



Work Instruction (WI)

DIRECTIVE NO. 350-WI-8700.1.1A
EFFECTIVE DATE: March 16, 2012
EXPIRATION DATE: March 16, 2017

APPROVED BY Signature: Original Signed by
NAME: Patrick Hancock
TITLE: Chief, Occupational Safety & Health Division

COMPLIANCE IS MANDATORY

Responsible Office: 350/Occupational Safety and Health (OS&H) Division

Title: Occupational Safety Emergency Support

PREFACE

P.1 PURPOSE

This work instruction defines the requirements and procedures applicable to all Occupational Safety and Health (OS&H) Division personnel providing support to emergencies at Goddard Space Flight Center (GSFC), Greenbelt. If an Incident Command Post (ICP) is established, OS&H Responders become members of the ICP staff. First and foremost, as Safety First Responder, it is the duty of OS&H personnel to provide safety oversight during the emergency, making sure that all operations and personnel involved are implementing correct safety disciplines in the response and operations. Secondly, as the incident transitions from the control of the Goddard Incident Commander (GIC) to safety for incident investigation, the Safety First Responder then takes on the role as the Initial Response Team (IRT) for a mishap and initiates action for scene security and mishap investigation.

P.2 APPLICABILITY

This work instruction is applicable to civil servant and contractor personnel of the OS&H.

P.3 REFERENCES

- a. GPR 8621.4, GSFC Mishap Preparedness and Contingency Plan
- b. GPR 8710.2, GSFC Emergency Management Program Plan

P.4 CANCELLATION

- a. 350-WI-8700.1.1 Occupational Safety Emergency Support

P.5 TOOLS, EQUIPMENT, AND MATERIALS

OS&H personnel shall use their professional judgment, based on knowledge, training and experience, to assess hazards at the scene of an incident and ensure that all personnel use appropriate Personal Protective Equipment (PPE) to prevent undue exposure to themselves and other personnel. Personnel shall only use equipment which they are properly qualified to use.

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Equipment for Industrial Hygiene staff include but are not limited to the following: detector tubes for acid gases, organic solvent vapors, and other inorganic gases; photo-ionization detector, multi-gas and combustible gas or confined space detectors, mercury vapor monitor, oxygen monitor, air sampling pumps with standard filter and charcoal tube media. Safety first responders shall wear appropriate attire which identifies them as the incident Safety Officer (Red Safety Vests located in B-28 Room N154 and in B-97).

P.6 SAFETY PRECAUTIONS AND WARNINGS

OS&H personnel shall use their professional judgment, based on knowledge, training and experience, to assess hazards and exercise appropriate protective actions to prevent undue exposure of emergency responders and themselves.

NO OS&H PERSONNEL SHALL ENTER AN AREA WERE THERE HAS BEEN A RELEASE OR SUSPECTED RELEASE OF AN UNKNOWN HAZARDOUS MATERIAL. OS&H personnel are not authorized to operate within the "Hot Zone" of a hazardous materials incident until the emergency conditions have been declared controlled by the Goddard Incident Commander (GIC).

OS&H personnel are not required to expose themselves to hazards if any of the following conditions exist:

- a. personnel believe they do not have enough information about the hazard to effectively manage their exposure to a hazard;
- b. personnel believe they do not have the personal protective equipment necessary to protect them from a hazard;
- c. personnel feel they are not qualified or appropriately trained for an activity that will potentially expose them to a hazard.
- d. personnel are likely to be exposed to oxygen-deficient environments or atmospheric concentrations of contaminants exceeding Immediately Dangerous to Life and Health (IDLH) thresholds;

P.7 TRAINING

OS&H personnel shall be trained and qualified commensurate to their individual duties. Personnel assigned IRT and duties as Incident Safety Officers shall also complete all required training as per GPR 8710.2 and GPR 8621.4.

P.8 RECORDS

N/A

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P.9 MEASUREMENT/VERIFICATION

No specific metrics have been identified.

PROCEDURE

In this document, a requirement is identified by “shall,” a good practice by “should,” permission by “may” or “can,” expectation by “will,” and descriptive material by “is.”

