

**E/L 0954**

# **NIMS ICS All-Hazards Safety Officer Course**

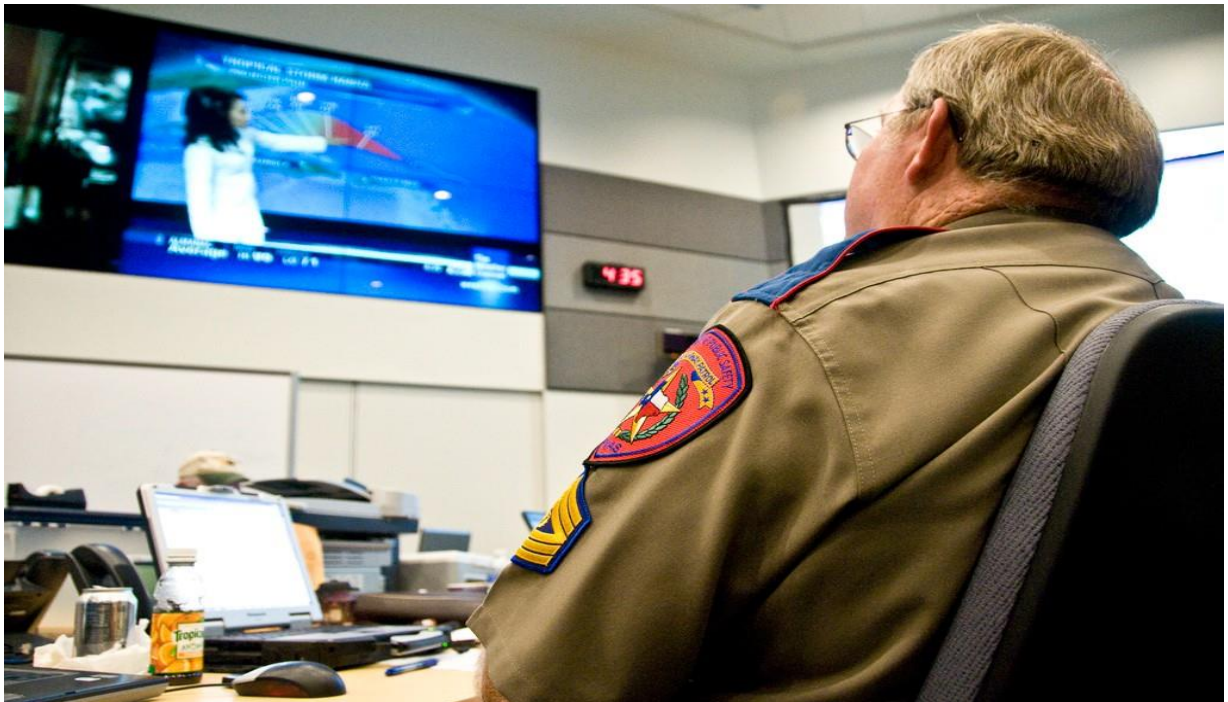


**FEMA**

## **Student Manual**

March 2025

Version 1.0



*A Texas Department of Public Safety officer looks at a weather report in the Alamo Command Center in San Antonio.*

This page intentionally left blank.

## Table of Contents

Unit 1: Course Introduction .....	5
Supplemental Materials.....	15
Unit 2: Rules, Regulations, and Standards .....	21
Supplemental Materials.....	41
Unit 3: Overview of the Safety Officer’s Role .....	49
Supplemental Materials.....	61
Unit 4: Obtaining Incident Safety Information.....	105
Supplemental Materials.....	119
Unit 5: Identifying Hazards and Risks .....	129
Supplemental Materials.....	141
Unit 6: Prioritize and Manage Hazards and Risks .....	151
Supplemental Materials.....	169
Unit 7: Incident Action Plan Safety Analysis .....	177
Supplemental Materials.....	189
Unit 9: Incident Safety Plan .....	219
Supplemental Materials.....	235
Unit 10: Coordination with the Logistics Section .....	245
Supplemental Materials.....	259
Unit 11: Operations and General Health and Welfare.....	263
Supplemental Materials.....	283
Unit 12: Special Situations.....	293
Supplemental Materials.....	311
Unit 13: Demobilization and Closeout.....	327
Supplemental Materials.....	335

This page intentionally left blank.

---

# Unit 1: Course Introduction

STUDENT MANUAL

---

---

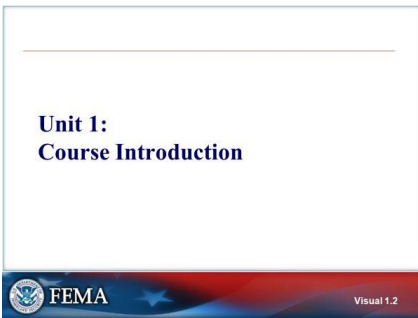
---

This page intentionally left blank.



Visual 1.1

## E/L 0954: ALL-HAZARDS SAFETY OFFICER COURSE



Visual 1.2

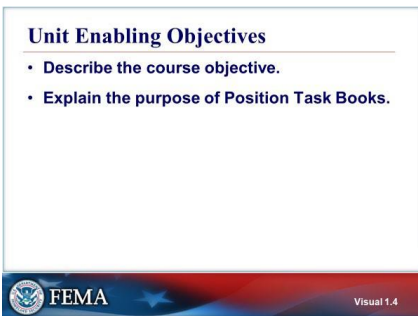
## UNIT 1: COURSE INTRODUCTION



Visual 1.3

## UNIT TERMINAL OBJECTIVE

Identify the course objective and position-specific resource materials for the position of Safety Officer.



Visual 1.4

## UNIT ENABLING OBJECTIVES

- Describe the course objective.
- Explain the purpose of Position Task Books.

The Pretest and Final Exam are based on the Unit Enabling Objectives from Units 2 – 13.



Visual 1.5



Visual 1.6



Visual 1.7



Visual 1.8

## UNIT OVERVIEW

This visual provides a general overview of the topics to be covered in the unit.

Through this unit, students will learn the objectives of the course, be instructed on the use and purpose of Position Task Books and receive Safety Officer versions of these resources.

## ADMINISTRATIVE CONSIDERATIONS

## INTRODUCTIONS

The instructor gives an overview of their personal experience as a Safety Officer and the agencies in which they have worked.

You will be asked to introduce yourself and provide an overview of your incident response experiences and ICS background as well as your reasons for wanting to be a Safety Officer.


After the introductions, the instructor will administer the pretest.

## EXPECTATIONS

Share your expectations for the course.

**Course Objective**

Upon completion of this course, students will demonstrate, through activities and a Final Exam, the duties, responsibilities, and capabilities of an effective Safety Officer.

