any specific SHE-related training identified by their supervisor or designee when completing the Center’s SHE Training Assessment. (See MPR 3410.1 for more information.)

NOTE: The training listed in section 5.2 may be provided to employees by a combination of training providers (i.e., supervisors, Center’s SHE Offices, Center’s Training Office).

5.2.1.11 Mandatory and required SHE-related training.
5.3 Employees Designated for SHE Collateral Duty

5.3.1 Employees designated for SHE Collateral Duty roles (BM and ABM, and organization’s SHE POC) shall:

5.3.1.1 Receive training in the recognition, evaluation, resolution and control of unsafe/unhealthful and hazardous conditions in the workplace in accordance with 29 CFR pt 1960.58. This training is accomplished within 6 months of being assigned to serve in the collateral duty role by successful completion of “SHE 103 – SHE Collateral Duty Training” and refresher training every 3 years after the date of the initial training. (See NPR 8715.1, Chapter 6 and sections 1.9 and 2.3.3 of this MPR, and MWI 8715.5 for more information.)


NOTE 2: Employees designated to serve as AM are encouraged to attend SHE 103. (See MWI 8715.5 for more information.)

5.3.1.2 Attend quarterly BM, ABM and organization’s SHE POC meetings scheduled by the Center’s Safety Office, when possible.

NOTE: At MAF, area supervisors may be designated to serve in the role of a BM or SHE collateral duty roles in their assigned work areas.

5.4 Visitors

5.4.1 Sponsors of visitor shall ensure:

5.4.1.1 Visitors whose stay at the Center is expected to be less than 30 calendar days receive Center-specific training for the job/operation they are expected to perform during their visit. Contact the appropriate Center’s SHE Office for assistance in obtaining this training.

NOTE: Visitors whose stay at the Center is expected to be less than 30 calendar days are not required to obtain SHE awareness training. The MSFC SHE/Redstone Arsenal (blue/green) backdrop badge issued at the Redstone Arsenal Visitors Center provides emergency contact information and serves the Center’s SHE Program awareness training.

5.4.1.2 Visitors whose stay at the Center is expected to be over 30 calendar days but less than 60 calendar days receive, at a minimum, SHE 101V, “SHE Program Awareness Training” within the first 10 calendar days of their visit following the processes described in MPR 3410.1.

NOTE: This training may be obtained prior to arrival at the Center. Contact the Center’s Safety Office for assistance in obtaining this training.
5.4.1.3 Visitors whose stay at the Center is expected to be over 60 calendar days receive, at a minimum, SHE 101, “SHE Program Awareness Training” within the first 10 calendar days of their visit.

NOTE: This training can be obtained from System for Administrative Training and Education Resources for NASA. Contact the Center’s Safety Office if a visitor is expected to perform work during their visit that may require specific Center training.

5.5 Construction Employees

Employees whose stay at the Center is in support of construction activities shall receive, at a minimum, SHE 101C, “SHE Program Awareness Training for Construction” within the first 10 calendar days of them starting work on the construction project. This training may be obtained prior to arrival at the Center. Contact the Center’s Safety Office.

5.6 Center Certification

5.6.1 Certain jobs/operations performed by Center personnel have been identified by the Center’s SHE Offices to require a Center certification in accordance with NPR 8715.3.

NOTE: A Center certification is a method of ensuring an employee has successfully completed specific training and designated by their supervisor as being qualified to safely perform a job/operation.

5.6.2 The nature of the work, the hazardous conditions and levels of risk associated with a job/operation are considered when determining if a Center certification is needed.

5.6.3 Center employees shall obtain a Center certification prior to performing jobs/operations that require a Center certification following the processes described in MWI 3410.1.

NOTE: NASA reserves the right to rescind employee certifications and the right to use Government-issued equipment based on violation of safety policies and procedures or if disciplinary action has been taken against the employee. The Center may refuse re-certification on use of equipment to Civil Servants and contractor employees, depending on the severity and number of de-certifications accumulated by the affected employee.

5.7 Unable to Provide Evidence of Training

5.7.1 Situations may arise where an employee is unable to provide evidence where they successfully completed OSHA or Center required training for a specific job/operation. Normally this will be for training received offsite or not obtained through the System for Administrative Training and Education Resources for NASA. In these situations the Center’s SHE Offices requiring the training may permit the use of a letter as a substitute for the certification of training.

5.7.1.1 When a letter is used as a substitute for training it shall contain the following: 1) Company letterhead; 2) Rationale why the employee is considered as trained and qualified to
perform the specific job/operation; and 3) Signature of the employee’s supervisor.

5.7.1.2 The supervisor signature shall be a department/office manager or above, or for contractors the program manager or superintendent.
CHAPTER 6
CPR 5 – EMS

6.1 EMS

6.1.1 MSFC’s environmental management policy, requirements and program are described in MPD 8500.1, MPR 8500.1, and MPR 8500.2.

6.1.1.1 Green Purchasing Program requirements are described in MWI 8540.2.

6.1.1.2 Waste Management requirements are described in MWI 8550.1.

6.1.1.3 Stormwater and Wastewater Management requirements are described in MWI 8550.2.

6.1.1.4 Air Emissions Compliance requirements are described in MWI 8550.4.

6.1.1.5 Hazardous Material Management requirements are described in MWI 8550.5.

6.1.2 MSFC’s EMS shall be compliant and following the processes described in NPR 8553.1 and all federal, state and local environmental laws and regulations.

6.2 MAF EMS

6.2.1 MAF’s environmental management policy, requirements are described in MPD 8500.1, AS60-OI-002, and AS60-OI-003.

6.2.2 The MAF EMS's shall be compliant and follow the processes described in NPR 8553.1 and all federal, state, and local environmental laws and regulations.

6.3 Transporting Hazardous Materials on Center

The transportation of hazardous materials on center follows the processes described in NPR 8715.3 and the Department of Transportation regulations.
CHAPTER 7
GENERAL SHE RULES FOR SUPERVISORS

7.1 General SHE rules applicable to all Center supervisors

7.1.1 Supervisors shall:

7.1.1.1 Halt or stop any job/operation if they notice an unsafe act or condition exists that has an increased level of risk to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment and take the actions necessary to correct the unsafe/unhealthful working conditions.

7.1.1.2 Ensure employees are aware of their authority to “stop or halt” an activity/job/operation that they feel is unsafe/unhealthful and has an increased level of risk to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment.

7.1.1.3 Promote safety, health, and environmental stewardship by setting a positive example for employees by following the established SHE rules, wearing PPE when required, reporting hazardous conditions, injuries and illnesses and communicating the Center’s SHE goals, and basically doing anything that employees are expected to do.

7.1.1.4 Communicate organizational housekeeping expectations to employees, be observant of employee housekeeping practices as part of their daily routine, and correct situations where employees fail to comply with the minimum organizational housekeeping expectations. (See Chapter 10 of this MPR for the minimum housekeeping expectations.)

7.1.1.5 Perform monthly SHE meetings and awareness training with employees to communicate organizational SHE expectations and SHE-related topic that are relevant and personable to their employees.

NOTE: SHE-related information and topics are located on MSFC’s “Inside Marshall,” select “Organizational Websites,” locate “Safety and Mission Assurance Directorate,” select “Safety, Health and Environmental,” select “SHE Focus Topic” or may be a topic developed by the organization in cases where the monthly SHE Focus Topic is not relevant to the specific working conditions of the organization. (See section 2.10 of this MPR for more information.)

7.1.1.6 Perform monthly SHE visits of assigned areas of responsibility to ensure employees are provided with a work environment free from recognized hazardous conditions and employees are following Center SHE-related rules and regulations contained in this MPR in the performance of their activities.

7.1.1.7 Evaluate employees’ SHE performance with the employee through implementation of the performance appraisal system. The review is between the employee and their immediate supervisor and is recommended to be performed at least semi-annually.
7.1.1.8 Provide support to the Center’s SHE Committees and other Center organizations in implementation of the Center’s SHE Program as needed.

7.1.1.9 Encourage employees to be actively engaged in the Center’s SHE Program. (See section 3 of this MPR for examples of the different methods of how employees can be involved and engaged in the Center’s SHE Program.)

7.1.1.10 Ensure the necessary level of safety assessment (e.g., in-depth hazard analysis, JHA, JSA, SPA, operating procedure, manufacturer’s instruction, hazardous operation checklist) is performed for all jobs/operations within their area for responsibility to identify the hazardous conditions and the method to eliminate, reduce or control the hazardous conditions following the processes described in MWI 8715.15.


7.1.1.11 Ensure safety assessments and operating procedures are made readily available (hard copy or electronic) to employees performing job/operations where hazardous conditions and their associated control methods have been identified.

7.1.1.12 Ensure employees are informed of the specific hazardous conditions associated with their job/operation and workplace, the actions to take in the event of an emergency situation, 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 in accordance with 29 CFR pt. 1960.59 and 29 CFR pt. 1903.2(a)(1).

7.1.1.13 Ensure MSFC Form 596, “Emergency Telephone Numbers,” or an equivalent form is posted on telephones in their area. This includes voice conferencing phones (polycoms) located in conference rooms.

7.1.1.14 Ensure employees are aware of the process to report emergency and non-emergency incidents and these are reported to the Center’s Safety Office following the processes described in section 3.3 of this MPR, MWI 8621.1, and MWI 8715.13.

7.1.1.15 Ensure each job/operation is evaluated to identify the training necessary for the employees to be considered as trained and qualified to perform the job/operation in a safe and healthful manner and the employee receive this specific training prior to performing the job/operation following the processes described in MPR 3410.1.

7.1.1.16 Ensure employees that perform jobs/operations requiring a Center certification are identified and they obtain the level of medical examination identified by the Center’s SHE Training Assessment for the job/operation they are expected to perform following the processes described in MWI 1800.1 and MWI 3410.1.
7.1.1.17 Ensure employees are trained, qualified and have received the certification before assigning employees to perform jobs/operations that require Center certification following the processes described in MPR 3410.1, MWI 3410.1, and Chapter 5 of this MPR when required.

7.1.1.18 Ensure all personnel (including visitors, contractors, and researchers) that are within their area of responsibility comply with the organization’s and Center’s SHE Program rules and regulations contained in this MPR as applicable.

7.1.1.19 Coordinate with the building’s Access Approver, PSO, and BMs to identify areas/rooms within their area of responsibility that need to be identified as “access controlled,” “restricted,” “authorized personnel only,” and “NASA Critical Infrastructure” following the processes described in MPR 1600.4.

7.1.1.20 Ensure access to areas/rooms identified as “access controlled,” “restricted,” “authorized personnel only,” and “NASA Critical Infrastructure” within their area of responsibility is limited only to those employees that have been granted access to those areas/rooms.

7.1.1.21 Identify an organizational POC that can be contacted to grant access to each area identified as “access controlled,” “restricted,” “authorized personnel only,” and “NASA Critical Infrastructure” within their area of responsibility following the processes described in MPR 1600.4. It is recommended the POC name and phone number be posted so that employees are aware of who to contact to be granted access to the controlled area/room.

7.1.1.22 Ensure employees are informed to not enter any area where signage is posted or cross any barricades that have been erected to alert personnel of hazardous conditions or to restrict access to the area, unless access to the area has been granted by the area POC.

7.1.1.23 Coordinate with technical disciplines to ensure adequate review of program/project SHE-related activities is performed during the planning, construction, testing, and operation phases of new and modified facilities, equipment, and processes following the processes described in MWI 8715.17.

7.1.1.24 Ensure employees are aware and use the buddy system when performing jobs/operations that have been identified to contain an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed following the processes described in section 4.2.6 of this MPR and MWI 8715.1. The buddy’s role is to render emergency assistance.

7.1.1.25 Ensure access to the SSWP has been made available and is used to document safety meetings and visits, when required. Contact the Center’s Safety Office for more information.

NOTE: The use of SSWP may not be required for some contractor supervisors such as for the following: 1) construction contracts; 2) service and operation type contracts that do not exceed 12 months in duration; 3) grants and Cooperative or Space Act Agreements; and 4) contracts with < 5 employees. Contact the Center’s Safety Office for more information.
7.1.1.26 Ensure the Center’s SHE Training Assessment is completed for each employee for which they are responsible, reviewed, and updated when the employee’s job assignments change that may require additional SHE training following the processes described in MPR 3410.1.

NOTE: If the Center’s SHE Training Assessment is completed by someone other than the supervisor, the employee completing the Center’s SHE Training Assessment should be knowledgeable of the hazardous conditions and risks directly associated with the jobs/tasks performed by the employee and technically competent to identify the specific training required.

7.1.1.27 Ensure employees follow the safety precautions identified by “warning” and “caution” notes in operating procedures and signs posted in the work area following the processes described in MWI 8715.15.

7.1.1.28 Ensure employees required to use PPE have been trained in the proper use and maintenance of PPE and the PPE is being maintained in a sanitary and reliable condition so that the PPE will provide the level of protection it is designed to provide to the employee in accordance with 29 CFR pt. 1910.132.

7.1.1.29 Ensure all employees within their organization are provided with an equal and high-quality level of SHE protection when required.

7.1.1.30 Ensure Center SHE-related requirements are considered and integrated into the planning for new equipment, processes, and facilities and when there are significant changes to existing equipment, processes, and facilities.

7.1.1.31 Ensure employees are informed of the designated meeting area, shown on the Building’s Emergency/Evacuation Plan, so they know where to gather in the event of an emergency, or if the alarm is sounded to evacuate the building.