1.0 OVERVIEW OF CAPABILITIES

The OS&H Division (Code 350) is responsible for providing support on occupational safety, radiation safety, and industrial hygiene expertise to the Center. During an emergency response, Code 350 brings to the Incident Commander expert advice in the following areas:

- a. safety and fire protection regulatory compliance;
- b. initial risk assessment for occupational safety hazards;
- c. oversight of mishap investigation;
- d. occupational health regulatory compliance;
- e. assessment of occupational hazards including environmental factors and hazardous materials;
- f. initial exposure risk assessment; and
- g. interim response team activation.

2.0 INSTRUCTIONS

The OS&H Division can be notified of emergencies two ways - via the Center radio system alert tones (during normal working hours) or the Center emergency management paging system (nights and weekends).

- 2.1 Upon receipt of notification of an emergency via the Center radio system alert tones or the Center emergency management paging system, an OS&H representative (civil servant or contractor) shall:
 - a. reply to the alert or page to ascertain current details of the emergency and to acknowledge receipt of the notification;
 - b. report to the scene of the emergency and report to the GIC (Code 240 representative) wearing the “Safety Emergency Representative Vest”;
 - c. assess possible Code 350 technical resource needed for support of the incident and coordinate their reporting to the scene (this includes requesting, via radio or cellular telephone, the presence of a Code 350 civil servant at the scene of the emergency if not already present); and
 - d. provide and coordinate OS&H resources in response to specific requests from the GIC (Code 240 representative).

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- 2.2 Upon confirmation that there are blood borne pathogen concerns, the representative will confirm with the GIC that Facilities Management Division (FMD) needs to be notified for appropriate cleanup, ONCE THE SCENE IS SAFE.
- 2.3 Upon confirmation that the emergency meets the definitions for a reportable mishap or mishap requiring investigation, a Code 350 civil Servant initiates the actions defined in GPR 8621.4, GSFC Mishap Preparedness and Contingency Plan.
- 2.4 The representative will ensure that a subject matter expert reports to the scene when specifically requested by the GIC or when determined appropriate by the representative. The expert(s) will:
- a. provide an occupational health representative at the scene based on professional judgment or when requested by the GIC or OS&H representative;
 - b. initiate an exposure risk assessment upon notification of a potential or confirmed occupational exposure or based on professional judgment; and
 - c. provide advice and consultation to the GIC through communication with the command post as requested by the GIC.
- 2.5 The representative will maintain communication with the GIC until support is no longer needed or replaced by another OS&H representative; and, when requested by the GIC, OS&H shall perform initial risk assessment for occupational safety hazards, consult on safety and fire protection regulatory compliance, and provide oversight of mishap investigation activities.
- 2.6 OS&H personnel shall provide the GIC advice in determining that a workplace is safe for re-occupancy following hazard assessment and emergency response activities. This determination will be made in coordination with the GIC and be based on knowledge of atmospheric concentrations of contaminants or knowledge of the presence of materials leading to response activity.