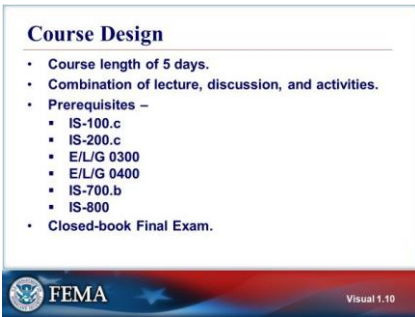


FEMA Visual 1.9

Visual 1.9

## **COURSE OBJECTIVE**

Upon completion of this course, students will demonstrate, through activities and a Final Exam, the duties, responsibilities, and capabilities of an effective Safety Officer.



Visual 1.10

## COURSE DESIGN

The course is scheduled to be 5 days in length. Direct students to the Course Schedule and point out the units to be covered through the course period.

Through a combination of lecture, discussion, and activities, students, upon course completion, will be provided the knowledge to meet the objectives of the course. Student interaction and participation will be integral to this process.

The course materials were developed as a position-specific course focusing on the duties and responsibilities of one member of IMT (in this course, Safety Officer) in an all-hazards context.

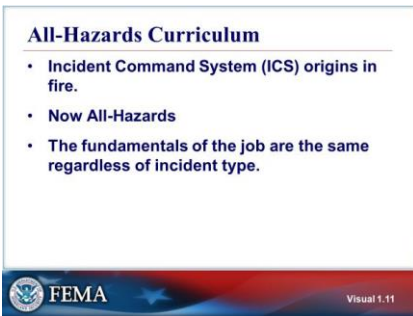
### Prerequisites:

- IS-0100 An Introduction to the Incident Command System, ICS 100
- IS-0200 Basic Incident Command System for Initial Response, ICS 200
- E/L/G 0300 Intermediate Incident Command System for Expanding Incidents, ICS 300
- E/L/G 0400 Advanced Incident Command System for Complex Incidents, ICS 400
- IS-0700 An Introduction to the National Incident Management System
- IS-0800 National Response Framework (NRF)

### Recommended courses:

- E/L/G 0191 Emergency Operations Center/Incident Command System Interface
- O 305 Type 3 AHIMT Training Course (US Fire Administration)
- O 337 Command & General Staff Functions for Local Incident Management Team (National Fire Academy)

**Closed-Book Final Exam** - To receive a certificate of completion for the course, students must obtain a 75% or higher on the final exam. The final exam will be closed-book, one hour will be allotted for its completion, and the



Visual 1.11

final exam's questions will be based on the Unit Enabling Objectives for Units 2 - 13. Unit 1 will not be tested in the pretest nor the final exam.

## ALL-HAZARDS CURRICULUM

NIMS ICS All-Hazards Position Specific training was born out of the terrorist attacks on the World Trade Center and the Pentagon on September 11, 2001, and was reinforced by the natural disasters of Hurricanes Katrina and Rita in 2005.

These incidents underscored the need for the nation's emergency managers and first responders to develop an improved posture for protection, prevention, mitigation, response, and recovery through an "all hazards" strategy. At the core of this realization is the need for standardized training in systems and performance competencies that enable emergency management and response resources to execute the essential tasks needed to overcome any challenge.

This curriculum was validated by a varied cadre of course developers with Safety Officer backgrounds.

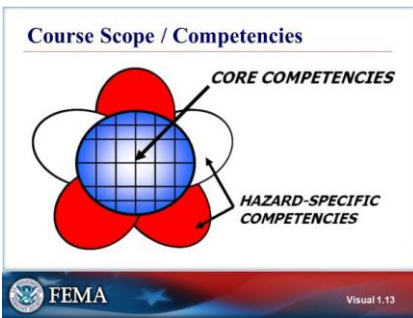
Given our personal incident experiences, each of us - have a limited perspective (by no means All-Hazards).

A Safety Officer needs to fundamentally possess the same core knowledge, skills, and abilities whether they are responding to a fire, an oil spill, a mass-casualty incident, or other incident. In other words, regardless of the hazard, discipline, or incident, the essential job of a Safety Officer is the same.

Therefore, students should not be deterred if one "hazard" from the list is spoken to more than another. Students can still obtain critical insight to the position and should add examples from their own disciplines to the discussion.



Visual 1.12



Visual 1.13

## DISCUSSION ACTIVITY

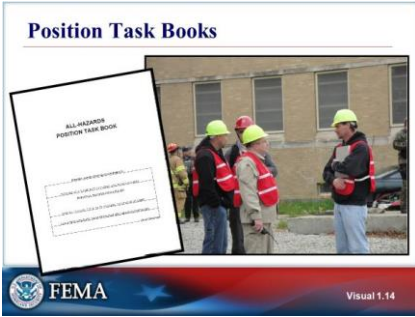
## COURSE SCOPE/COMPETENCIES

Competency is a broad description that groups core behaviors necessary to perform a specific function. The Flower Diagram illustrates the concept that successful performance of the tasks, duties, activities in any position requires both core and incident-specific competencies.

### Key Points:

- Core competencies are the competencies required of a Safety Officer regardless of discipline.
- Hazard-specific competencies are those required to perform in a particular discipline, such as law enforcement, fire, public health, HAZMAT, EMS, public works, etc.
- The center of the flower represents the core competencies of the position.
- The petals represent the hazard-specific competencies associated with specific disciplines.
- You cannot be competent as a Safety Officer with only the center of the flower or only the petals—“The flower needs to be complete” to ensure qualification.

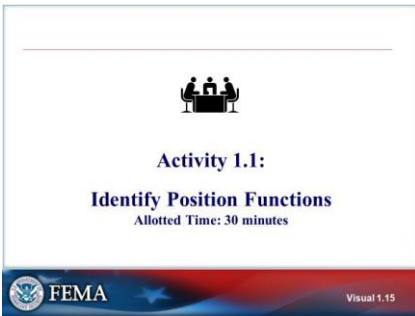
This course will help to establish core competencies (center of the flower) for the Safety Officer position. The hazard-specific competencies will have to be developed through additional agency or discipline training, field training, and the completion of the Safety Officer Position Task Book, discussed on the next visual.



Visual 1.14

## POSITION TASK BOOKS

PTBs are the primary tools for observing and evaluating the performance of trainees aspiring to a new position within ICS. PTBs allow documentation of a trainee’s ability to perform each task, as prescribed by the position. Successful completion of all tasks is the basis for recommending certification.

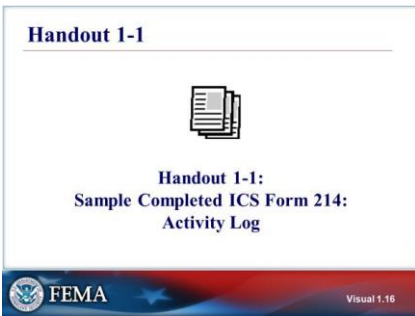


Visual 1.15

## ACTIVITY 1.1: IDENTIFY POSITION FUNCTIONS

The instructor will explain Activity 1.1.

You will have 15-30 minutes to complete the activity.