7.1.1.32 Ensure employees comply with federal, state, NASA, and SHE rules and regulations and are aware they are to comply with SHE requirements as directed by local authorities when visiting or located in work areas off Center.

7.1.1.33 Ensure PPE requirements are clearly communicated and understood by employees and visitors to the area.

7.1.1.34 Encourage employees to take time to ensure PPE is in a safe and reliable condition prior to its use and emergency equipment/systems are in a state of readiness prior to performing a job/operation that identifies a specific type of emergency equipment/system be provided, such an emergency shower/eyewash for the quick drenching and flushing of eyes or body or oxygen deficiency monitors within an area.

DIRECTIVE IS UNCONTROLLED WHEN PRINTED
Verify current version before use at https://dml.msfc.nasa.gov/directives
7.1.1.35 Ensure employees are aware of their responsibility to follow directions provided by announcements made over the Center’s Emergency Warning System such as moving to the building’s designated protective area for severe weather/tornado or evacuate the building in the event of a building fire alarm and gather at the organization’s designated meeting area.

7.1.1.36 Ensure assistance and support is provided to the Center’s Safety Office in performing incident investigations following the processes described in NPR 8621.1 and MWI 8621.1.

a. Supervisor participation in an incident investigation is recommended and encouraged by the Center’s Safety Office.

7.1.1.37 Ensure employees successfully complete training identified by the SHE training assessment for the jobs/operations they perform and SHE collateral duty roles they are assigned.
CHAPTER 8
GENERAL SHE RULES FOR EMPLOYEES

8.1 General SHE rules applicable to all Center employees

8.1.1 Employees shall:

8.1.1.1 Halt or stop any job/operation if they notice an unsafe act or condition exists that has an increased level of risk to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment and take actions to correct the unsafe/unhealthy working conditions. Submit an FWR, Trouble Call, or safety concerns or secure and identify the area with the appropriate hazardous condition warning system to prevent injury or damage. Report the condition to the supervisor, the BM, Center’s Safety Office or the safety designee listed on the “Occupational Safety and Health Protection for NASA Employees” poster. (See 29 CFR pt. 1910.144 and 145, and ANSI Z535.2, Z535.3, Z535.4, and Z535.5, and Chapter 15 of this MPR for more information on sign format, color combinations, signal words or symbols, and basic messages.)

8.1.1.2 Comply with federal, state, NASA, and SHE rules and regulations and comply with SHE requirements as directed by local authorities when visiting or located in work areas off Center.

8.1.1.3 Avoid performing unsafe acts or activities that may pose a risk of injury to themselves or other employees.

8.1.1.4 Report all SHE-related concerns and incidents to their supervisor. Contact the appropriate Center’s SHE Office for additional assistance following the processes described in section 3.3 of this MPR, MWI 8621.1, and MWI 8715.13.

8.1.1.5 Report all fires immediately by calling 911 and the Center’s Safety Office following the processes described in section 3.3 of this MPR, AS50-HBK-001, and MWI 8715.11. (At MAF see MCP 1040.4 at MAF for more information.)

8.1.1.6 Attend and be actively engaged in Center SHE Committees, organization SHE meetings, SHE-related training and awareness activities, and the Center’s SHE Program. (See section 3 of this MPR for examples of the different methods of how employees can be involved and engaged in the Center’s SHE Program.)

8.1.1.7 Obtain and post a “Permit for Portable Appliance,” MSFC Form 3798, for privately-owned, electrically-powered appliances with heating elements and comply with the rules listed on the MSFC Form 3798 following the processes described in MWI 8715.11.

8.1.1.8 Be familiar with and follow the safety and health information and recommendations provided on Safety Data Sheets for the hazardous chemicals/materials stored or used in their work area.
8.1.1.9 Be trained to wear PPE and wear the appropriate PPE specified by an in-depth hazard analysis, JHA, JSA, SPA, operating procedure for the job/operation, or PPE signs posted in the work area. Maintain PPE in a sanitary and reliable condition, so that the PPE will provide the level of protection it was designed to provide to the employee. Take the time prior to using the PPE to ensure it is in a safe and reliable condition, and will provide the protection necessary for the hazardous condition in accordance with 29 CFR pt. 1910.132). (See MWI 8715.15 for more information on assessing the job/operation to identify the PPE needed.)

8.1.1.10 Not cross barricades that have been erected to alert personnel of hazardous conditions or to restrict access to the area, or enter areas/rooms identified with signage as “access controlled,” “restricted,” “authorized personnel only,” or “NASA Critical Infrastructure” 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.

8.1.1.11 Evaluate jobs/operations prior to performing them to identify any potential hazardous conditions. Eliminate the hazardous conditions or ensure actions (engineering or administrative) are taken and in place to control the hazardous condition.

8.1.1.12 Not perform jobs/operations until the hazardous conditions have been reduced to a safe working level or eliminated following the processes described in MWI 8715.15.

8.1.1.13 Ensure safety assessments and operating procedures are readily available (hard copy or electronic) prior to performing job/operations identified as safety critical, hazardous or contain an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed.

8.1.1.14 Use the buddy system when performing operations identified to contain an increased level of risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of work being performed following the processes described in MWI 8715.15. The buddy is intended to provide emergency assistance if needed.

8.1.1.15 Complete all SHE-related training identified by their supervisor for the job/operation they perform and SHE collateral duty role they are assigned in the Center’s SHE Training Assessment or equivalent training assessment method following the processes described in MPR 3410.1 and Chapter 5 of this MPR.

8.1.1.16 Obtain Center SHE certifications prior to performing the job/operation requiring the certification following the processes described in MPR 3410.1.

8.1.1.17 Perform jobs/operations 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 following the processes described in MWI 8715.15.

8.1.1.18 Become familiar with the specific hazardous conditions associated with their workplace and duties, the actions to take in the event of an emergency situation, location of nearest medical treatment facility, procedure for obtaining treatment, method of reporting occupational injuries.

8.1.1.19 Obtain medical examinations and/or monitoring when identified for the job/operation being performed following the processes described in MWI 1800.1.

8.1.1.20 Take time to ensure emergency equipment/systems have been inspected and are in a state of readiness prior to performing a job/operation that identifies a specific type of emergency equipment/system be provided, such an emergency shower/eyewash for the quick drenching and flushing of eyes or body or for monitoring low oxygen levels within an area.

8.1.1.21 Provide assistance to employees designated to serve in a SHE Collateral Duty position as needed, (i.e., maintaining the building(s) and surrounding grounds in a safe and healthy condition; taking actions to correct hazardous conditions in the work area).

8.1.1.22 Maintain work areas in accordance with organizational housekeeping expectations that have been communicated by supervisors. (See Chapter 10 of this MPR for more information for minimum housekeeping expectations.)

8.1.1.23 Participate in incident investigations performed by the Center’s Safety Office or a Government-authorized investigation, when requested.
CHAPTER 9  
CENTER-WIDE SAFETY RULES

9.1 Center-wide safety rules applicable to all Center employees:

9.1.1 Remove loose objects or other tripping hazards from floors when discovered. Floors are maintained in a dry condition where practical and liquid spills are cleaned up when discovered or highlighted by safety cones or signs.

9.1.2 Keep fire exits and means of egress from buildings free of boxes, file cabinets, excess furniture and other furnishings that may obstruct the egress path.

9.1.3 Close desk or file drawers when not in use and only one drawer of a file cabinet is opened at a time.

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

9.1.5 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.

9.1.6 Use proper manual lifting techniques and limit lifts to their personal physical capabilities, (typically no more than 40 pounds per employee). Contact the Center’s Occupational Health Office or Center’s Safety Office for information on proper lifting techniques. Seek assistance from another employee when the item weighs more than 40 pounds or is too bulky to safely handle.

NOTE: Any task requiring an employee to manually lift an object weighing more than 40 pounds should be evaluated to determine if alternate lifting methods are feasible. The National Institute for Occupational Safety and Health provides information and guidance on methods to help reduce the risk of injury due to improper lifting techniques.

9.1.7 Store hazardous chemicals/materials only in cabinets/areas approved for this type storage.

NOTE: Contact the Center’s Environmental Engineering Office for assistance.

9.1.8 Ensure all vehicle occupants wear seat belts in all vehicles while onsite and anywhere on duty. This includes children being seated in a properly installed Department Of Transportation-approved child safety seat if the child is unable to use a seat belt.

9.1.9 Not use cell phone or other hand held communication devices while driving a personal vehicle on the Center, or anywhere when driving or operating a Government vehicle or equipment except in a hand-free arrangement.

9.1.10 Not leave a vehicle unattended while it is running.
9.1.11 Not ride in the cargo area of pickup trucks, flatbed, or special purpose equipment.


9.1.13 Not ride bicycles, motorized scooters, hover boards and skate boards on sidewalks or inside buildings.

**NOTE 1:** Electric-powered units used by persons with physical disabilities are permitted on sidewalks and inside buildings. The Center’s Office of Diversity and Equal Opportunity approves the documented “need” for the electric-powered unit.

**NOTE 2:** Bicycles at MAF are allowed to be ridden inside MAF building 103.

9.1.14 Wear a suitable helmet conforming to federal safety standards and a reflective vest when operating or riding bicycles on MSFC roadways. (See Redstone Army Regulation 190-5 and Team Redstone Policy for Walking, Jogging and Running for more information.)

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

**NOTE 2:** Center organizations providing bicycles for employee use on Center are encouraged to provide helmets and reflective vests for employees to wear if they desire while riding bicycles within the MSFC East and West Test Areas and 4700 area complex.

**NOTE 3:** Employees riding bicycles on MAF roadways are to comply with the State of Louisiana requirements.

**NOTE 4:** See Chapter 14 of this MPR for more information for riding bicycles on the Center.

9.1.15 Walk (not run) in buildings, parking lots, or sidewalks. Running is allowed only in designated exercise areas. (See Team Redstone Policy for Walking, Jogging and Running” for more information.)

9.1.16 Turn off coffeemakers and heat-producing appliances at the end of the workday and when left unattended if no one is in the immediate work area. In some cases, the Center’s Safety Office may recommend unplugging the heat-producing appliances following the processes described in MWI 8715.11.

9.1.17 Avoid cleaning areas/items contaminated with blood or biohazardous materials.
9.1.18 Not feed wild animals.

9.1.19 Not bring children into the workplace on a routine basis or for extended visits, except for special “open” events. (See “Policy Statement for Children in the Workplace” dated July 15, 2004 for more information.)

NOTE: When children briefly accompany the parent to the workplace, the parent ensures the safety, well-being, and conduct of the child.

9.1.20 Not enter any area where signage is posted or cross barricades that have been erected to alert personnel of hazardous conditions or to restrict access to the area, unless access to the area has been granted by the area POC.

9.1.21 Ensure sufficient lighting and adequate waste containers are provided in their work areas.

9.1.22 Ensure they provide the right-of-way to pedestrians at crosswalk paths that have been designated by a painted crosswalk on the pavement.

NOTE: Vehicles have the right-of-way at main roadway mid-block crossing points. These crossing points are marked with signs stating “Pedestrians Yield to Motorists.”

9.1.23 Not smoke within 25 feet in all directions of building entrances identified as smoke free, ventilation intake ducts, and other areas designated as a smoke free environment and posted with “No Smoking” signage.

9.1.23.1 Not smoke within areas and within the distances to a particular type of operation, activity, or location prohibited by 29 CFR pt 1910, 29 CFR pt 1926, E.O. 13058, NASA STD 8719.11, NFPA 1, state and local laws and regulations for a particular type of operation, activity, or location.

NOTE: No smoking distances to a particular type of operation or location is identified in the regulation governing the operation or location.

9.1.23.2 Maintain cigarette receptacles a minimum of 25 feet from building entrances and ventilation intake ducts.

9.1.23.3 Discard tobacco products in an appropriate manner, such as discarding cigarette butts in receptacles designated for this purpose and smokeless tobacco waste in a socially acceptable and hygiene-friendly manner. Close/cap containers used for smokeless tobacco waste in a manner that prevents the waste leaking or spilling from the container during their disposal.

9.1.24 Not perform work where a fall hazard exists to a lower level (e.g., elevated surfaces, unprotected holes, open pits, platforms, landings, floors, roofs, hoist areas, and above dangerous equipment when work is being performed) without the use of a fall protection system (guardrail system or personal fall arrest system) appropriate for the work being performed in accordance with
9.1.25 Not park vehicles or place objects on a designated path of travel/sidewalk leading to an exterior entrance of a building to a point where the vehicle or object completely blocks or greatly restricts the path of travel/sidewalk.

   NOTE: Drivers should enter parking spaces head-on whenever possible, so as to prevent the rear of the vehicle to obstructing a portion of a sidewalk. Obstructing a portion of a sidewalk occurs more often when a larger vehicle; such as a truck, is backed into a parking space.

9.1.26 Use/operate tools and equipment in a safe manner and in the manner they were designed/intended for use.

9.1.27 Not bring personally-owned exercise/fitness equipment into the office/work area without first obtaining approval for reasonable accommodations following the processes described in NPR 3713.1.

   NOTE: At MSFC, a variety of exercise/fitness equipment is provided and available for employee use in 4315, “Wellness Center.” The Wellness Center provides exercise specialists to assist employees in identifying exercise needs and provides a variety of exercise classes for employees. (See NPR 1800.1 for more information.)

9.1.28 Not modify/replace government provided furniture (desks, workstations, chairs and other office equipment) without first obtaining written concurrence from the Center’s Logistics Services Office, Property Management Office. (See MPR 4000.2 for more information.)