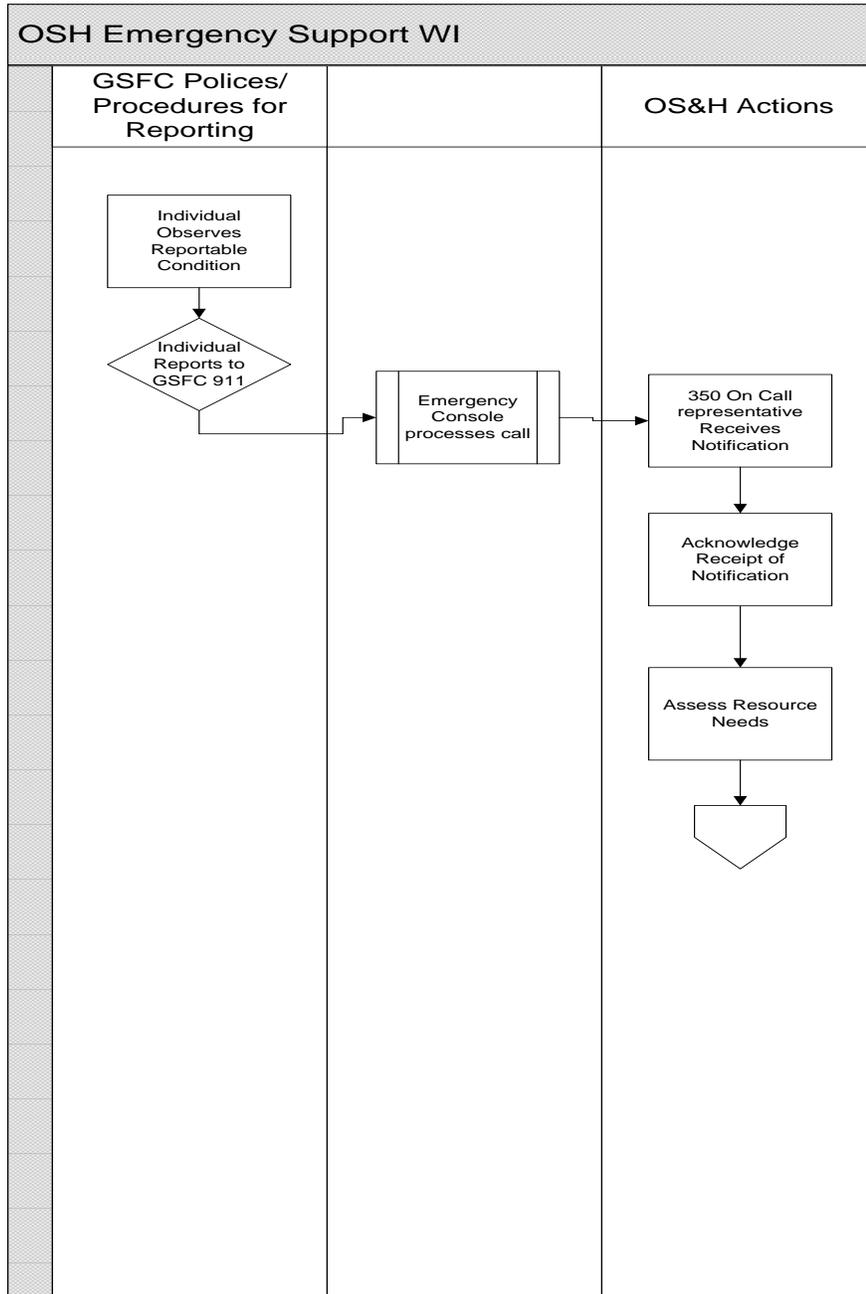
In all cases of emergency support, OS&H personnel shall perform actions in accordance with existing plans, policies and procedures. In absence of specific plans, policies and procedures, OS&H personnel shall conform to professional and industry standards.