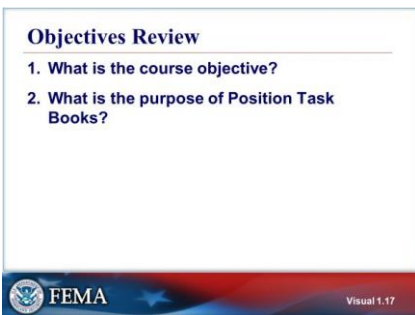


Visual 1.16

## HANDOUT 1-1: SAMPLE COMPLETED ICS FORM 214, ACTIVITY LOG

The ICS Form 214 should document important factors, decisions, and elements such as the “three A’s” – Actions, Agreements, and Accidents:

- **Actions** taken to prevent hazardous activities.
- **Agreements** made with Supervisors or others to correct unsafe conditions.
- **Accidents** that occurred at the incident site



Visual 1.17

## OBJECTIVES REVIEW

### Unit Enabling Objectives

- Describe the course objective.
- Explain the purpose of Position Task Books.

This page intentionally left blank.

# Supplemental Materials

This page intentionally left blank.

## Activity 1.1: Identify Position Functions

# Activity 1.1 Overview—Unit 1

### Purpose

This activity will familiarize students with a position's functions as defined in a position task book (PTB).

### Objectives

Students will:

- Identify functions performed as part of their job that match the responsibilities of the IMT position.
- Be able to identify basic requirements of the IMT position as identified in the Position Task Book.

### Activity Structure

This activity is scheduled to last approximately 30 minutes, including small group discussion and presentation of group findings. Students will review the Position Task Book (PTB) associated with this course and identify their current job responsibilities that are like those identified in the PTB. This analysis should stay at the Competencies level. Each group will present their findings to the rest of the group.

### References

**FEMA's National Qualification System (NQS) PTBs** identify the competencies, behaviors, and tasks that personnel should demonstrate to become qualified for a defined incident position. A copy of the NQS PTB for the position in this course is included as a separate PDF file in the course materials. NQS PTBs can also be downloaded from <https://www.fema.gov/national-qualification-system>. NQS is not the only PTB in common use and other PTBs may be used for this activity. The All-Hazards Incident Management Team Association (AHIMTA) has developed All-Hazards IMT PTBs which are available at <https://www.ahimta.org/ptb>. The National Wildfire Coordination Group (NWCG) has developed wildland firefighting PTBs which are available at <https://www.nwcg.gov/publications/position-taskbooks>.

### Rules, Roles, and Responsibilities

Following are the specific activities / instructions for your participation in the activity:

1. Within your work group, select a group spokesperson.
2. Review the PTB. Looking at the Competencies (do not delve into Behaviors or Tasks), identify functions and duties that you perform during your regular job and that are listed in the PTB.
3. Write the common functions/duties/responsibilities on easel pad paper.
4. Present your list to the rest of the class.

**Instructors** moderate discussions, answer questions and provide additional information as required.

## Activity 1.1 Schedule

Activity	Duration	Participation Type
Activity Introduction and Overview	2 minutes	Classroom
Discussion / Documentation	15 minutes	Small Groups
Debrief / Review	15 minutes	Classroom

## Handout 1-1: Sample Completed ICS Form 214: Activity Log

Refer to EL 954\_HO\_1-1\_ICCS\_Form\_214.pdf

### Key points about information logged on the ICS Form 214.

The purpose of the ICS Form 214 is to provide documentation of 'significant' activities you have worked on when on-duty. As with all documentation about an incident, it serves as a record of actions and activities that are part of the official documentation and timeline of the incident.

There is therefore a dual use for this documentation. First as your personal reminder list / memory jog; and second as proof of action taken in fulfilling your official duties.

1. 0730 Noted the briefing and my announcement of contact info. This is my personal record of having provided this critical information. Benefits of noting this are that it is my proof that I provided the info in case someone claims to have not received it.
2. 0800 Assigned Ed Gross to track down AREP from Tri-County Ambulance Service....
  - a. This serves as a reminder to me to follow up later if I haven't heard back from Ed and/or Tri-County Ambulance.
  - b. Also, a documentation that we have tried to establish contact and have not yet done so.
3. 0930 Baker County Commissioner called...
  - a. Noted who I informed and the assignment of responsibilities
4. 0945 Ed contacted ambulance AREP
  - a. Noted completion of task assignment #2 above.
  - b. Noted cause of problem for later AAR follow-up and possible system change on future incidents.
5. 1200 SO told me...
  - a. Any safety issue is potentially critical. Noted my involvement in this issue.
  - b. Potential follow-up with both SO and AREP later on
6. 1300 Parker County AREP wants fire engines back
  - a. Very significant issue
  - b. Documented that I informed the two critical C&G staff about this development.
  - c. May need to follow-up later.

This page intentionally left blank.

---

# Unit 2: Rules, Regulations, and Standards

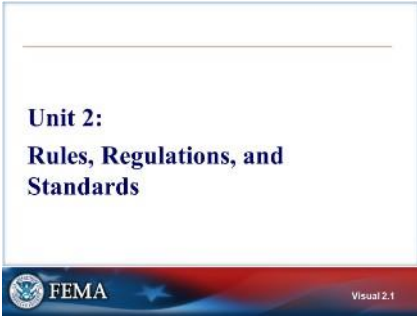
STUDENT MANUAL

---

---

---

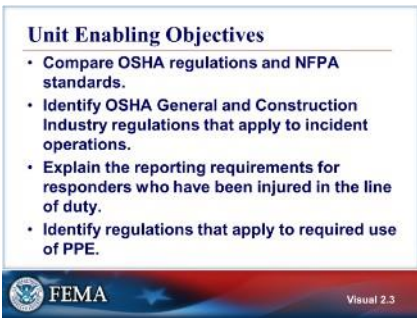
This page intentionally left blank.



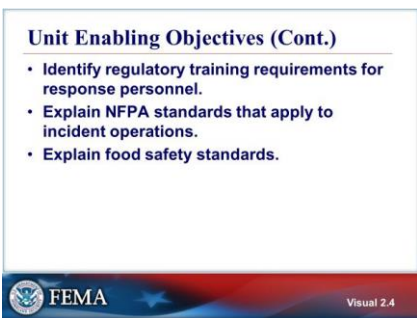
Visual 2.1



Visual 2.2



Visual 2.3



Visual 2.4

## UNIT 2: RULES, REGULATIONS, AND STANDARDS

### UNIT TERMINAL OBJECTIVE

Explain the OSHA regulations and NFPA standards to response operations.

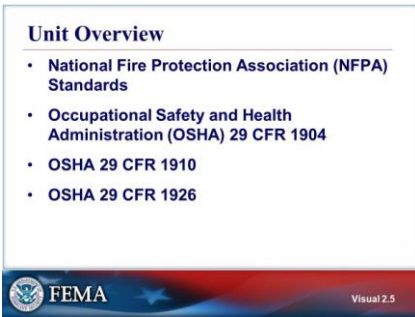
### UNIT ENABLING OBJECTIVES

- Compare OSHA regulations and NFPA standards.
- Identify OSHA General and Construction Industry regulations that apply to incident operations.
- Explain the reporting requirements for responders who have been injured in the line of duty.
- Identify regulations that apply to required use of Personal Protective Equipment (PPE).