9.1.29 Not attach/hang items to the building’s ceiling suspended grid system without first obtaining written concurrence from the Center’s FMO, Facilities Engineering Office. Hanging items may cause damage to the ceiling’s suspended grid system.

9.1.30 Not bring dogs or other animals into the workplace other than for official purposes, except that an employee with a disability may be allowed to bring a service animal to work if approved as a reasonable accommodation through the process described in NPR 3713.1.
CHAPTER 10
MINIMUM HOUSEKEEPING RULES

NOTE: This Chapter provides the minimum Center expectations for area housekeeping in both office and industrial work areas.

10.1 Minimum housekeeping rules applicable to all Center employees

10.1.1 Employees shall:

10.1.1.1 Maintain the area in a dry, clean, orderly, and sanitary condition at all times.

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

10.1.1.3 Maintain work areas free from protruding nails, splinters, loose objects, and unnecessary holes and openings.

10.1.1.4 Limit the accumulation of combustible materials to minimum and the combustible materials in the area are stored/stacked in a neat and orderly manner.

10.1.1.5 Limit the amount of paper, rubbish, waste, materials, tools, and equipment out of normal storage places to only those needed for daily tasks and operations.

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

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

10.1.1.8 Store materials so they do not create a hazardous condition. Bags, containers, bundles, and other materials stored in tiers are stacked, blocked, interlocked, and limited in height so that they are stable and secure against sliding or collapsing.

10.1.1.9 Limit the storage of items on the top of any free-standing or fixed furniture to where it has a minimal potential to fall off and injure personnel or damage property.

10.1.1.10 Stack/arrange items stored on the top of furniture so it has a minimal potential to be easily vibrated or be knocked off and fall onto personnel or damage property.

10.1.1.11 Not store furniture, equipment, supplies, or other substantial physical objects in building egress corridors and passageways serving six or more people except in lobbies, recessed areas, or other spaces specifically designed for such purpose.
10.1.1.12 Not store Furniture, equipment, supplies, or other large objects in egress corridors and passageways, or obscure the view of, obstruct, prevent or delay access to, or the use of, fire protection equipment following the processes described in NFPA 101.

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

10.1.1.14 Place cloth rags and paper towels saturated with combustible or flammable liquids in waste containers designed and constructed specifically for this purpose following the processes described in MWI 8715.11.

10.1.1.15 Obtain metal cans with self-extinguishing lids for computer rooms and areas that generate a large amount of paper.

10.1.1.16 Clean work areas and remove waste materials, such as metal shaving, wood, paper and other combustible materials at the end of each workday.

10.1.1.17 Not use furnace rooms, boiler rooms, or equipment rooms for storage.

    NOTE: A limited amount of spare parts may be permitted for the equipment located within the room.

10.1.1.18 Clean up any spilled fluids (water, oil, or grease) from floor in the work area.

10.1.1.19 Ensure tobacco products are disposed of in an appropriate manner, such as discarding cigarette butts in receptacles designated for this purpose and smokeless tobacco waste in a socially acceptable and hygiene-friendly manner. Close/cap containers used for smokeless tobacco waste in a manner that prevents the waste leaking or spilling from the container during their disposal.
CHAPTER 11
SAFETY AWARDS

11.1 Center Safety Awards

11.1.1 Center management is committed to recognizing employees and organizations with safety awards when it is determined they have made outstanding safety-related contributions to the Center’s Safety Program or have met or exceeded safety-related benchmarks set by the Center.

11.1.2 Employee and Employee Team Awards shall be available to recognize individuals/teams that have made outstanding safety-related contributions to the Center’s Safety Program. (See Award Table 1 of this Chapter for more information.)

*NOTE: The Center’s Space Flight Safety Awards Program is described on the “MSFC Space Flight Awareness” Web page. The link can be found on MSFC’s “Inside Marshall,” select “Organizational Websites,” select “Office of Strategic Analysis and Communications.” Nomination criteria and forms are also listed at this site.*

Award Table 1

<table>
<thead>
<tr>
<th>a. Silver Snoopy Award</th>
<th>d. Honoree Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Team Award</td>
<td>e. Leadership Award</td>
</tr>
<tr>
<td>c. Flight Safety Award</td>
<td>f. Safety Excellence Award</td>
</tr>
</tbody>
</table>

11.2 Organization Safety Awards

11.2.1 Organization Safety Awards shall be available to recognize onsite organizations that meet or exceed the safety-related benchmark set by the Center for the peak elapsed time or cumulative exposure hours without a significant mishap, or make other special achievements. (See Award Table 2 of this Chapter for more information.)

*NOTE: These awards are presented at the civil service directorate/office level or contractor level.*

Award Table 2

<table>
<thead>
<tr>
<th>Achievement</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 1,000,000 Hours Worked Without a DAFWII Case</td>
<td>Hours Worked Without a Lost Time Case</td>
</tr>
<tr>
<td></td>
<td>Plaque Presented by Center Director at Marshall Team Meeting.</td>
</tr>
</tbody>
</table>

*NOTE: Additional awards for hours worked without a lost time case are given in increments of 1 million.*
b. Prime Contractor (including subcontractors and teammates) at a minimum have the following: 1) TCR less than 10% of the NAICS national average for the applicable NAICS code; 2) DAFWII equal to or less than 50% of the NAICS national average for the applicable NAICS code; and 3) validation from the Center’s Safety Office that the Contractor’s overall SHE performance “exceeds all” of the MSFC SHE Program requirements identified as applicable to their contracted effort.

Plaque Presentation by Center Director at Marshall Team Meeting.

11.3 Requesting Consideration for Safety Awards

NOTE: Organization safety awards listed in Table 2 are normally limited to contractors. Organization safety awards for hours worked without a lost time injury are given per million and are calculated per individual prime contract. Only the work hours reported to the Center’s Safety Office that are in direct support of the individual prime contract will be used for calculating this award. Organization safety awards are given per specific contract number.

11.3.1 Contractors, if requesting consideration for an organization safety award, shall:

11.3.1.1 Submit a formal request to their Contracting Officer for consideration of one of the awards listed in Award Table 2 of this Chapter and provide all supporting documentation needed.

NOTE 1: The supporting documentation can include, but not limited to, copies of the Contractor’s annual self-evaluation of their SHE program, contractor’s OSHA Form 300A, documentation that the contractor’s overall SHE performance has “exceeded all” MSFC SHE Program requirements identified as applicable to their contract, and any other documentation that acknowledges the contractor has fulfilled the requirements for the safety award.

NOTE 2: Request for award is recommended during the anniversary quarter of the contract award.

11.3.1.2 Not submit a request for an award directly to the Center’s Safety Office.

11.3.2 The Contracting Officer shall:

11.3.2.1 Review the supporting documentation and if they concur with the request forward the supporting documentation, including a statement of the Contracting Officer’s concurrence, to the Center Safety Office for review and concurrence.
11.3.2.2 Provide rationale for any non-concurrence to the contractor.

11.3.3 The Center’s Safety Office shall:

11.3.3.1 Evaluate the supporting documentation and notify the Contracting Officer of their concurrence or non-concurrence with the award nomination.

11.3.3.2 Provide rationale for any non-concurrence to the Contracting Officer.

11.3.3.3 Prepare the appropriate award certificate.

11.3.3.4 Notify the Contracting Officer to notify the contractor of when the award will be presented.

**NOTE 1:** The awards are normally given to the contractor at a Marshall Team Meeting, but can also be provided directly to the contractor by the Contracting Officer or Center Safety Office, if deemed appropriate. The awards listed in Award Tables 1 and 2 of this Chapter are also available to employees and contractors at MAF.

**NOTE 2:** Employees can be nominated to receive a “Caring in Action” award given by the MSFC Marshall Safety Action Team. These awards given to employees that have been observed, through their own initiative, identifying hazardous conditions and taking the actions necessary to eliminate or control the hazardous condition. Information on how to nominate someone for this award can be found on the “Caring In Action” located on the MSFC’s “Inside Marshall.”

**NOTE 3:** Previous versions of the Superior Safety Performance Award were sometimes referred to as the Level 1 Safety Performance Award or Industrial Safety Performance Award.

11.4 Organization/Program/Project Safety Awards

11.4.1 Some Center Organizations have developed safety awards specific to their organization/program/project. These safety awards are outside the scope of this MPR. The Center’s Office of Human Capital may be able to provide guidance in the development of an organization/program/project safety award if needed.
CHAPTER 12
REQUEST FOR RELIEF FROM SAFETY-RELATED REQUIREMENTS

12.1 Request for Relief

NOTE: A request for relief is commonly referred to as a waiver, deviation, variance or exception.

12.1.1 Relief from safety requirements contained in federal, state, NASA, or Center level documents shall be initiated and requested by the system/operation owner.

12.1.1.1 Requests for relief shall include rationale why the safety requirement cannot be met and the actions that will be implemented to provide the same level of protection.

NOTE 1: A request for relief normally follows the concurrence processes described in NPR 8715.3; for Agency-level safety requirements, follow the processes described in NPR 8715.3; MPR 1410.2 for Center-level safety requirements; the process described by the Program/Project for Program/Project safety requirements; and the process identified by OSHA, NFPA, and general consensus standards.

NOTE 2: The Directorate/Office directly held accountable 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.

12.1.1.2 The Center’s Safety Office Manager shall evaluate each request for relief from Center-level safety requirements to determine the following:

a. If the request is a Center-wide safety-related issue and needs to follow the approval processes described in MPR 1410.2.

b. If the request is an isolated issue; temporary in nature; or has a low/minimal risk of causing an undesired event.

NOTE: At MSFC and MAF, this evaluation is performed by the MSFC Safety and Quality Department Manager/QD10.

12.1.1.3 Requests determined to meet section 12.1.1.2.b of this Chapter may be evaluated by subject matter experts, or the OPRD of the Center document containing requirements, and be approved by the MSFC SMA Director or designee and the Director or designee of the organization requesting the relief.

NOTE 1: The request for relief from safety-related requirements may be submitted to the Center’s Safety Office using MSFC Form 4612 or an equivalent that provides clear rationale why compliance with the safety-related requirement cannot be achieved.
NOTE 2: Evaluation from the Center designated Technical Authority in specific areas may be provided such as the Authority Having Jurisdiction for fire protection and NFPA-related issues; Fall Protection Program Administrator for Center fall protection; Lifting Device and Equipment Manager for Center lifting equipment; and Pressure Systems Manager for Pressure Vessels and Systems. (See NASA STD 8709.20 for more information.)

12.1.2 Relief from Center health-related or environmental-related issues shall be requested in accordance with the process defined by the Center’s Occupational Health Office or Center’s Environmental Engineering Office.

12.1.3 At MAF, request for relief for Center SHE requirements that are Agency-related shall be routed through the MAF SMA Manager/QD12 for safety-related issues, the MAF Emergency Management/PSO Manager/AS50 for health-related issues, the MAF Environmental Lead/AS60 for environmental-related issues and appropriate MAF manager/lead prior to forwarding on to MSFC SMA or MSFC EEOH for processing and approval.
CHAPTER 13
MINIMUM CLOTHING IN AREAS WITH AN INCREASED LEVEL OF RISK FOR INJURY

13.1 Minimum Clothing Worn in Industrial Areas (e.g., Testing Areas, Laboratories)

13.1.1 When working in areas (e.g., testing areas, laboratories, industrial areas/shops) at the Center where operations are routinely performed that have an increased risk to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of the work being performed employees shall, at a minimum, wear the following clothing:

13.1.1.1 Long pants.

13.1.1.2 Short-sleeved shirts.

13.1.1.3 Full-cover footwear.

NOTE: Full-cover footwear is footwear that provides coverage to the entire foot and will provide adequate protection against the environment in which it is being worn and the hazardous conditions expected to be encountered.

13.2 Minimum Clothing Worn Outside Designated Walkway or Safe Zone

13.2.1 Employees and visitors not wearing the minimum clothing and footwear shall not be permitted outside a designated walkway or safe zone in shops, test area, or hazardous facilities while potentially-hazardous operations are occurring.

13.3 Minimum Footwear Worn in Industrial Areas

13.3.1 Footwear worn inside the work areas of test areas, laboratories, and shops shall provide coverage to the entire foot while potentially-hazardous operations are ongoing.

13.3.1.1 Shoes with open toes, sandals or have heels longer than 2 inches are not permitted to be worn inside the work areas of test areas, laboratories, and shops.

13.3.1.2 At MAF, open toe shoes or heels longer than 2 inches are not permitted in the 103 Manufacturing Complex (buildings 103, 110, 114, and 115).

NOTE: Contact the Center’s Safety Office and Center’s Occupational Health Office for more information.
CHAPTER 14
MINIMUM SAFETY RULES FOR OPERATING SLOW-MOVING VEHICLES, MINI-SCOOTERS, AND BICYCLES AT MSFC

NOTE 1: See MPR 1600.1 for information of other restrictions for operations on MSFC roadways.

NOTE 2: MAF has site specific requirements and are excluded from the following. Contact the MAF SMA Manager/QD12 or MAF Emergency Management/PSO Operations Manager/AS50 for more information.

14.1 Slow-Moving Vehicles on MSFC Roadways

14.1.1 Slow-moving vehicles are authorized to travel on roads with speed limits of 35 miles per hour or less.

14.1.2 Slow-moving vehicles shall not be operated on Rideout or Martin Roads.

NOTE: When crossing or when escorted from behind by a roadway-worthy vehicle with flashing lights or beacon. Rush-hour traffic (generally 6:30 a.m. – 8:30 a.m., 11 a.m. – 1:15 p.m., and 3:30 p.m. – 5:30 p.m.) on normal weekdays is to be avoided.