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Flow Diagram



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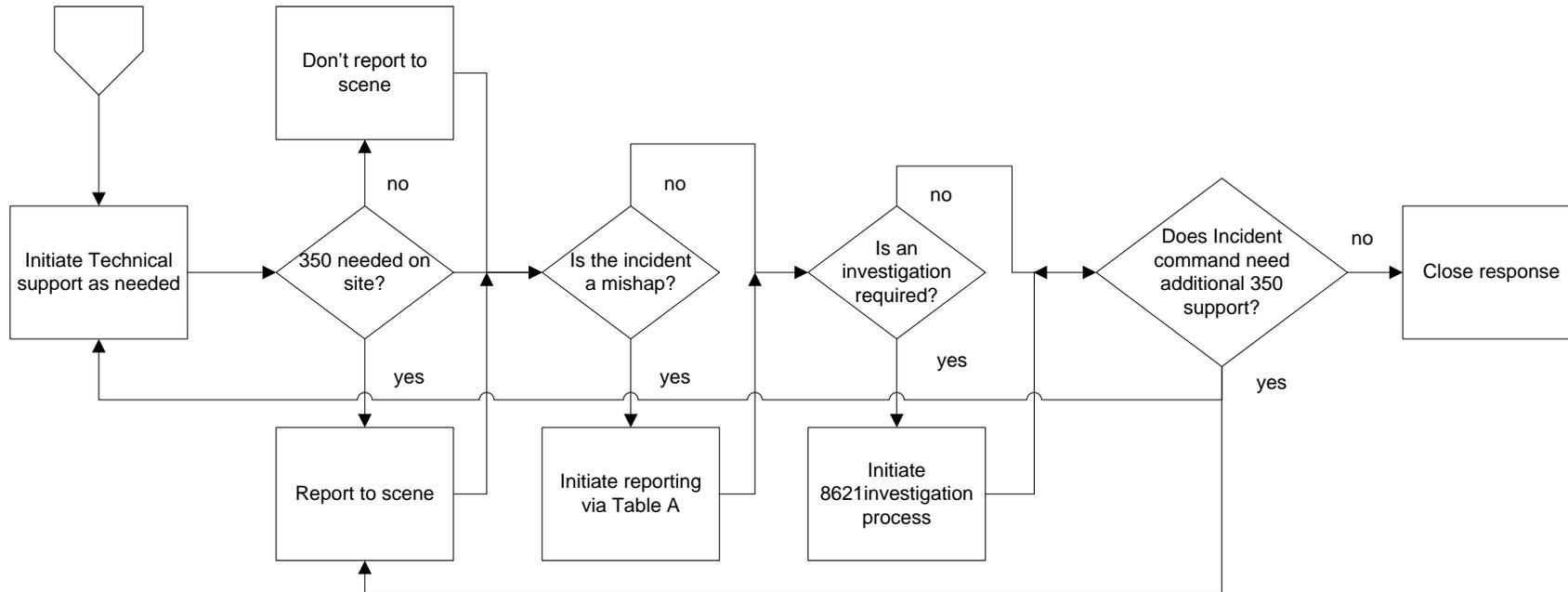
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Report Type	Details	GSFC/Greenbelt - Who is to be notified (timeliness)
Type A Mishap	<ul style="list-style-type: none"> • Death or 3 in-patient hospitalizations within 30 days • Permanent total disability • Property damage or loss \geq \$2M • High visibility Close Call and/or flight of payloads on Expendable Launch Vehicle (ELV) • Crew/aircraft hull loss or loss of flight control 	<ul style="list-style-type: none"> • Center Director (immediately) • Director, Code 300 (immediately) • HQ OSMA and Administrator (1 hour) • OSHA Area Office (<8 hours for employee death, or 3 in-patient hospitalizations within 30 days)
Type B Mishap	<ul style="list-style-type: none"> • Permanent partial disability or \leq3 in-patient hospitalizations within 30 days • Property damage or loss \geq\$500K but <\$2M 	<ul style="list-style-type: none"> • Center Director (immediately) • Director, Code 300 (immediately) • HQ OSMA and Administrator (1 hour) •
Type C Mishap	<ul style="list-style-type: none"> • Lost workday or restricted duty • Property damage or loss \geq\$50k but <\$500k 	<ul style="list-style-type: none"> • Center Director (immediately) • Director, Code 300 (immediately) • HQ OSMA (IRIS Input) within 24 hours) •
Type D Mishap	<ul style="list-style-type: none"> • Injury requiring more than first aid • Property damage or loss \geq \$1k but < \$50k 	<ul style="list-style-type: none"> • Director, Code 300 (immediately) • HQ OSMA (IRIS input within 24 hours) •
Close Call with the potential for a mishap	<ul style="list-style-type: none"> • Property damage <\$1k • Occurrence with potential to cause a mishap 	<ul style="list-style-type: none"> • Director, Code 300

In all cases, the NASA Office of the Inspector General and the Office of the Chief Counsel shall be notified if it is suspected that a mishap resulted from criminal activity.

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Appendix A – Definitions

- A.1 Goddard Incident Commander (GIC)** – Code 240, the Security Division, has responsibility for the overall management of an emergency incident and will identify the GIC during emergency operations. Designation and responsibilities of the GIC for spills and releases are defined in the Integrated Contingency Plan.
- A.2 Hazardous Material** - any item or agent (biological, chemical, physical) which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.
- A.3 Hot Zone** – Zone established on a hazardous materials/waste emergency scene. The area in which remediation or containment work is performed during a hazardous materials incident is considered the hot zone, for which individuals must be trained and prepared to enter and leave through specific corridors.
- A.4 Safety First Responder** - OS&H representative (civil servant or contractor) responding to a notification of an emergency via the Center radio system alert tones or the Center emergency management paging system.

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Appendix B – Acronyms

FMD Facilities Management Division
GIC Goddard Incident Command
GPR Goddard Procedural Requirement
GSFC Goddard Space Flight Center
HQ Headquarters
ICP Incident Command Post
IDLH Immediately Dangerous to Life and Health
IRIS Incident Reporting Information System
IRT Initial Response Team
OS&H Occupational Safety & Health Division
OSHA Occupational Safety and Health Administration
OSMA Office of Safety and Mission Assurance
PPE Personal Protective Equipment
WI Work Instruction

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CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	02/09/2010	Initial Release
A	03/16/2012	Update response procedure and Table A.

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