### UNIT ENABLING OBJECTIVES (CONT.)

- Identify regulatory training requirements for response personnel.
- Explain NFPA standards that apply to incident operations.
- Explain food safety standards.

The Final Exam is based on the Unit Enabling Objectives.



Visual 2.5

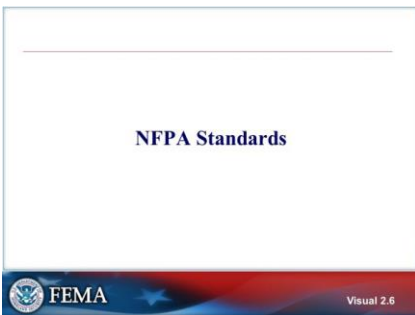
## UNIT OVERVIEW

This unit explains the OSHA regulations and NFPA standards that govern a Safety Officer.

- National Fire Protection Association (NFPA) Standards
- Occupational Safety and Health Administration (OSHA) 29 CFR 1904
- OSHA 29 CFR 1910
- OSHA 29 CFR 1926

The National Fire Protection Association (NFPA) is a global, nonprofit organization that creates and maintains private, copyrighted standards, and codes for usage and adoption by local governments to eliminate death, injury, property and economic loss due to fire, electrical and related hazards.

The Occupational Safety and Health Administration (OSHA) is an agency of the United States Department of Labor that sets and enforces protective workplace safety and health standards.




Visual 2.6

## NFPA STANDARDS

**NFPA 1500 Standard Fire Dept Occupational Safety, Health, & Wellness Program**


- Requires training programs to prevent death, injuries, and illnesses.
- Training commensurate with duties.
- Training in Incident Management System and accountability system.
- AHJ shall provide annual skills check.



Visual 2.7

**NFPA 1500 Chapter 5, Sec. 5.4: Special Operations**


- Specific requirements for members engaged in special operations incident.
- Advanced training Spec Ops Technician.
- Specific training for support members.
- Requires HAZMAT technician for mitigation activities.
- Required training for rescue technicians (NFPA 1006).



Visual 2.8

**NFPA 1500 Chapter 8: Emergency Operations**

- Operations conducted in manner that recognizes hazards and prevents injury.
- ICS shall be used.
- IC shall integrate risk management into regular functions and strategic plan.
- Risk management shall be routinely employed by supervisory personnel.



Visual 2.9

## NFPA 1500 STANDARD ON FIRE DEPARTMENT OCCUPATIONAL SAFETY, HEALTH, & WELLNESS PROGRAM

Key provisions of NFPA 1500 include:

- Requires training programs to prevent death, injuries, and illnesses.
- Training commensurate with duties.
- Training in Incident Management System and accountability system.
- Authority Having Jurisdiction (AHJ) shall provide annual skills check.

## NFPA 1500 CHAPTER 5, SEC. 5.4: SPECIAL OPERATIONS


- Specific requirements for members engaged in special operations incident.
- Advanced training Special Operations Technician.
- Specific training for support members.
- Requires HAZMAT technician for mitigation activities.
- Required training for Rescue technicians is further defined in NFPA 1006, Standard for Rescue Technician Professional Qualifications Job Performance Requirements (JPR's) for Chapter 5 – General Requirements.

## NFPA 1500 CHAPTER 8: EMERGENCY OPERATIONS

- Operations conducted in manner that recognizes hazards and prevents injury.
- ICS shall be used.
- IC shall integrate risk management into regular functions and strategic plan.
- Risk management shall be routinely employed by supervisory personnel.

**NFPA 1500 Chapter 8: Emergency Operations (Cont.)**


- Special operations incident requires ISO.
- Personnel accountability used at all incidents.
- Operations in hazardous areas requires two or more personnel.
- RIT requires at least two members.
- Safety Officer involved in post incident analysis.



Visual 2.10

**NFPA 1521, Chapter 5: Functions of the Health & Safety Officer**


- Monitor risk management plan.
- Develop an incident risk management plan.
- Manage accident prevention plan.
- Investigate injuries and deaths.
- Ensure compliance with 29 CFR 1910.1030, Bloodborne Pathogens



Visual 2.11

**NFPA 1521, Chapter 6: Functions of the Incident Safety Officer**

- Integrate into ICS.
- Monitor incident conditions.
- Ensure use of personnel accountability system.
- Have appropriate training.
- HAZMAT Safety Officer shall meet NFPA 472.
- Incident Safety Officer shall investigate accidents, injuries and fatalities.



Visual 2.12

**NFPA 1500 CHAPTER 8: EMERGENCY OPERATIONS (CONT.)**

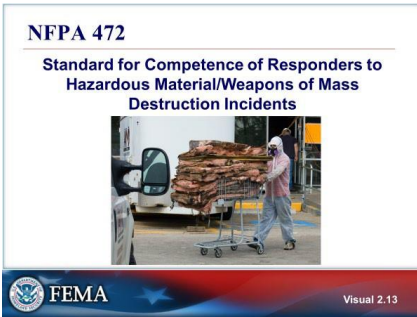
- Special operations incident requires an Incident Safety Officer (ISO).
- Personnel accountability used at all incidents.
- Operations in hazardous areas requires two or more personnel.
- Rapid Intervention Team (RIT) requires at least two members.
- Safety Officer involved in post incident analysis.

**NFPA 1521, CHAPTER 5: FUNCTIONS OF THE HEALTH AND SAFETY OFFICER**

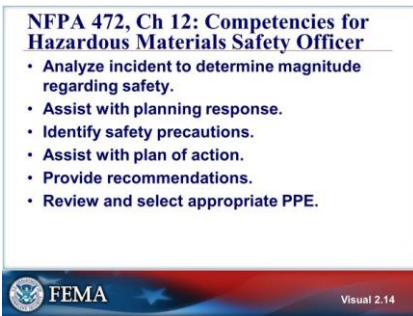
- Monitor risk management plan.
- Develop an incident risk management plan.
- Manage accident prevention plan.
- Investigate injuries and deaths.
- Ensure compliance with 29 CFR 1910.1030, Bloodborne Pathogens.

**NFPA 1521 CHAPTER 6: FUNCTIONS OF THE INCIDENT SAFETY OFFICER**

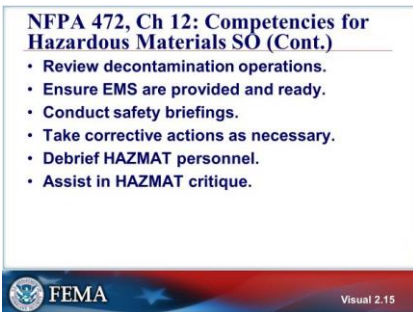
- Integrate into ICS.
- Monitor incident conditions.
- Ensure use of personnel accountability system.
- Have appropriate training.
- HAZMAT Safety Officer shall meet NFPA 472, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents.
- Incident Safety Officer shall investigate accidents, injuries and fatalities.