14.1.3 Slow-moving vehicles may be used on other roads within MSFC and are subject to the following conditions:

14.1.3.1 Vehicle shall display a triangular slow-moving vehicle emblem mounted on the rear as near as is practicable to the center and at an approximate height of not less than 3 feet or more than 5 feet above the ground level or pavement surface and mounted so as to be entirely visible from the rear, day or night.

14.1.3.2 Vehicle shall have either red or amber flashing lights, or a red or amber flashing beacon operating, or an escort so equipped.

NOTE: An exception is permitted when operated inside the 4700 fenced area, the east and west test area, or other areas where the speed limit does not exceed 15 miles per hour.

14.2 Mini-Scooters, Bicycles, and Mobility Scooters

14.2.1 Mini-scooters shall comply with State law while used on any roadway at MSFC. In general, the law requires they be equipped with headlights, reflectors, brakes, horn, pneumatic tires, rearview mirror, and muffler.

14.2.1.1 The driver shall wear a helmet.

14.2.1.2 Mini-scooters meeting these requirements shall comply with the rules for slow-moving vehicles.
14.2.2 Bicycles, mini-scooters, hover boards and skate boards shall not be operated on sidewalks or inside buildings at MSFC.

14.2.3 Bicycles being used for work-related activities shall not be operated on Rideout, Martin, Morris, Dodd, or Neal Roads.

NOTE 1: Privately-owned bicycles for personal use may be operated on any roadway at MSFC in accordance with State law. In general, bicycle users stay on far right side of road or curb as practicable, obey normal traffic rules, and wear a helmet. (Make sure rider and bicycle are visible, particularly at night.) A white headlight and a rear red light or reflector is required by law when bicycling at night. Use of headphones while operating a bicycle is prohibited.

NOTE 2: See Chapter 9 of this MPR for more information for riding bicycles on the Center.

14.2.4 Mobility Scooters (Electric-powered units) used by persons with physical disabilities may be operated on sidewalks and inside buildings, but not on MSFC roadways.
CHAPTER 15
GENERAL DESCRIPTIONS FOR SIGNS/TAGS USED AT THE CENTER

Below provides a general description of the format, color combinations, signal words or symbols, and basic messages included on signs/tags used to communicate unsafe/unhealthful or hazardous conditions and information. (See 29 CFR pt. 1910.144 and 145, and ANSI Z535.2, Z535.3, Z535.4, and Z535.5 for more information.)

15.1 Signs/Tags (including placards and labels)

15.1.1 Are securely attached as close as safely possible to the respective hazardous condition by a positive means such as a string, wire, adhesive, or other means that prevents their loss or unintentional removal to inform others in the area of potentially-hazardous conditions, equipment, and operations.

15.1.2 Contain accurate and specific information about the hazardous condition.

15.1.3 Clearly state the needed information or specific requirement, so that it is easily understood by all employees that may become exposed to the hazardous condition.

15.1.4 Have maximum color contrast between the sign and its visual environment so as to ensure optimum visibility.

15.1.5 Be made of metal, card stock, paperboard, plastic, or other imprinted material.

15.1.6 Be furnished with rounded or blunt corners free from sharp edges, burrs, splinters, or other sharp projections.

15.1.7 Be replaced when they become faded or can no longer be legible when viewed at a minimum distance of 5 foot or a greater distance if warranted by the nature of the hazardous condition.

15.1.8 Be removed when the hazardous condition has been eliminated or no longer exists.

15.2 Danger Signs/Tags

15.2.1 Consist of the colors red, black and white on a glossy surface.

15.2.2 Contain the signal word “DANGER” in white letters on a red oval background with a white border within a black rectangular background located in the uppermost portion of the sign or tag.

15.2.3 Include a square that has a black or red symbol on a white background, or a white symbol on a red background When a symbol/pictograph panel is used.
15.2.4 Contain a major message and/or message panel printed in black or red letters on a white background.

15.2.5 Only used in situations to call attention to potential hazards that, if not avoided, can result in serious injuries or death.

15.2.6 The distinctive colors and signal words in this section are reserved only for danger signs/tags.

15.3 **Warning Signs/Tags**

15.3.1 Consist of the colors orange (blaze orange or vivid orange) and black on a glossy surface.

15.3.2 Contain the signal word “WARNING” printed in black letters on an orange truncated diamond within a black background located on the uppermost portion of the sign or tag.

15.3.3 Include a square with a black symbol/pictograph on an orange background when a symbol/pictograph panel is used.

15.3.4 Contain a major message and/or message panel printed in black letters on an orange background.

15.3.5 Only used in situations to call attention to potential hazards that, if not avoided, can result in serious injury or death.

15.3.6 The distinctive colors and signal words in this section are reserved only for warning signs/tags.

15.4 **Caution Signs/Tags**

15.4.1 Consist of the colors yellow and black on a glossy surface.

15.4.2 Contain the signal word “CAUTION” printed in yellow letters within a black rectangular background located in the uppermost portion of the sign or tag.

15.4.3 Include a square that has a black symbol/pictograph printed on a yellow background when a symbol/pictograph panel is used.

15.4.4 Contain a major message and/or message panel printed in black letters on a yellow background.

15.4.5 Only used in minor hazard situations to call attention to potential hazards or unsafe practices which, if not avoided, could result in minor to moderate injuries, or property damage.
NOTE: Caution signs/tags are not intended for use when there is any potential for death or severe injury.

15.4.6 The distinctive colors and signal words in this section are reserved only for caution signs/tags.

15.5 Notice Signs/Tags

15.5.1 Consist of the colors blue and white on a glossy surface.

15.5.2 Contain the signal word “NOTICE” printed in white letters on a blue rectangular background located in the uppermost portion of the sign or tag.

15.5.3 Include a square with a blue or black symbol/pictograph on a white background, or white symbol on a blue background when a symbol/pictograph is used.

15.5.4 Contain a major message or message panel printed with blue or black letters on a white background.

15.5.5 Only used to provide general information.

15.5.6 The distinctive colors and signal words in this section are reserved only for notice signs/tags.

15.6 Safety Instruction Signs

15.6.1 Consist of the colors green and white on a glossy surface.

15.6.2 Contain a signal word that conveys general safety messages printed in white letters on a green rectangular background located in the uppermost portion of the sign.

15.6.3 Not contain the signal words “DANGER,” “CAUTION,” “WARNING,” and “NOTICE.”

15.6.4 Include a square with a green symbol/pictograph on a white background, or a black symbol/pictograph on a white background having a green border when the symbol/pictograph panel if used.

15.6.5 Contain a major message or message panel printed with green or black letters on a white background.

15.6.6 Only used for general instructions and suggestions relative to safety measures.
CHAPTER 16
CENTER FALL PROTECTION REQUIREMENTS

16.1 Designation of Roles

16.1.1 The MSFC SMA Safety and Quality Department Manager shall select an SMA employee to serve as the Center Fall Protection Program Administrator following the process described in NPR 8715.3 Chapter 3.18.

16.1.1.1 The Center Director shall designate, in writing, the Center’s Fall Protection Program Administrator.

16.1.2 The Center’s FMO shall designate an FMO employee to serve as the Center Fall Protection Engineer.

   NOTE: At MSFC, the Fall Protection Engineer has been designated to be the Facilities Engineering Office lead or designee.

16.1.2.1 At MAF, the MAF Operations Office Manager shall designate an employee or organization to serve as the MAF Fall Protection Engineer.

16.1.2.2 The organization/contractor performing the work/operations shall designate an employee within their organization to serve as the competent and qualified employee in accordance with 29 CFR pt. 1926.32(f) and 32(m).

   NOTE: The organization/contractor can elect to have one employee serve as both the competent and qualified employee or different employees to serve as a competent employee and a qualified employee.

16.1.2.3 The organization/contractor performing a specific duty or duties that require the use of a fall protection system, or a personal fall protection arrest system to be worn shall designate employees as authorized employees in accordance with 29 CFR pt. 1926.32(d).

16.2 Center Fall Protection Program Administrator

16.2.1 Center Fall Protection Program Administrator shall:

16.2.1.1 Have a working knowledge of current fall protection regulations, standards, fall protection equipment and systems, training, skills, experience, and abilities to ensure effective management of the fall protection requirements.

16.2.1.2 Ensure the implementation and management of fall protection requirements with assistance from the Center’s Safety Office and Center’s FMO.
16.2.1.3 Ensure the Center-wide potential fall hazards are evaluated, determine where protection from falls from elevations is needed, and establish any additional or more stringent requirements as necessary to protect against specific fall hazards.

16.2.1.4 Ensure fall protection requirements are included in Center contracts where contract employees are required to perform work where the use of fall protection is required.

   NOTE: The need for fall protection requirements in contracts can be coordinated with the Center’s Safety Office.

16.2.1.5 Ensure fall protection requirements are included in any Center operating procedures where employees are required to perform work where the use of fall protection is required.

   NOTE: The need for fall protection requirements to be identified in operating procedures is coordinated with the Center’s Safety Office and the organization performing the operation where fall protection is required.

16.2.1.6 Ensure that for each situation that requires use of a fall protection system that a “competent” or “qualified” person is assigned responsibility for the immediate application of the fall protection work where fall protection is required and that the competent or qualified person has received the necessary training.

16.2.1.7 Ensure a review of the fall protection requirements is performed following processes and frequency described in NPR 8715.3 Chapter 3 to verify the fall protection requirements are being implemented in compliance with current OSHA, NASA and NASA adopted ANSI, ISEA and American Society of Safety Engineers (ASSE) regulations and requirements.

   NOTE: The review of the fall protection requirements is normally performed during inspections and visits to worksites where fall protection is necessary and documented in SHEtrak.

16.2.1.8 Ensure a written fall protection procedure (site/building specific) is developed for a work area or operation that prevents the use of conventional fall protection systems, or the use of the fall protection system creates a greater hazard in accordance with 29 CFR pt. 1926.502(k).

16.2.1.9 Obtain assistance from the Center’s Safety Office, Center’s FMO, and other Center organizations/contractors that use fall protection systems regularly during construction work or testing activities to implement the Center’s Fall Protection Program, if determined necessary.

16.2.1.10 Obtain assistance from the Center’s Safety Office and/or Center’s FMO to identify a Fall Protection Engineer, when needed.

16.2.1.11 Obtain assistance from the Center’s Safety Office, Center’s FMO, and other Center organizations/contractors that use fall protection systems regularly during construction work or testing activities with the implementation and annual evaluation of the fall protection requirements.
16.2.1.12 Participate in all fall-related incident investigations, as warranted.

16.2.1.13 Initiate a request for relief following the process described in Chapter 12 of this MPR when necessary.

16.3 Fall Protection Engineer

16.3.1 Fall Protection Engineer shall:

16.3.1.1 Serve on an as-needed basis when requested by the Center’s Fall Protection Program Administrator, Center’s Safety Office, or Center’s FMO to concur with the use of or design non-conventional anchorage points that are needed for use with any fall protection system [guardrail, Personal Fall Arrest System (PFAS), or safety net].

16.3.1.2 Have the training, skills, experience, and ability necessary to perform structural engineering evaluation of fall protection systems and PFAS anchor points in accordance with 29 CFR pt 1926.32(m). A structural engineer or qualified professional engineer is recommended.

16.3.1.3 Work closely with the Center’s Safety Office, Center’s FMO, organization/contractor competent, qualified, and authorized employee to identify the conventional anchor points that can be expected to be used during the course of the work, when requested.

16.3.1.4 Be notified by the Center’s Fall Protection Program Administrator, Center’s Safety Office or Center’s FMO when the designated authorized and/or “competent” person cannot select an appropriate non-engineered anchorage for a fall arrest or fall restraint system.

16.3.1.5 Design any required permanent anchorage in accordance with OSHA and ANSI, ISEA and ASSE Fall Protection Standards for fall arrest systems, fall restraint systems, or horizontal lifelines.

16.3.1.6 Only deviate from OSHA and ANSI, ISEA and ASSE Standards after written engineering rationale is provided and concurrence is received from the Center’s Fall Protection Program Administrator, Center’s Safety Office and Center’s FMO.

16.3.1.7 Be familiar with fall protection practices, equipment, regulations, engineering principles, and the effects that permanent fall protection systems will have on the surrounding structure.

16.4 Organization/Contractor Competent and Qualified Employee

16.4.1 Organization/Contractor Competent and Qualified Employee shall:

16.4.1.1 Have the training, skills, experience, and abilities necessary to be knowledgeable of applicable fall protection regulations, standards, equipment, systems, and mandatory requirements for fall protection equipment and systems in accordance with 29 CFR pt.
1926.32(f) and 32(m), and 29 CFR pt. 1926.501 and 502.

16.4.1.2 Ensure compliance with all the responsibilities identified for this position. These two designations are often times viewed as the same and used interchangeably depending on the Contractor.

16.4.1.3 Have the knowledge and ability to identify unsafe/unhealthful working conditions or practices as they relate to fall protection during the course of the work.

16.4.1.4 Have the authority to take prompt action to correct any unsafe/unhealthful working condition or practice as they relate to fall protection.

16.4.1.5 Be available to organization/construction contractor authorized persons when fall protection issues/concerns arise.

16.4.1.6 Be able to provide training to the authorized employees in the safe work practices required when using a fall protection system.

16.4.1.7 Work closely with the Center’s Safety Office, Fall Protection Engineer, and Fall Protection Program Administrator to identify the conventional anchor points that are expected to be used during the course of the work, as needed.

16.5 Organization/Contractor Authorized Employee (user)

16.5.1 Organization/Contractor Authorized Employee (user) shall:

16.5.1.1 Receive training in fall protection from a competent person or qualified person before being required to use fall protection systems, wear a personal fall arrest system, or be exposed to potential fall hazards.

16.5.1.2 Have the skills, experience, and abilities to properly inspect, wear, use, install, and dismantle fall protection systems and equipment according to manufacturer instructions.

16.5.1.3 Notify the organization/construction contractor’s designated competent and/or qualified person when any work requires the use of a fall protection system and the fall protection system has not been installed (or is not in place), or the performance of a fall protection system is unpredictable.

16.5.1.4 Work closely with the organization/contractor competent and qualified employee to identify conventional anchor points that are expected to be used during the course of the work, as needed.

NOTE: These are the employees that wear or use the fall protection system to perform their work tasks.
16.6 Training

16.6.1 All employees performing work at the Center where a personal fall arrest system is required to be worn shall receive fall protection training in accordance with 29 CFR pt. 1926.503(a) and following the processes described in MPR 3410.1.

16.6.2 The training shall be provided by a competent or qualified person knowledgeable in fall protection safe practices and qualified to teach personal fall arrest system safety to organization/construction contractor employees designated as “authorized” and are required to wear a PFAS or use a fall protection system.

16.6.3 Fall protection system training, at a minimum, shall include the following topics:

16.6.3.1 Recognition of fall hazards in the work area.

16.6.3.2 Correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection components and systems before use.

16.6.3.3 Correct use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection systems to be used.

16.6.3.4 Selecting the right fall protection systems for the work.

16.6.3.5 Each worker’s (competent, qualified, and authorized) responsibilities following the processes described in ANSI, ISEA and ASSE Standards and OSHA regulations.

16.6.3.6 Applicable fall protection regulations following the processes described in ANSI, ISEA and ASSE Standards and OSHA regulations.

16.6.3.7 Role of each employee in a safety monitoring system when this system is allowed for use.

**NOTE**: MSFC does not allow the use of a monitoring system or safety nets without other safeguards also being in place and without prior concurrence from the Center’s Fall Protection Program Administrator, Center’s Fall Protection Engineer, and Center’s Safety Office. The Center’s FMO approval is required for construction.

16.6.3.8 Limitations of mechanical equipment while performing roofing work on low-sloped roofs.

16.6.3.9 Correct procedures for handling and storing equipment and materials and the erection of overhead protection.

16.6.3.10 Role of employees in fall protection plans in accordance with 29 CFR pt.
1926.503(a)(2).

NOTE: Initial training can be obtained by successfully completing the Center-provided SMA-SAFE-NASA Safety Training Center (NSTC)-0311-Authorized User (AU), “Fall Protection, Authorized User,” SMA-SAFE-NSTC-0311-Competent Person (CP), “Fall Protection, Competent Person,” or an equivalent contractor provided training.

16.6.4 Employees receiving personal fall arrest system training not provided by the Center shall provide proof of this training to the Center’s Safety Office when requested. The Center’s FMO can request evidence of this training for construction in accordance with 29 CFR pt. 1926.503 (b).

16.6.5 Contractor-generated personal fall arrest system training provided to their employees working onsite after contract award and used in lieu of Center provided training shall be approved by the SHE Training subcommittee before being taught to employees in accordance with MWI 3410.1.

NOTE: Contractor-generated training is encouraged and not prohibited. The review and approval of Contractor training is to ensure the training addresses all of the Center’s fall protection requirements.

16.6.6 Contractors providing their own fall protection training shall ensure the training material is provided by an employee that is “competent” or “qualified” in the correct use of fall protection systems in accordance with 29 CFR pt. 1926.503(a)(2).

NOTE: Training requirements listed in this section are applicable to employees that are required to wear a PFAS or perform activities that require the use of a fall protection system.

16.7 Refresher Training

16.7.1 Refresher training for fall protection is not required unless determined by one of the following:

16.7.1.1 When supervisors or managers discover inadequacies in the employee’s knowledge of the proper use of personal fall arrest systems, fall protection systems, or equipment.

16.7.1.2 When changes in the types of personal fall arrest systems, or fall protection systems, or workplace render the previous training obsolete.

16.7.1.3 When determined from work site inspections by the Center’s Safety Office or Center’s FMO that employees continually violate the fall protection requirements, and refresher training is needed in accordance with 29 CFR pt. 1926.503(c).

16.7.2 This training can be obtained by successfully completing the Center-provided SMA-SAFE-NSTC-0044-AU- Refresher (REF), “Fall Protection Refresher for Authorized User and/or
16.8 Record of Training

16.8.1 A record of training shall (1) include the name of the employee; (2) dates of the training; and (3) signature of person who conducted the training, or the signature of the employer (organization/construction contractor).

16.8.2 Employees that are unable to attend Center fall protection system training shall provide a training certification or evidence showing they have successfully completed an equivalent fall protection training if their job requires them to wear a personal fall arrest system.

16.8.3 Offsite contractor employees shall not be allowed to perform work activities where the use of a PFAS is required unless they are able to provide evidence of successfully completing a fall protection training course.

16.8.3.1 In cases where an offsite contractor is unable to provide evidence of an employee completing fall protection training, the contractor shall be permitted to provide a letter that contains the company letterhead and signed by the superintendent and includes rationale from the contractor why the employee is considered trained, qualified and authorized to wear a PFAS. (See Chapter 5 of this MPR for more information.)

16.8.3.2 The offsite contractor shall ensure their employees are adequately trained, qualified, and authorized to properly use and wear a PFAS or perform the activities associated with scaffolds listed in section 15.20 of this MPR.

16.8.4 Records of fall protection training shall be maintained in accordance with Appendix D of this MPR.

16.9 Requirement to Provide Fall Protection

16.9.1 A fall protection system or guard shall be provided where a potential fall hazard exists that can allow a person to fall to a lower level as a result of an unprotected open side (e.g., hole, open pit, platform, landing, floor, roof, or hoist area) in accordance with 29 CFR pt. 1910.23(b)(1) and pt. 1926.501(b).

16.9.2 Fall protection systems shall be compliant with the systems criteria and practices in accordance with in the applicable sections of 29 CFR pt. 1926.501.

16.9.3 In general industry areas (non-construction), a fall protection system or guards shall be provided for an unprotected open side that is 4 feet or more above an adjacent floor or ground level (e.g., wall openings, opened sided floors, or platforms) in accordance with 29 CFR pt. 1910.23(b)(1) and 23(c)(1).
16.9.4 In construction areas, a fall protection system shall be provided for working surfaces with an unprotected side or edge that is 6 feet above a lower level in accordance with 29 CFR pt. 1926.501 (b)(1).

16.9.5 A fall protection system shall be provided when work is performed above dangerous equipment in accordance with 29 CFR pt. 1926.501(b)(8).

16.9.6 A fall protection system shall be provided when work is performed on a scaffold 10 feet or more above the next lower level in accordance with 29 CFR pt. 1926.451(g)(1).

16.9.7 The use of a fall protection monitoring system without other safe guards also being implemented shall not be allowed for roofing and leading edge work without prior approval from the Center’s Fall Protection Program Administrator, Center’s Fall Protection Engineer, and Center’s Safety Office. The Center’s FMO approval is required for construction.

16.9.8 Controlled access zones shall be erected no closer to the unprotected or leading edge than 6 feet in accordance with 29 CFR pt. 1926.502(g).

**NOTE:** A fall protection system or guard to prevent the possibility of falling to a lower level can be required regardless of height when deemed necessary by the Center’s Safety Office, Center’s FMO, or the organization/contractor performing the work.

16.10 **PFAS**

16.10.1 A PFAS shall be worn when working at dangerous heights that are not protected by a guardrail system following the processes described in 29 CFR 1910.501, NPR 8715.3, and ANSI/ASSE Z359.1.

16.10.2 All components when used with a PFAS (anchorage, connector, lanyard, lifeline, positioning device, tether or restraint line, and self-retracting lifeline) shall be compliant and follow the processes described in ANSI/ASSE Z359.1.

16.11 **Inspecting PFAS and Components**

16.11.1 Prior to each use, the PFAS shall be visually inspected by the user and another qualified or competent person for cuts, cracks, tears, abrasions, undue stretching, deterioration, defective or distorted snap-hooks or faulty springs or the effect of mildew, heat, acid or corrosion in accordance with 29 CFR pts. 1926.502(d) and 503(a).

16.11.2 PFAS and associated components shall be inspected at least annually by a competent person to verify the PFAS shows no evidence of defects, damage, or being improperly maintained following the processes described in ANSI/ASSE Z359.1.

**NOTE 1:** The inspection is normally a visual observation of the PFAS by an employee designated in the role of a competent person for PFAS. The visual observation is aimed to
identify damaged or worn parts of the PFAS including all components that may be used with the PFAS.

NOTE 2: The organization using the PFAS is responsible for ensuring the annual inspection is performed and documented.

NOTE 3: The competent person performing the annual inspection should be someone other than the worker that regularly wears the PFAS being inspected.

16.11.3 Organizations using PFAS shall provide evidence of the annual inspection for any PFAS provided to their employees.

16.11.3.1 The inspection shall be documented. The documentation may be noted on an inspection tag attached to the PFAS or other method so long as it easily identifies the PFAS being inspected.

16.11.3.2 If an inspection tag is used it shall be durable enough to withstand the environment in which the PFAS is to be used.

16.11.3.3 The inspection tag/documentation shall be retained in accordance with Appendix D of this MPR.

16.11.4 Defective or damaged equipment shall be removed from service or properly repaired before being returned to service.

16.11.5 Self-retracting lifelines shall be inspected in accordance with manufacturer’s recommendations or if subjected to a fall.

16.12 Inspecting Work Site for a Fall Protection System

16.12.1 All employees who can be exposed to a potential fall hazard while walking/working with an unprotected side or edge that is 6 feet or more above a lower level shall be protected from falling by the use of a fall protection system (guardrail system, safety net or PFAS) in accordance with 29 CFR pt. 1926.501(b)(1).

NOTE 1: OSHA has made an exception to the requirement for use of a fall protection system for inspection, investigation, and assessment of activities of the work area prior to the actual start of construction work and after all construction work has been completed. (See OSHA Letters of Interpretation 03/02/2010, “Interpretation of OSHA Fall Protection Exemption 29 CFR pt. 1926.500(a)(1) during inspection, investigation and assessment of activities” for more information)

NOTE 2: The exemption stated in Chapter 16.10.1 is not allowed if work activities are in progress and inspection, investigation, or assessment of activities are being performed within close proximity to the potential fall hazards or if tools are being used during the inspection,
investigation or assessment of activities that could potentially distract from the fall hazards. (See OSHA Letters of Interpretation 03/02/2010, “Interpretation of OSHA Fall Protection Exemption 29 CFR pt. 1926.500(a)(1) during inspection, investigation, and assessment of activities” for more information.)

16.12.2 When an employee enters a controlled access zone or danger zone (within 6 feet of the unprotected open side or edge) to inspect, investigate, or assess the work progress while construction work is ongoing, the employee shall wear or use the appropriate fall protection system.

16.13 Safety Assessment for Fall Protection

16.13.1 A safety assessment that directly focuses on potential fall protection hazards shall be performed following the processes described in MWI 8715.15 for work activities where a fall protection system (guardrail, personal fall arrest system, or safety net) is not provided and employees are expected to be exposed to potential fall hazards when working on or near unprotected sides or edges.

16.13.2 The safety assessment shall be documented, at a minimum, and identify the following:

16.13.2.1 Description, basic configuration, and height of the hazard (graphic/drawing), if necessary.

16.13.2.2 Frequency of exposure to the fall hazard and hazard rating (high, moderate, low or minimal).

16.13.2.3 Methods to eliminate, reduce, or control each potential fall hazard.

16.13.3 The safety assessment shall be performed by a “competent” or “qualified” person who (1) has received training and experience in fall protection systems; (2) is capable of identifying the potential fall hazards associated with the job/operation; and (3) is knowledgeable of and understands the mandatory and applicable fall protection system regulations.

16.13.4 The Center’s Safety Office shall assist with the safety assessment, as requested.

16.13.5 The Center’s FMO shall assist with the safety assessment for construction, as requested.

16.14 Site-Specific Procedure for Fall Protection

NOTE: This procedure is specific to the job/operation being performed.

16.14.1 A site-specific procedure for fall protection shall be developed at the Center in accordance with 29 CFR pt. 1926.502(k) when the use of a conventional fall protection system (guardrail, PFAS, or safety nets) is infeasible or creates a greater hazard when performing work on an elevated surface such as leading edge, construction, or precast concrete erection work.
16.14.2 The organization/contractor performing the work shall initiate the site-specific procedure for fall protection.

16.14.3 The site-specific procedure for fall protection shall have concurrence from the Center’s Fall Protection Program Administrator, Center’s Safety Office, Center organization requesting the work, and the superintendent of the organization performing the work. The Center’s FMO concurrence is required for construction.

16.14.4 The site-specific procedure for fall protection shall, at a minimum, include the following:

16.14.4.1 A description of why a conventional fall protection system cannot be utilized during this work.

16.14.4.2 A description of the measures taken to reduce or eliminate the fall hazards and provide the workers with the same level of protection that is provided by use of a conventional fall protection system.