Visual 2.13



Visual 2.14



Visual 2.15

## NFPA 472

The NFPA 472 is the Standard for Competence of Responders to Hazardous Material/Weapons of Mass Destruction Incidents.

It is important for responders to have competence with hazardous materials.

### NFPA 472, CHAPTER 12: COMPETENCIES FOR HAZARDOUS MATERIALS SAFETY OFFICER



- Analyze incident to determine magnitude regarding safety.
- Assist with planning response.
- Identify safety precautions.
- Assist with plan of action.
- Provide recommendations.
- Review and select appropriate PPE.

### NFPA 472, CHAPTER 12: COMPETENCIES FOR HAZARDOUS MATERIALS SAFETY OFFICER (CONT.)

- Review decontamination operations.
- Ensure EMS are provided and ready.
- Conduct safety briefings.
- Take corrective actions as necessary.
- Debrief HAZMAT personnel.
- Assist in HAZMAT critique.




**NFPA 1670 Operations & Training for Technical Search & Rescue Incidents**

- Requires documented hazard identification and risk assessment.
- AHJ shall ensure use of PPE.
- Shall meet NFPA 1500 Chap. 5, 7, and 8.
- IC shall assign Safety Officer who meets NFPA 1521.

Visual 2.16



**NFPA 1670, Standard on Ops & Training for Technical S&R Incidents**  
Members physically and mentally fit for duty

Visual 2.17

**NFPA 1670, Std on Ops & Training for Technical S&R Incidents (Cont.)**

- Structural Collapse Technician must have:
  - Technician-level rope rescue.
  - Technician-level confined space rescue.
  - Technician-level vehicle / machinery.
  - Technician-level trench rescue.
- Awareness-level surface water rescue

Visual 2.18

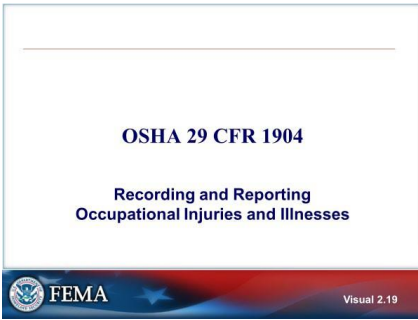
**NFPA 1670 OPERATIONS AND TRAINING FOR TECHNICAL SEARCH & RESCUE INCIDENTS**

- Requires documented hazard identification and risk assessment.
- AHJ shall ensure use of PPE.
- Shall meet NFPA 1500, Standard on Fire Department Occupational Safety, Health, and Wellness Program, Chap. 5, 7, and 8.
- IC shall assign Safety Officer who meets NFPA 1521, Standard for Fire Department Safety Officer Professional Qualifications.

**NFPA 1670, STANDARD ON OPERATIONS AND TRAINING FOR TECHNICAL SEARCH AND RESCUE INCIDENTS**

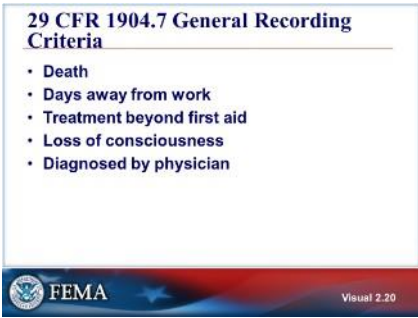
**NFPA 1670, STANDARD ON OPERATIONS AND TRAINING FOR TECHNICAL SEARCH AND RESCUE INCIDENTS (CONT.)**

- Technician-level rope rescue.
- Technician-level confined space rescue.
- Technician-level vehicle / machinery.
- Technician-level trench rescue.
- Awareness-level surface water rescue



Visual 2.19

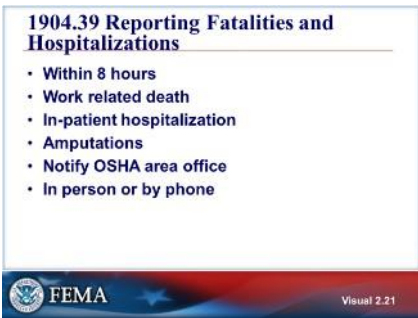
**OSHA 29 CFR 1904**



Visual 2.20

**29 CFR 1904.7 GENERAL RECORDING CRITERIA**

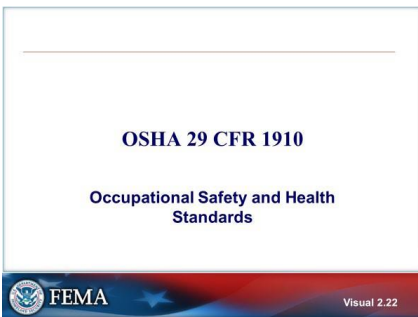
- Death
- Days away from work
- Treatment beyond first aid
- Loss of consciousness
- Diagnosed by physician



Visual 2.21

**1904.39 REPORTING FATALITIES AND HOSPITALIZATIONS**

- Within 8 hours
- Work related death
- In-patient hospitalization
- Amputations
- Notify OSHA area office
- In person or by phone




Visual 2.22

**OSHA 29 CFR 1910**

**29 CFR 1910.120 Hazardous Waste Operations and Emergency Response**

- Emergency response without regard to location.
- Exposed employees shall be trained on.
- Safety and health hazards.
- Use of personal protective equipment.
- Medical requirements.




FEMA Visual 2.23

Visual 2.23

**29 CFR 1910.120 Atmospheric Monitoring**

- Upon initial entry.
- Periodic monitoring.
- Work conducted at different site.
- When different operation is initiated.

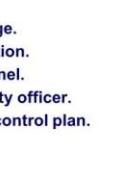


FEMA Visual 2.24

Visual 2.24

**29 CFR 1910.120 Emergency Response Plan**

- Procedures for handling.
- Assign individual in charge.
- Use of respiratory protection.
- Requires back-up personnel.
- Requires designated safety officer.
- Requires site safety and control plan.



FEMA Visual 2.25

Visual 2.25

**29 CFR 1910.120 HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE**

- Emergency response without regard to location.
- Exposed employees shall be trained on.
- Safety and health hazards.
- Use of personal protective equipment.
- Medical requirements.

**29 CFR 1910.120 ATMOSPHERIC MONITORING**


- Upon initial entry.
- Periodic monitoring.
- Work conducted at different site.
- When different operation is initiated.

**29 CFR 1910.120 EMERGENCY RESPONSE PLAN**

- Procedures for handling.
- Assign individual in charge.
- Use of respiratory protection.
- Requires back-up personnel.
- Requires designated safety officer.
- Requires site safety and control plan.

**29 CFR 1910.134 Respiratory Protection**

- Respirators shall be provided.
- Requires respiratory protection program.
- SCBA or SAR in IDLH environment.
- Medical evaluations required.
- Fit test requirement.
- Required maintenance and care.
- Required Grade D air.




FEMA Visual 2.26

Visual 2.26

**29 CFR 1910.136 Occupational Foot Protection**

- ANSI standard “USA Standard for Men’s Safety-Toe Footwear”.
- Required for work in areas where there is danger of foot injuries.
  - Falling or rolling objects.
  - Objects piercing sole.
  - Exposure to electrical hazards.