16.14.4.3 A description of the methods to ensure a prompt rescue is provided to employees in the event of a fall.

16.14.4.4 The specific location this procedure is to be implemented.

NOTE: A site-specific fall protection procedure can be initiated using MSFC Form 4507, “Site-Specific Fall Protection Procedure.” This form is located on NASA’s “Explornet page,” select “Center,” select “Marshall,” select “MIDL,” select “Forms Management – MSFC Forms.”

16.15 Plan for a Prompt Fall Rescue

16.15.1 A plan for a prompt rescue shall be available in accordance with 29 CFR pts. 1910.140(c), 29 CFR pts. 1926.502(d) following the processes described in Subpart M, Appendix C and ANSI/ASSE Z359.2, when employees are required to wear a PFAS and a fall occurs from an elevated surface.

NOTE 1: At MSFC, call 911 for rescue of a fall from an elevated surface.

NOTE 2: At MAF, call 911 or 504-257-2333 from a non-NASA phone.

16.15.2 Employees shall be instructed in the safe methods to perform self-rescue, when possible, or the actions to take in the event they need to wait for rescue by emergency responders in accordance with 29 CFR pt. 1926 Subpart M, Appendix C.
16.16 Aerial Lift (mobile extension boom)

16.16.1 Aerial lifts are vehicle-mounted aerial devices used to elevate personnel to job sites above the ground and include the following:

16.16.1.1 Extensible boom platforms.

16.16.1.2 Aerial ladders.

16.16.1.3 Articulating boom platforms.

16.16.1.4 Vertical towers. (See 29 CFR pt. 1926.453(a)(1) for more information.)

16.16.2 While operating or working from any aerial devices, employees shall wear a body harness. A body harness is often referred to as a PFAS.

16.16.2.1 The lanyard shall be connected to an anchorage point that is intended for this purpose in the boom or basket, and adjusted in length in such a manner that it reduces the possibility of the employee falling over the guardrails creating a fall restraint system.

16.16.3 The body harness shall be used as one of the following:

16.16.3.1 A position or restraint system that prevents an employee being exposed to falling any distance.

16.16.3.2 A fall arrest system that allows an employee to be exposed to a fall, but stops the fall within a specified distance.

16.16.4 When used as a fall arrest system, the lanyard shall be connected to an anchorage point in the boom or basket that is designed and intended for this purpose, adjusted in length not to exceed 6 feet maximum, and used in such a manner that it reduces the possibility of the employee falling over the guardrails.

16.16.4.1 Anchorage points for fall arrest systems shall be rated for 5000 pounds.

   NOTE: Review the manufacturer’s specifications to verify the anchorage point is rated for 5000 pounds.

16.16.5 When used as a position or restraint system, the lanyard shall be connected to an anchorage point in the boom or basket that is intended for this purpose, adjusted in length not to exceed 3 feet maximum, and used in such a manner that it prevents the possibility of the employee falling over the guardrails.
NOTE: Exception – employees are permitted to wear a body belt only if it is part of a restraint system that prevents the employee from being exposed to a fall. (See 29 CFR pt. 1926.453 and OSHA Letters of Interpretation 2/23/2000, “Fall protection, training, inspection, and design requirements of aerial lifts and scissor lifts/scaffolds” for more information.)

16.16.6 A full body harness is the preferred method while operating any of the equipment listed above. Approval to wear a body belt while operating this equipment shall be obtained from ISB.

16.17 **Scissor Lift (guardrail-equipped platforms)**

16.17.1 There are no OSHA provisions that specifically address scissor lifts; however, they do meet the definitions of “scaffold.” Therefore, scissor lifts shall be compliant with the fall protection requirements contained in 29 CFR pt. 1926.451. (See OSHA Letters of Interpretations 02/23/2000, “Fall protection, training, inspection and design requirements for aerial lifts and scissor lift/scaffolds,” and 08/01/2000, “Scissor lifts are not aerial lifts” for more information.)

16.17.2 When working from equipment designated as a scissor lift, employees shall be protected from falling by use of a fall protection system or guardrail-equipped platform.

   NOTE: The fall protection system on equipment designated as a scissor lift can be a properly designed and maintained guardrail system. However, if the guardrail system is less than adequate, or the employee leaves the safety of the work platform, an additional fall protection device is required. (See OSHA Letters of Interpretation 11/29/05, “Fall protection requirements for workers on guardrail-equipped platforms” for more information.)

16.17.3 Guardrail systems that do not meet the minimum requirements in accordance with 29 CFR pt. 1910.23(e) shall be considered as less than adequate and not permitted for use as a guardrail system.

16.17.4 In cases where the scissor lift guardrail system is less than adequate or the employee leaves the safety of the work platform, additional fall protection device, such as a PFAS shall be required.

16.18 **Permanently-Installed (fixed) Ladders**

16.18.1 Permanently-installed (fixed) ladders whose climb exceeds 20 feet shall be equipped with fall protection systems (alternating rest platforms with cages or ladder safety devices).

16.18.2 Permanently-installed ladders shall be visually inspected for defects in accordance with 29 CFR pt. 1910.23(b).
16.19 Portable Metal and Wood Ladders

Portable metal and wood ladders shall be visually inspected for defects in accordance with 29 CFR pt. 1910.23(b).

16.20 Temporary Work Platforms

All temporary work platforms that are greater than 4 feet in height from the next lower level and have the potential fall hazard to a lower level shall be provided with a fall protection system or guards.

16.21 Scaffold

16.21.1 Each employee working on a scaffold that is more than 10 feet above a lower level shall be protected by a fall protection system.

16.21.2 A “competent” person shall evaluate the area where scaffold base is to be placed to determine the feasibility and safety of providing fall protection during the scaffold erection or dismantling in accordance with 29 CFR pt. 1926.451(g)(2).

16.21.3 Scaffolds shall be inspected for visible defects and structural integrity in accordance with 29 CFR pt. 1926.451(f).

16.21.4 Scaffolds that meet the definitions described in 29 CFR pt. 1926.452 shall be designed by a registered professional engineer.

16.21.5 Employees who are involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting a scaffold shall be trained by a competent person to recognize the hazardous conditions associated with the work they are performing following the process described in 29 CFR pt. 1926.454.
APPENDIX A
DEFINITIONS

Area Manager  Individual responsible for a given area of MSFC-controlled real property, who ensures a BM is appointed for buildings in their area. (See MWI 8715.5 for more information.)

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

Assistant Building Manager (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. The ABM is sometime referred to as a floor manager. (See MWI 8715.5 for more information.)

Building Manager (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, and provides SHE-related assistance to the and support to their organization management and the Center’s Safety Office, Center’s Occupational Health Office and Center’s Environmental Office in ensuring the processes described in this MPR are communicated and implemented within their building. This is normally a SHE collateral duty. If possible, the BM is selected from employees located in the assigned building. (See MWI 8715.5 for more information.)

Buddy System  An arrangement used when the level of risk for an injury is high, where personnel work in pairs, with one person in the pair is stationed nearby, not directly exposed to the hazard, to serve as an observer to render emergency assistance if needed.

Center  NASA-owned property that has been designated as a NASA Center. In this MPR, the Center is MSFC or MAF.

Center’s Environmental Office  The Center Office/Department/Branch that provides insight, oversight and coordination of environmental-related issues with internal and external organizations, to ensure compliance with all applicable federal, state and local environmental regulations, NASA and Center environmental requirements, and environmental-related E.O.s, in accordance with NPD 8500.1. At MSFC, these functions are performed by the Office of Center Operations/ Environmental Engineering and Occupational Health (EEOH)/AS10. At MAF, these functions are performed by the MAF Environmental Lead/AS60 and the Synergy Achieving Consolidated Operations and Maintenance (SACOM) Environmental Services, who ensure all environmental-related day-to-day functions identified in this MPR for EEOH are performed.

Center’s Facilities Management Office (FMO)  The Center Office/Department/Branch that provides insight, oversight, and coordination of facility operation and maintenance-related issues with internal and external organizations to ensure compliance with all applicable facility-related
Executive Orders, federal, state, local, NASA, and Center regulations in accordance with NPR 8831.2. At MSFC, these functions are performed by the Office of Center Operations/FMO/AS20. At MAF, these functions are performed by the MAF Operations Office/AS60 and the SACOM FMO Department who ensure all facility-related day-to-day functions identified in this MPR for FMO are performed at MAF.

Center’s Occupational Health Office The Center Office/Department/Branch that provides insight, oversight, and coordination of occupational health-related issues with internal and external organizations, to ensure compliance with all applicable occupational health-related Executive Orders, federal, state, local, NASA and Center regulations, in accordance with NPR 1800.1. At MSFC, these functions are performed by the Office of Center Operations/EEOH/AS10. At MAF, these functions are performed by the MAF Emergency Management/Protective Services Office (PSO) Operations Manager/AS50 and the SACOM Safety and Health Services, who ensure all occupational health-related day-to-day functions identified in this MPR for EEOH are performed.

Center’s Safety Office The Center Office/Department/Branch that provides insight, oversight, and coordination of safety-related issues with internal and external organizations to ensure compliance with all applicable safety-related Executive Orders, federal, state, local, NASA, and Center regulations in accordance with in NPR 8715.1 and NPR 8715.3. At MSFC, these functions are performed by the SMA Directorate/ISB/QD12. At MAF, these functions are performed by the MAF SMA Manager/QD12 and the SACOM Safety and Health Services who ensure all safety-related day-to-day functions identified in this MPR for SMA and ISB are performed at MAF. The MAF SMA Manager/QD12 is commonly referred to as the MAF Site Safety Manager.

Center’s Safety, Health and Environmental (SHE) Committee A committee formed by employees and managers to help promote and improve the Center SHE programs. (See MC-12 for more information.)

Center’s Safety, Health and Environmental (SHE) Offices The Center organizations given primary responsibility for implementing federal, state, local, NASA, and Center SHE-related requirements and ensuring continual compliance with these requirements. At MSFC, these organizations are the Industrial Safety Branch (ISB) within the Safety and Mission Assurance (SMA) Directorate and the Environmental Engineering and Occupational Health (EEOH) Office within the Center Operations organization. The Center’s Safety Office, Center’s Occupational Health Office and Center’s Environmental Office form the Center’s SHE Offices in this MPR.

Collateral Equipment Encompasses building-type equipment, built-in equipment, and large, substantially-affixed equipment/property and is normally acquired and installed as part of a facility project. (See NPR 8820.2 for more information.)

Close Call An incident in which there is no or minor injury requiring first aid, or no or minor equipment or property damage (less than $20,000), but which possesses a potential to cause a mishap. (See NPR 8621.1 and MWI 8621.1 for more information.)
Deviation  A written authorization for temporary relief from a specific requirement that is requested during the formulation/planning/design stages of a program/project operation or when it becomes known that compliance with a specific requirement cannot be achieved. Sometimes referred to as a variance.

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

ePort  A Center risk management tool used to document and track institutional risks.

Exception  A written authorization for permanent relief from a specific requirement that is requested during the formulation/planning/design stages of a program/project operation or when it becomes known that compliance with a specific requirement cannot be achieved.

Exercise/Fitness Equipment  Any apparatus or device used during physical activity to enhance strength or conditioning by providing fixed or adjustable amounts of resistance or other means to enhance an individual’s physical condition. Example equipment include, but not limited to, treadmill, free weights, weight machine, elliptical trainer, stair stepper/climber, stationary bicycle, seated peddler, balance ball/ chair, balance/wobble board, and resistance/stretch bands.

Facility  A term used to encompass land, buildings, structures, and other real property including utility systems and collateral equipment. This term does not include operating materials, supplies, special tooling, special test equipment, or non-capitalized equipment. The term facility is used in connection with land, buildings (facilities having the basic function to enclose usable space), structures (facilities having the basic function of a research or operational activity), and other real property improvement. A facility can involve a single operation or multiple operations being performed within the same building or structure. (See NPR 8820.2 for more information.)

Hazard  A state or a set of conditions, internal or external to a facility or operation that has the potential to cause an undesired event.

Hazard Analysis  A term used to describe a method or technique used to identify hazards, the hazard cause, the hazard effect (undesired event), and their associated risks for a given facility or operation and for providing the corrective actions to mitigate these hazards and their risks. (See MWI 8715.15 for more information.)

Incident  A general term used to describe the occurrence of a mishap or close call. (See NPR 8621.1 and MWI 8621.1 for more information.)

Infrastructure  Systems, services, facilities and equipment necessary to sustain Center daily activities such as power, water, pressure, electrical, and other systems necessary to properly maintain a building’s operation.

InstiGators Team  A safety team at MAF, comprised of employees (Civil Servants and contractor) that to promote employees being provided a safe and healthful work environment,
and for employees to demonstrate an attitude to accomplish work safely.

**Job Hazard Analysis (JHA)** An assessment that focuses on identifying hazards associated with the interaction between the worker and jobs/operation being performed and the necessary controls to eliminate the hazards before they can occur. This level safety assessment is normally performed for jobs/operations identified to have an overall level of risk of low or minimal. A JHA is sometimes referred to as a JSA or SPA. The JSA and SPA are equivalent forms of a JHA and can serve the same purpose of a JHA if they are specific in identifying hazardous conditions and the control methods. (See MWI 8715.15 for more information.)

**Marshall Team Meeting** A monthly meeting of top-level MSFC 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.

**Mishap** An unexpected occurrence, event, or sequence of events that results in injury to personnel or damage to equipment or property. Sometimes referred to as an accident. (See NPR 8621.1 and MWI 8621.1 for more information.)

**NASA Mishap Information System (NMIS)** A NASA-wide database for recording and tracking mishap information. (See NPR 8621.1 and MWI 8621.1 for more information.)

**Offsite Contractor** A contractor that is not located on the Center or a construction contractor.

**Organization’s Safety, Health and Environmental (SHE) Point of Contact (POC)** Individual designated by an organization’s management to perform a wide range of activities in support of the Center’s Safety Office, Center’s Occupational Health Office and Center’s Environmental Office in implementing the Center’s SHE Program within their organization. Sometimes referred to in general terms as an organization’s SHE representative or coordinator. (See MWI 8715.5, MWI 8715.12, MWI 8715.13 and section 2.3.3 of this MPR for more details in the types of activities and support these individuals are expected to perform.)

**Operation** A series of acts involved in a particular form of work, job, task, or process. It can involve personnel, equipment, the entire facility or only a section of a facility. (See MWI 8715.15 for more information.)

**Operations Tracking (OpsTrak)** An MSFC SMA database that lists facilities/operations identified to have an increased level of risk (high, moderate and low) to cause/contribute to an accident, injury, illness, or damage to property or environment due to the nature of the work being performed, provides the ability to maintain documentation associated with the facility/operation, and assists in the development of safety assessments for the facility/operation. (See MWI 8715.15 for more information.)

**Overall Level of Risk** This term is assigned generally to a facility/operation that is intended to describe its potential level of risk that an undesired event can occur while operating the facility or performing the operation. The level of risk is normally selected based on (1) the complexity,
structure, purpose, and function of the facility/operation; (2) the visibility and/or value of the facility/operation; and (3) the potential for the facility/operation to cause an undesired event. The level of risk can also be selected by using the highest residual risk listed in a hazard analysis or a general consensus between the facility/operation owner and ISB of the appropriate level of risk for the facility/operation. The overall level of risk is the level of risk entered into OpsTrak for a facility or operation by the owner or for a building into the Electronic Project Online Risk Tool (ePORT) database by ISB. (See MWI 8715.15 for more information.)

Real Property  Land and anything erected thereon or affixed or appurtenant thereto (e.g., buildings, structures, utility systems, and improvements). (See NPR 8820.2 for more information.)

Request for Relief  A written authorization for relief from a specific safety-related requirement(s) and can be in the form of a deviation, waiver, variance or exception. (See Chapter 12 of this MPR and NPR 8715.3 for more information.)

Risk  The combination of (1) the probability (qualitative or quantitative) of experiencing the occurrence of 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. (See MWI 8715.15 for more information.)

Safety Assessment  A disciplined, systematic approach to analyze and evaluate a facility/operation to determine its potential to affect the safety and health of personnel or its potential to cause damage to the environment, equipment or adjacent facilities/operations. A safety assessment is a general term that covers the total spectrum of methods used to identify hazards and the actions necessary to eliminate, reduce and control them. Safety assessments include all types of hazard analysis, JHAs, JSA, SPA, workplace safety assessment, operating procedures, and readiness reviews. (See MWI 8715.15 for more information.)

Safety Critical  A term used to describe a condition, event, operation, process, equipment, or system that could cause or lead to severe injury, major damage, or mission failure if performed or built improperly, or allowed to remain uncorrected. (See NPR 8715.3 for more information.)

Safety Concerns Reporting System (SCRS)  A Web-based electronic database maintained by MSFC SMA for employees to report and track SHE program-related suggestions, concerns, and unsafe acts or unsafe/unhealthy working conditions. This system does not include use for the following: (1) when the concern or condition can be corrected by a FWR; (2) questions regarding SHE issues; (3) concern or condition can be corrected by the BM; and (4) concerns not related to SHE policies or regulations. SCRS can be reported hardcopy and entered into the Web-based database upon receipt. (See MWI 8715.13 for more information.)

Safety, Health and Environmental (SHE) Collateral Duty Role  A work assignment either volunteer or by appointment that is on a temporary basis and is intended to provide Center organizational assistance to the Center’s SHE Offices in the implementation of the Center’s SHE Program.
Safety, Health and Environmental-Finding Tracking System (SHEtrak) A Web-based electronic database maintained by MSFC SMA for the purpose of documenting and tracking to closure hazards that are identified in the workplace. (See MWI 8715.12 for more information.)

Solicitation Document used to solicit quotes, bids, offers, or proposals to include those for contracts, grants, cooperative agreements, or other agreements. (See MWI 5115.2 for more information.)

SpecsIntact Automated system used by the Center’s FMO for preparing standardized facility construction specifications.

Stop Work Authority Authorization given to all employees located at the Center to take the appropriate action necessary to stop or halt any operation/process/activity where they feel there is an increased level of risk to result in loss of life, serious injury/illness to personnel or public, or damage to property or the environment. This authority is intended to only stop or halt the portion of the operation where the increased level of risk for injury, unsafe act or condition exists. Sometimes referred to as Authority to Halt.

Supervisor The person assigned responsibility for the daily oversight functions of employees performing the job/task. This can include organizational first and second line manager, foreman, branch chief, or team lead.

Undesired Event An event or series of events which unleashes the potential inherent in a hazard and either directly or indirectly results in (1) injury, occupational-related illness, or death to personnel or the public; (2) damage to or loss of facilities/equipment; or (3) detrimental impact to the environment and the surrounding community. (See MWI 8715.15 for more information.)

Unhealthful Conditions A wide range of conditions that has been implicated as risk factors for a variety of health problems (e.g., unsanitary, unhygienic or dirty work conditions).

Unsafe Acts A departure from an accepted, normal, or correct procedure or practice which has in the past actually produced injury or property damage or has the potential for producing such a loss in the future; an unnecessary exposure to a hazard; or conduct reducing the degree of safety normally present. Unsatisfactory behavior that occurs immediately prior to an accident event which is significant in initiating the event. Not every unsafe act produces an injury or loss.

Unsafe Conditions Any physical state which deviated from that this is acceptable, normal or correct in terms of its past production or potential future production of person injury and/or damage to property of things; any physical state which results in a reduction in the degree of safety normally present. A condition that has been found to be harmful in the past and has the potential to be harmful again in the future if not corrected. The condition exists immediately prior to an accident event which is significant in initiating the event.

Variance A written authorization for temporary relief from a specific requirement that is requested during the formulation/planning/design stages of a program/project operation or when
it becomes known that compliance with a specific requirement cannot be achieved. Sometimes referred to as a deviation.

**Visitor**  A person who has a temporary stay at the Center and is not badged as an employee that is permanent, detailed or is supporting an onsite Space Act or Cooperative Agreement or grant.

**Waiver**  A written authorization requested after the fact or when it becomes known that compliance with a specific requirement cannot be achieved and authorizes the departure from the specific safety requirement where the level of risk has been documented and accepted by the appropriate level of management.
APPENDIX B
ACRONYMS

ABM  Assistant Building Manager
AED  Automated External Defibrillator
ANSI American National Standards Institute
AS Center Organization Identifier for the Office of Center Operations
ASME American Society of Mechanical Engineers
ASSE American Society of Safety Engineers
AU Authorized User
BLS (U.S.) Bureau of Labor Statistics
BM Building Manager
CDRM Center Data Requirements Manager
CERTRAK Certification Tracking
CFR Code of Federal Regulations
CP Competent Person
CPR Core Program Requirement
CSP Cooperative and State Program
DAFWII Days Away from Work Injury and Illness
DG Desk Guide
DRD Data Requirements Description
EEOH Environmental Engineering and Occupational Health
EMS Environmental Management System
E.O. Executive Order
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ePORT</td>
<td>Electronic Project Online Risk Tool</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>FacGIS</td>
<td>Facilities Geographic Information System</td>
</tr>
<tr>
<td>FAR</td>
<td>Federal Acquisition Regulation</td>
</tr>
<tr>
<td>FMO</td>
<td>Facilities Management Office</td>
</tr>
<tr>
<td>FRC</td>
<td>Federal Records Center</td>
</tr>
<tr>
<td>FWR</td>
<td>Facilities Work Request</td>
</tr>
<tr>
<td>HBK</td>
<td>Handbook</td>
</tr>
<tr>
<td>HS</td>
<td>Center Organization Identifier for the Office of Human Capital</td>
</tr>
<tr>
<td>ISB</td>
<td>Industrial Safety Branch</td>
</tr>
<tr>
<td>ISEA</td>
<td>International Safety Equipment Association</td>
</tr>
<tr>
<td>JHA</td>
<td>Job Hazard Analysis</td>
</tr>
<tr>
<td>JSA</td>
<td>Job Safety Analysis</td>
</tr>
<tr>
<td>MAF</td>
<td>Michoud Assembly Facility</td>
</tr>
<tr>
<td>MC</td>
<td>Marshall Charter</td>
</tr>
<tr>
<td>MCP</td>
<td>Marshall Center Plan</td>
</tr>
<tr>
<td>MGM</td>
<td>Marshal Guidance Manual</td>
</tr>
<tr>
<td>MIDL</td>
<td>Marshall Integrated Document Library</td>
</tr>
<tr>
<td>MOA</td>
<td>Memorandum of Agreement</td>
</tr>
<tr>
<td>NAICS</td>
<td>North American Industry Classification System</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Association</td>
</tr>
<tr>
<td>NAMS</td>
<td>NASA Application Management System</td>
</tr>
<tr>
<td>NFS</td>
<td>NASA FAR Supplement</td>
</tr>
</tbody>
</table>

**DIRECTIVE IS UNCONTROLLED WHEN PRINTED**
Verify current version before use at https://dml.msfc.nasa.gov/directives
NMIS  NASA Mishap Information System
NRC  Nuclear Regulatory Commission
NRRS  NASA Records Retention Schedules
NSRS  NASA Safety Reporting System
NSTC  NASA Safety Training Class
OPRD  Organization of Primary Responsibility Designee
OpsTrak  Operations Tracking
OSHA  Occupational Safety and Health Administration
PDT  Procurement Development Team
REF  Refresher
PFAS  Personal Fall Arrest System
POC  Point of Contact
PPE  Personal Protective Equipment
Pub. L.  Public Law
PSO  Protective Services Office
Pt  Part
QD  Center Organization Identifier for SMA Directorate
SACOM  Synergy Achieving Consolidated Operations and Maintenance
SAFE  NASA identifier for NASA Headquarter SMA training course
SCRS  Safety Concerns Reporting System
SEB  Source Evaluation Board
SHE  Safety, Health and Environmental

DIRECTIVE IS UNCONTROLLED WHEN PRINTED
Verify current version before use at https://dml.msfc.nasa.gov/directives
SHEtrak: Safety, Health and Environmental-Finding Tracking System

SMA: Safety and Mission Assurance

SOW: Statement of Work

SPA: Safe Plan of Action

SpecsIntact: Specifications-Kept-Intact

SSWP: Supervisor Safety Web Page

STD: Standard

TCR: Total Case Rate


VPP: Voluntary Protection Program
## APPENDIX C
### VERIFICATION MATRIX

<table>
<thead>
<tr>
<th>Section</th>
<th>Brief Description</th>
<th>Verification</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH 1</td>
<td>Responsibilities</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>CH 2</td>
<td>CPR 1 - Management Leadership and Employee Involvement</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>CH 3</td>
<td>CPR 2 - Worksite Analysis</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CH 4</td>
<td>CPR 3 - Hazard Prevention and Control</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>CH 5</td>
<td>CPR 4 - SHE Training</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CH 6</td>
<td>CPR 5 - EMS</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CH 7</td>
<td>General SHE Rules for Supervisors</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CH 8</td>
<td>General SHE Rules for Employees</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CH 9</td>
<td>Site-wide Safety Rules</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CH 10</td>
<td>Minimum Area Housekeeping Rules</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CH 11</td>
<td>Safety Awards</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CH 12</td>
<td>Request for Relief from Safety-Related Requirements</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CH 13</td>
<td>Minimum Clothing Requirements in Work Areas Where Operations with Increased Risks are Performed</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CH 14</td>
<td>Minimum Safety Rules for Operating Slow-Moving Vehicles</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CH 15</td>
<td>General Descriptions for Signs/Tags</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CH 16</td>
<td>Center Fall Protection Requirements</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D