FEMA Visual 2.27

Visual 2.27

**29 CFR 1910.146 Permit-Required Confined Spaces (1 of 3)**

- Contains or may contain a hazardous atmosphere.
- Contains material that could engulf entrant.
- Internal configuration that could trap or asphyxiate person.
- Any serious safety or health hazard.



FEMA Visual 2.28

Visual 2.28

**29 CFR 1910.134 RESPIRATORY PROTECTION**

- Respirators shall be provided.
- Requires respiratory protection program.
- Self Contained Breathing Apparatus (SCBA) or Supplied Air Respirator (SAR) required in an Imminent Danger to Life Health (IDLH) environment.
- Medical evaluations required.
- Fit test requirement.
- Required maintenance and care.
- Required Grade D air (“Compressed breathing air shall meet at least the requirements for Grade D breathing air described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1”)

**29 CFR 1910.136 OCCUPATIONAL FOOT PROTECTION**


- ANSI standard “USA Standard for Men’s Safety-Toe Footwear”.
- Required for work in areas where there is danger of foot injuries.
  - Falling or rolling objects.
  - Objects piercing sole.
  - Exposure to electrical hazards.

**29 CFR 1910.146 PERMIT-REQUIRED CONFINED SPACES (1 OF 3)**

- Contains or may contain a hazardous atmosphere.
- Contains material that could engulf entrant.
- Internal configuration that could trap or asphyxiate person.
- Any serious safety or health hazard.

**29 CFR 1910.146 Permit-Required Confined Spaces (2 of 3)**

- Identifies required training.
- Duties of entrant, attendant, supervisor
- Requires atmospheric testing.
- Requires control of atmospheric and engulfment hazards.



FEMA Visual 2.29

Visual 2.29

**29 CFR 1910.146 PERMIT-REQUIRED CONFINED SPACES (2 OF 3)**

- Identifies required training.
- Duties of entrant, attendant, supervisor
- Requires atmospheric testing.
- Requires control of atmospheric and engulfment hazards.

**29 CFR 1910.146 Permit-Required Confined Spaces (3 of 3)**

- Atmospheric testing of confined spaces is required for two reasons:
  - To evaluate the hazard of the confined space.
  - To verify that acceptable entry conditions exist.

FEMA Visual 2.30

Visual 2.30

**29 CFR 1910.146 PERMIT-REQUIRED CONFINED SPACES (3 OF 3)**

- Atmospheric testing of confined spaces is required for two reasons:
  - To evaluate the hazard of the confined space.
  - To verify that acceptable entry conditions exist.

**29 CFR 1910.147 The Control of Hazardous Energy**

- Energy control procedures Lockout / Tagout devices.
- Required training to ensure understanding .
- Periodic inspections required to ensure compliance.

FEMA Visual 2.31


Visual 2.31

**29 CFR 1910.147 THE CONTROL OF HAZARDOUS ENERGY**

- Energy control procedures Lockout / Tagout devices.
- Required training to ensure understanding.
- Periodic inspections required to ensure compliance.

**29 CFR 1910.1030 Bloodborne Pathogens**

- Universal precautions shall be observed.
- Procedures to minimize splashing.
- Contaminated equipment shall be decontaminated or disposed.
- Employer provides PPE.



FEMA Visual 2.32

Visual 2.32

**29 CFR 1910.1030 BLOODBORNE PATHOGENS**

- Universal precautions shall be observed.
- Procedures to minimize splashing.
- Contaminated equipment shall be decontaminated or disposed.
- Employer provides PPE.

**29 CFR 1910.1030 Bloodborne Pathogens (Cont.)**

- Safety Officer shall ensure use of PPE.
- When removed, shall be placed in a designated area for decon or disposal.
- Employer provides HBV vaccine.



FEMA Visual 2.33


Visual 2.33

**29 CFR 1910.1030 BLOODBORNE PATHOGENS**

- Safety Officer shall ensure use of PPE.
- When removed, shall be placed in a designated area for decon or disposal.
- Employer provides Hepatitis B Vaccine (HBV).

**29 CFR 1910.1096 Ionizing Radiation**

- Includes alpha, beta, gamma, and x-ray.
- Survey as necessary.
- Supply personal monitors.
- Evacuation signal at least 75 decibels.
- Maintain exposure records.



FEMA Visual 2.34

Visual 2.34

**29 CFR 1910.1096 IONIZING RADIATION**

- Includes alpha, beta, gamma, and x-ray.
- Survey as necessary.
- Supply personal monitors.
- Evacuation signal at least 75 decibels.
- Maintain exposure records.

**29 CFR 1910.1200 Hazard Communications**

- Training provided to all employees regarding hazardous chemicals in the workplace.
- Training includes:
  - Methods to detect presence of chemicals.
  - Physical and health hazards.
  - Protective measures.

FEMA Visual 2.35

Visual 2.35

**29 CFR 1910.1200 HAZARD COMMUNICATIONS**

- Training provided to all employees regarding hazardous chemicals in the workplace.
- Training includes:
  - Methods to detect presence of chemicals.
  - Physical and health hazards.
  - Protective measures.

**OSHA 29 CFR 1926**

Safety and Health Regulations for Construction


FEMA Visual 2.36

Visual 2.36

**OSHA 29 CFR 1926**

**29 CFR 1926.20 General Safety and Health Provisions**

- Employer shall NOT require employees to work in dangerous conditions.
- Employer shall initiate and maintain programs to comply with this standard.
- Only qualified and experienced employees permitted to operate equipment and machinery.




Visual 2.37

Visual 2.37

**29 CFR 1926.21 Safety Training and Education**

- Requires training and education.
- Instruction to control or eliminate hazards or exposure to illness.
- Instruction for safe handling of harmful substances and protective measures.
- Instruction for safe handling of flammable liquids, gases, and toxic materials.



Visual 2.38

Visual 2.38

**29 CFR 1926.51 Sanitation**

- Adequate supply of drinking water.
- Adequate supply of toilets.
- Food handling free of contamination.






Visual 2.39

Visual 2.39

**29 CFR 1926.51 Sanitation (Cont.)**

- Hand washing facilities.
- Free from rodents, insects, other vermin.
- Sleeping quarters heated, lighted, and ventilated.

Visual 2.40

Visual 2.40

**29 CFR 1926.20 GENERAL SAFETY AND HEALTH PROVISIONS**

- Employer shall NOT require employees to work in dangerous conditions.
- Employer shall initiate and maintain programs to comply with this standard.
- Only qualified and experienced employees permitted to operate equipment and machinery.

**29 CFR 1926.21 SAFETY TRAINING AND EDUCATION**

- Requires training and education.
- Instruction to control or eliminate hazards or exposure to illness.
- Instruction for safe handling of harmful substances and protective measures.
- Instruction for safe handling of flammable liquids, gases, and toxic materials.

**29 CFR 1926.51 SANITATION**


- Adequate supply of drinking water.
- Adequate supply of toilets.
- Food handling free of contamination.