RECORDS

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

<table>
<thead>
<tr>
<th>RECORD</th>
<th>REPOSITORY</th>
<th>RETENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual SHE Program Plan</td>
<td>Maintained by the Center</td>
<td>NASA Records Retention Schedule (NRRS) 1/72/B/1: retires to Federal</td>
</tr>
<tr>
<td></td>
<td>Directives Manager</td>
<td>Records Center (FRC) 5 years after cancellation or when superseded.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transfer to the National Archives Regional Archive in 5 year blocks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>when 20 years old.</td>
</tr>
<tr>
<td>OpsTrak</td>
<td>MSFC - Maintained by SMA</td>
<td>Per MWI 8715.15</td>
</tr>
<tr>
<td></td>
<td>MAF - Maintained by the SACOM</td>
<td></td>
</tr>
<tr>
<td>OSHA Form 300A, “Summary of Work-Related</td>
<td>MSFC - Maintained by SMA</td>
<td>Per MWI 8621.1</td>
</tr>
<tr>
<td>Injuries and Illnesses”</td>
<td>MAF - Maintained by the SACOM</td>
<td></td>
</tr>
<tr>
<td>Safety Report (the injury, illness, and</td>
<td>MSFC - Maintained by SMA</td>
<td>NRRS 1/14/B/2: Destroy when 3 years old or when no longer needed</td>
</tr>
<tr>
<td>close call trends)</td>
<td>MAF - Maintained by the SACOM</td>
<td>for reference, whichever is sooner.</td>
</tr>
<tr>
<td>Request for Relief (Safety Deviations/Waivers) to Center’s SHE program</td>
<td>MSFC - Maintained by SMA</td>
<td>NRRS 1/72/E: Destroy when superseded, obsolete or no longer needed.</td>
</tr>
<tr>
<td></td>
<td>MAF - Maintained by the SACOM</td>
<td></td>
</tr>
<tr>
<td>Request for Relief (Safety Deviations/Waivers) to MSFC Program/Project</td>
<td>Maintained in accordance with the appropriate Program/Project Plan or Configuration Management Plan</td>
<td>NRRS 8/101-117: The specific schedule depends on what type program/project and the requirements in the Program/Project and/or Configuration Management Plan.</td>
</tr>
<tr>
<td>Safety Program Self-Assessment Report and Safety Trends</td>
<td>MSFC - Maintained by SMA</td>
<td>NRRS 1/14/B/2: Destroy when 3 years old or when no longer needed for reference, whichever is sooner.</td>
</tr>
<tr>
<td></td>
<td>MAF - Maintained by the SACOM</td>
<td></td>
</tr>
<tr>
<td>SHE Committee Meeting Minutes</td>
<td>MSFC - Posted on the Safety, Health and Environmental Web page</td>
<td>NRSS 1/14/B/2: Destroy when 3 years old or when no longer needed for reference, whichever is sooner.</td>
</tr>
<tr>
<td>SCRS records/report of unsafe/unhealthy working conditions</td>
<td>MSFC - Maintained by SMA MAF - Maintained by the SACOM</td>
<td>Per MWI 8715.13</td>
</tr>
<tr>
<td>SHE Inspection records and related Hazard Abatement Plans</td>
<td>MSFC - Maintained by SMA MAF - Maintained by the SACOM</td>
<td>Per MWI 8715.12</td>
</tr>
<tr>
<td>SSWP Supervisor Safety Visits</td>
<td>MSFC - Maintained by SMA MAF - Maintained by the SACOM</td>
<td>NRRS 1/117.5: Cutoff at the end of the fiscal or calendar year. Destroy 3 years after cutoff or when no longer needed for business purposes, whichever is later.</td>
</tr>
<tr>
<td>SSWP Supervisor Safety Visit Findings entered into SHEtrak</td>
<td>MSFC - Maintained by SMA MAF - Maintained by the SACOM</td>
<td>Per MWI 8715.12</td>
</tr>
<tr>
<td>SSWP Supervisor Safety Meetings</td>
<td>MSFC - Maintained by SMA MAF - Maintained by the SACOM</td>
<td>NRRS 1/117.5: Cutoff at the end of the fiscal or calendar year. Destroy 3 years after cutoff or when no longer needed for business purposes, whichever is later.</td>
</tr>
<tr>
<td>Employee Safety Training records</td>
<td>MSFC - Maintained by MPR 3410.1 MAF - Maintained by the SACOM</td>
<td>Per MPR 3410.1</td>
</tr>
</tbody>
</table>
| PFAS Inspection Documentation | Maintained by the organization performing the inspection or test.  
*NOTE: Inspection tags may be attached to the device being inspected or maintained in a database.* | NRSS 1/123: Destroy on expiration of tag or when superseded. |
<p>| Site Specific Fall Protection Plan (MSFC Form 4507 or equivalent) | Maintained by the organization performing the inspection or test. | NRSS 1/123: Destroy on expiration of permit or when superseded. |</p>
<table>
<thead>
<tr>
<th>Safety Assessment (MSFC Form 4390, JHA, SPA and similar workplace safety assessments)</th>
<th>Maintained by the organization performing the assessment.</th>
<th>Per MWI 8715.15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Shower/Eyewash Inspection tag or similar method of documentation</td>
<td>Maintained by the organization performing the inspection on or adjacent to the equipment until full with data, and then replace with new tag or similar method of documentation.</td>
<td>NRSS 1/123: Destroy on expiration of tag or when superseded.</td>
</tr>
<tr>
<td>Portable Fire Extinguisher inspection Form 549, “Portable Fire Extinguisher Readiness Verification Tag” or similar type inspection tag</td>
<td>Per MWI 8715.11</td>
<td>Per MWI 8715.11</td>
</tr>
<tr>
<td>AED Inspection MSFC Tag 21 or a similar type inspection tag</td>
<td>Per MPR 1810.2</td>
<td>Per MPR 1810.2</td>
</tr>
<tr>
<td>Emergency Light Inspection documentation</td>
<td>Maintained by the organization performing the inspection,</td>
<td>NRSS 8/56/A/1: Destroy when 3 years old.</td>
</tr>
</tbody>
</table>

**NOTE:** Contractors maintain their own OSHA Form 300A, “Summary of Work-Related Injuries and Illnesses” and training records for their employees.
APPENDIX E
GUIDE FOR SUPERVISORS PERFORMING A WORK AREA SHE VISIT

E.1 One method of helping the Center ensure employees are provided with safe and healthful working conditions free from recognized hazardous conditions is by organizational managers and supervisors routinely visiting their employees work areas. Organizational managers and supervisors are encouraged to visit at least a portion of each team, group, or department at the frequency shown in Table 1. Document the visit and findings (positive and negative, and observations) discovered during the work area visit in SSWP and track the findings till corrected then close the finding in SSWP.

NOTE 1: The recommended visit schedule in Table 1 is a method of ensuring all first line supervisors visit all of their employees and work areas within their area of responsibility within a year. Visits for large work areas may be divided, so that a different portion of the work area is visited each monthly so that the entire work area is visited within three months (quarterly).

NOTE 2: Center Director and Directorate Office Directors visits are normally performed on a quarterly basis, but may be more frequent as their work schedules permit.

E.2 Each supervisor is encouraged to form a team consisting of one or more members from their group to assist in the visit on a rotational basis. Rotating group members helps ensure that all group members participate in at least one work area visit per year.

E.3 Example list of items to observe during the visit include, but is not limited to, the following:

E.3.1 The positions and actions of employees while performing assigned jobs/operations.

E.3.2 Appropriate PPE is available and worn correctly when performing required job/operation.

E.3.3 Necessary tools are used correctly; equipment and facilities are in good repair.

E.3.4 Procedures are being followed.

E.3.5 Area housekeeping practices meet or exceed the Center’s minimum housekeeping requirements and those stated in this MPR.

E.3.6 Discuss the nature of the job/operation, hazards associated with the job/operation, employee concerns or recommendations, improvements to the job/operation, working environment in general, etc.

E.3.7 Unsafe/unhealthful conditions and facilities hazards and items in need of repair.

E.4 SHE-related checklists are located on MSFC’s “Inside Marshall,” select “Organizational Websites,” locate “Safety and Mission Assurance Directorate,” select “Safety, Health and

**NOTE:** Checklists for various types of work areas are provided at the location listed above and are available for supervisor’s use, if desired, in performing their visit. A checklist is not required for these visits, but may be used for guidance during the visit.

Table 1 Recommended Visit Frequency

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
<th>Suggested Team</th>
</tr>
</thead>
</table>
| Center Director | Annually Staff Offices & Each Directorate’s work area | • Center Director  
• Selected Directorate Director  
• SMA Director or Representative (Optional)  
• Selected BM (Optional) |
| Third Line Supervisors (Usually Directorate/Office Directors) | Annually Each Department/Sub-Office’s work area. | • Directorate/Office Director  
• Selected Department/Office Manager or Representative  
• Safety Professional (Optional)  
• BM or ABM (Optional) |
| Second Line Supervisors (Usually Department/Office Managers) | Semi-Annually Each Group or Team’s work area, as applicable | • Department/Office Manager  
• Selected Group or Team Lead  
• Safety Professional (Optional)  
• BM or ABM (Optional) |
| First Line Supervisors (Usually Department Managers or Group Leads) | Monthly Each Group or Team’s work area  
Weekly for construction sites | • Selected Team Lead  
• Selected Employee(s)  
• Safety Professional (Optional)  
• BM or ABM (Optional) |
APPENDIX F
REFERENCES

F.1 FAR 52.236-13, Accident Prevention (1.5.9)
F.2 FAR 36.513, Accident Prevention (1.5.9)
F.3 NFS 1823.70, Safety and Health (1.5.9 and 1.5.12)
F.4 NFS 1823.7001, NASA solicitation previsions and contract clauses (1.5.9)
F.5 NFS 1852.223-70, Safety and Health Measures and Mishap Reporting (1.5.9, 2.6.1.4 and 3.5.7)
F.6 NFS 1852.223-73, Safety and Health Plan (1.5.9)
F.7 DG-03, NASA Desk Guide for Table of Disciplinary Offences and Penalties (4.7.3.1)
F.8 MGM 7120.3, MSFC Data Management Guidance (1.3.9 and 1.5.6)
F.9 MSFC 52.223-90, Asbestos Material (1.5.7)
F.10 MSFC 52.223-91, Hazardous Material Reporting (1.5.7)
F.11 MSFC 52.223-92; Environmental – General Clause (1.5.7)
F.12 MSFC 52.223-96, Medical Services. (1.5.7 and 4.4.2)
F.13 MSFC 52.223-97, Mandatory and Required Training (1.5.7)
F.14 AS50-HBK-001, MSFC Emergency Procedures Handbook (1.2.20, 1.2.23 and 4.8)
F.15 MSFC Technical Specifications for Repair and Construction (1.5.8 and 4.3.5.17)
F.16 SpecsIntact (for Construction) (1.5.8, 4.3.5.17 and Appendix A)
F.17 SMA-SAFE-NSTC-0044-AU-REF, Fall Protection Refresher for Authorized User (16.17.2)
F.18 SMA-SAFE-NSTC-0044-CP-REF, Fall Protection Refresher for Competent Person (16.17.2)
F.19 SMA-SAFE-NSTC-0311-AU, Fall Protection Authorized User (16.6.3.10)
F.20 SMA-SAFE-NSTC-0311-CP, Fall Protection Competent Person (16.6.3.10)
F.21 SHE 101, Introduction to MSFC SHE Program (5.2 and 5.4.1.3)

F.22 SHE 102, MSFC SHE Program Refresher Training (5.2)

F.23 SHE 103 – SHE Collateral Duty Training

F.24 SHE 113, Equivalent Fall Protection Authorized User Training (16.7.2)

F.25 NASA Form 1390, Notice of Unsafe or Unhealthful Condition (3.2.3.3)

F.26 NASA Form 1584, Safety and Health Hazard Abatement Form (3.2.3.3)

F.27 AED Inspection MSFC Tag 21 (Appendix D)

F.28 Portable Fire Extinguish inspection Form 549, Portable Fire Extinguisher Readiness Verification Tag (Appendix D)

F.29 MSFC Form 596, Emergency Telephone Numbers (7.1.13)

F.30 MSFC Form 3798, Permit for Portable Appliance (8.1.7)

F.31 MSFC Form 4371, Mishap and Safety Statistics (2.6.1.3)

F.32 MSFC Form 4390, Job Hazard Analysis (3.1.2.11 and Appendix D)

F.33 MSFC Form 4507, Site Specific Fall Protection (16.14.4.4 and Appendix D)

F.34 MSFC Form 4515, Incident Investigation Form (2.6.1.4 and 3.5.7)

F.35 MSFC Form 4612, MSFC Request for Relief/Variance from Safety-Related Requirements (12.1.1.3)

F.36 NAICS 541712, Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology) (3.6.5)

F.37 NAICS 336414, Guided Missile and Space Vehicle Manufacturing (3.6.6)

F.38 OSHA Form 300A, Log of Work-Related Injuries and Illnesses (2.6.1.17, 3.6.2.1, 3.6.5, 11.3.1.1 and Appendix D)

F.39 OSHA Letters of Interpretation 11/29/05, Fall protection requirements for workers on guardrail-equipped platforms (16.17.2)
F.40 OSHA Letters of Interpretation 03/02/2010, Interpretation of OSHA Fall Protection Exemption 29 CFR pt. 1926.500(a)(1) during inspection, investigation and assessment activities (16.12.1)

F.41 OSHA Letters of Interpretations 02/23/2000, Fall protection, training, inspection and design requirements for aerial lifts and scissor lift/scaffolds (16.16.5 and 16.17.1)

F.42 OSHA Letters of Interpretation 08/01/2000, Scissor lifts are not aerial lifts (16.17.1)

F.43 OSHA 2254, Training Requirements in OSHA Standards and Training Guidelines (5.1.3.2)

F.44 Agreement between George C. Marshall Space Flight Center and Marshall Engineers and Scientists Association, Article 19, Safety and Health (2.2.1)

F.45 Agreement between George C. Marshall Space Flight Center and the American Federation of Government Employees Agreement, Article 39 (2.2.1)

F.46 Redstone Army Regulation 190-5, Motor Vehicle Traffic Supervision (9.1.14)

F.47 Team Redstone Policy for Walking, Jogging and Running (9.1.12, 9.1.14 and 9.1.15)

F.48 Policy Statement for Children in the Workplace dated July 15, 2004 (9.1.19)

F.49 National Institute for Occupational Safety and Health (9.1.6)

F.50 CSP 03-01-003, Voluntary Protection Programs (VPP): Policies and Procedures Manual (2.8.1.6)