**29 CFR 1926.51 SANITATION (CONT.)**

- Hand washing facilities.
- Free from rodents, insects, other vermin.
- Sleeping quarters heated, lighted, and ventilated.

**29 CFR 1926.52 Occupational Noise Exposure**

- Protection against noise greater than 85 decibels.
- Hearing protection mandatory .
- Shall make hearing protectors available.



FEMA Visual 2.41

Visual 2.41

**29 CFR 1926.52 OCCUPATIONAL NOISE EXPOSURE**

- Protection against noise greater than 85 decibels.
- Hearing protection mandatory.
- Shall make hearing protectors available.

**29 CFR 1926.52 Occupational Noise Exposure (Cont.)**

- Employee choice of hearing protectors.
- Training required on:
  - Effects of noise on hearing.
  - Purpose of hearing protectors.
  - Purpose of audiometric testing.

FEMA Visual 2.42

Visual 2.42

**29 CFR 1926.52 OCCUPATIONAL NOISE EXPOSURE (CONT.)**

- Employee choice of hearing protectors.
- Training required on:
  - Effects of noise on hearing.
  - Purpose of hearing protectors.
  - Purpose of audiometric testing.

**29 CFR 1926.250 General Requirements for Storage**



- Materials stored to prevent collapse.
- Safe load limits on floors.
- Material separation required for non-compatible materials.
- Lumber stacked to be stable.
- Storage area free from trip and fire hazards.

FEMA Visual 2.43

Visual 2.43

**29 CFR 1926.250 GENERAL REQUIREMENTS FOR STORAGE**

- Materials stored to prevent collapse.
- Safe load limits on floors.
- Material separation required for non-compatible materials.
- Lumber stacked to be stable.
- Storage area free from trip and fire hazards.

**29 CFR 1926.251 Rigging Equipment for Material Handling**

- Equipment must be inspected prior to use.
- Wire rope safety factor greater than 5.
- Synthetic slings shall be marked.
- Synthetic slings removed from service if they contain:
  - Acid or caustic burns.
  - Melting or charring of sling surface.
  - Snags, punctures, tears, or cuts.
  - Broken or worn stitches.



Visual 2.44

**29 CFR 1926.251 RIGGING EQUIPMENT FOR MATERIAL HANDLING**

- Equipment must be inspected prior to use.
- Wire rope safety factor greater than 5.
- Synthetic slings shall be marked.
- Synthetic slings removed from service if they contain:
  - Acid or caustic burns.
  - Melting or charring of sling surface.
  - Snags, punctures, tears, or cuts.
  - Broken or worn stitches.

**29 CFR 1926.301 Hand Tools and 1926.302 Power-operated Hand Tools**

- Guards shall be used.
- PPE shall be provided and worn.
- Electric tools shall be grounded.
- Fuel Powered tools stopped while refueling.
- Pneumatic tools secured from disconnecting.
- Power actuated tools used by trained personnel only.






Visual 2.45

**29 CFR 1926.301 HAND TOOLS AND 1926.302 POWER-OPERATED HAND TOOLS**

- Guards shall be used.
- PPE shall be provided and worn.
- Electric tools shall be grounded.
- Fuel Powered tools stopped while refueling.
- Pneumatic tools secured from disconnecting.
- Power actuated tools used by trained personnel only.

**29 CFR 1926.350 Gas Welding and Cutting**

- Gas and oxygen manifolds in safe and ventilated area, NOT enclosed space.
- Hoses must be easily distinguishable.
- Torch tips cleaned and inspected.
- Oxygen cylinders and fittings kept away from oil and grease.

Visual 2.46

**29 CFR 1926.350 GAS WELDING AND CUTTING**

- Gas and oxygen manifolds in safe and ventilated area, NOT enclosed space.
- Hoses must be easily distinguishable.
- Torch tips cleaned and inspected.
- Oxygen cylinders and fittings kept away from oil and grease.

**29 CFR 1926.502 Fall Protection Systems Criteria and Practices**

- Install systems when required.
- Guardrail system of wood or wire rope.
- Personal fall arrest system with harness.
- Attached at point in back.
- Shall provide for prompt rescue.



FEMA Visual 2.47

Visual 2.47

**29 CFR 1926.502 Fall Protection Systems Criteria and Practices (Cont.)**  
Control access zones not less than 6 feet, not more than 25 feet from leading edge.

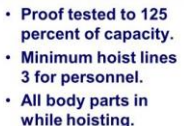


FEMA Visual 2.48

Visual 2.48

**29 CFR 1926.1400-1442 Cranes and Derricks in Construction**

- Proof tested to 125 percent of capacity.
- Minimum hoist lines 3 for personnel.
- All body parts in while hoisting.
- Tag lines shall be used except if create greater hazard.
- Traveling while hoisting personnel is prohibited.
- Personnel riding with material load is prohibited.

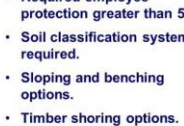


FEMA Visual 2.49

Visual 2.49

**29 CFR 1926.650-652 Excavations**

- Applies to all open excavations.
- Required employee protection greater than 5 ft.
- Soil classification system required.
- Sloping and benching options.
- Timber shoring options.
- Hydraulic and pneumatic shoring options.



FEMA Visual 2.50

Visual 2.50

**29 CFR 1926.502 FALL PROTECTION SYSTEMS CRITERIA AND PRACTICES**

- Install systems when required.
- Guardrail system of wood or wire rope.
- Personal fall arrest system with harness.
- Attached at point in back.
- Shall provide for prompt rescue.

**29 CFR 1926.502 FALL PROTECTION SYSTEMS CRITERIA AND PRACTICES (CONT.)**

**29 CFR 1926.1400-1442 CRANES AND DERRICKS IN CONSTRUCTION**

- Proof tested to 125 percent of capacity.
- Minimum hoist lines 3 for personnel.
- All body parts in while hoisting.
- Tag lines shall be used except if create greater hazard.
- Traveling while hoisting personnel is prohibited.
- Personnel riding with material load is prohibited.

**29 CFR 1926.650-652 EXCAVATIONS**

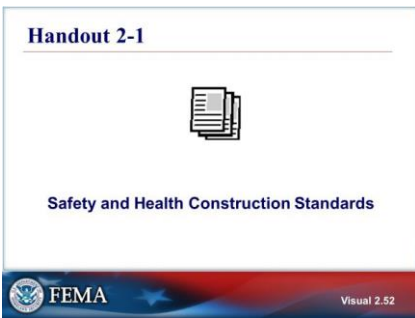
- Applies to all open excavations.
- Required employee protection greater than 5 ft.
- Soil classification system required.
- Sloping and benching options.
- Timber shoring options.
- Hydraulic and pneumatic shoring options



Visual 2.51

## FOOD SAFETY STANDARDS

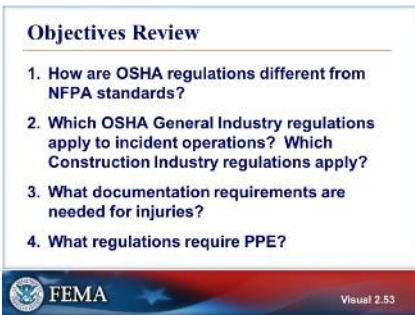
- ServSafe® is a food industry standard. It is a food and beverage safety training and certificate program administered by the National Restaurant Association. The program is accredited by ANSI and the Conference for Food Protection.
- Cross-contamination concerns.
- Storage.
- Preparation.
- Serving - food serving and preparation locations should be away from latrines, sleeping and shower areas, fuel storage and dispensing, hazardous materials, etc



Visual 2.52

## HANDOUT 2-1: SAFETY AND HEALTH CONSTRUCTION STANDARDS

Refer to Handout 2-1: Safety and Health Construction Standards.



Visual 2.53


## OBJECTIVES REVIEW

### Unit Enabling Objectives

- Compare OSHA regulations and NFPA standards.
- Identify OSHA General and Construction Industry regulations that apply to incident operations.
- Explain the reporting requirements for responders who have been injured in the line of duty.
- Identify regulations that apply to required use of Personal Protective Equipment (PPE).

**Objectives Review (Cont.)**

5. Which regulatory training requirements affect response personnel?
6. Which NFPA standards apply to incident operations?
7. Name a few food safety standards.

The image shows the FEMA logo on the left and the text "Visual 2.54" on the right, both set against a red and blue background.

Visual 2.54

**OBJECTIVES REVIEW (CONT.)**

- Identify regulatory training requirements for response personnel.
- Explain NFPA standards that apply to incident operations.
- Explain food safety standards.

This page intentionally left blank.

# Supplemental Materials

This page intentionally left blank.

## Handout 2-1: Safety and Health Construction Standards

**PLEASE NOTE: The regulations listed in this handout are current and are subject to change. In addition, this list is not intended to be complete. It is the Safety Officer's responsibility to ensure that all relevant and current regulations and guidelines are followed.**

Examples of relevant Occupational Safety and Health Administration (OSHA) guidelines and regulations:

- OSHA 29 CFR 1910.120
- OSHA 29 CFR 1910.146
- OSHA 29 CFR 1910.134
- OSHA 29 CFR 1910.1200
- OSHA 29 CFR 1926 Safety and Health Regulations for Construction
- OSHA 29 CFR 1910.1030

### Subpart D – Occupational Health and Environmental Controls

- 29 CFR 1926.50 – Medical Services and First Aid
- 29 CFR 1926.51 – Sanitation
- 29 CFR 1926.52 – Occupational Noise Exposure
- 29 CFR 1926.53 – Ionizing Radiation
- 29 CFR 1926.54 – Nonionizing Radiation
- 29 CFR 1926.55 – Gases, Vapors, Fumes, Dusts, and Mists
- 29 CFR 1926.56 – Illumination
- 29 CFR 1926.57 – Ventilation
- 29 CFR 1926.59 – Hazard Communication

### Subpart E – Personal Protective and Life Saving Equipment

- 29 CFR 1926.100 – Head Protection
  - OSHA requires workers to wear head protection when a possible danger of head injury exists from:
    - Impact with a fixed object
    - Falling or flying objects
    - Electrical shock and burns

Class	Use	Work Function
A	General service, limited voltage	General Construction
B	Utility service, high voltage	Electrical workers
C	Special service, no voltage (metal)	Oil fields, refineries

- 29 CFR 1926.101 – Hearing Protection
  - OSHA states that wherever it is not feasible to reduce the noise levels or duration of permissible noise exposures as specified in 1926.52, Table D-2, ear protective devices shall be provided.

### Types of Hearing Protection



Aural (inserts)



Superaural (hearing bands)



Circumaural ( earmuffs)

**Permissible Noise Exposures**

<b>Duration Per Day (Hours)</b>	<b>Sound Level (dBA) Slow Response</b>
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105
0.5	110

Source: 29 CFR 1926.52

**Selection of Hearing Protection**

- Noise reduction rating (NRR)
- Worker comfort

<b>Noise reduction without hearing protection</b>	<b>NRR of hearing protection</b>	<b>Noise reduction with hearing protection</b>
<b>100 dBA*</b>	<b>25 dB</b>	<b>75 dBA</b>

\* dBA = Decibels measured on the A-weighted scale

- 29 CFR 1926.102 – Eye and Face Protection
  - OSHA requires that workers be provided with eye and face protection equipment when machines or operations present potential eye or face injury from physical, chemical, or radiation agents.
- 29 CFR 1926.103 – Respiratory Protection
- 29 CFR 1926.104 – Safety Belts, Lifelines, and Lanyards
- 29 CFR 1926.105 – Safety Nets
- 29 CFR 1926.106 – Working Over or Near Water
- 29 CFR 1926.107 – Definitions Applicable to This Subpart

### Subpart O – Motor Vehicles, Mechanized Equipment, and Marine Operations

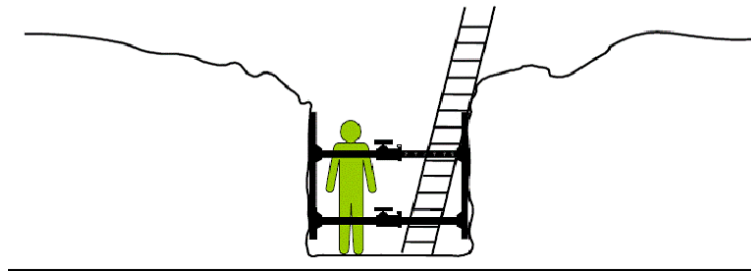
- 29 CFR 1926.600 – Equipment
- 29 CFR 1926.601 – Motor Vehicles
- 29 CFR 1926.602 – Material Handling Equipment
- 29 CFR 1926.603 – Pile Driving Equipment
- 29 CFR 1926.604 – Site Clearing
- 29 CFR 1926.605 – Marine Operations

### Subpart P – Excavations

- 29 CFR 1926.650 – Scope, Application, and Definitions
- 29 CFR 1926.651 – General Requirements
- 29 CFR 1926.652 – Requirement for Protective Systems

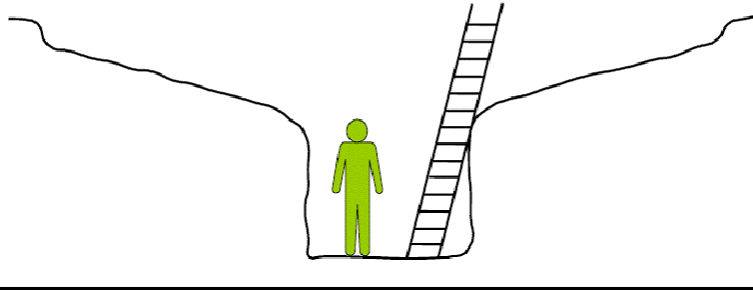
#### **Shoring**

A structure that supports the sides of an excavation and which is designed to prevent cave-ins



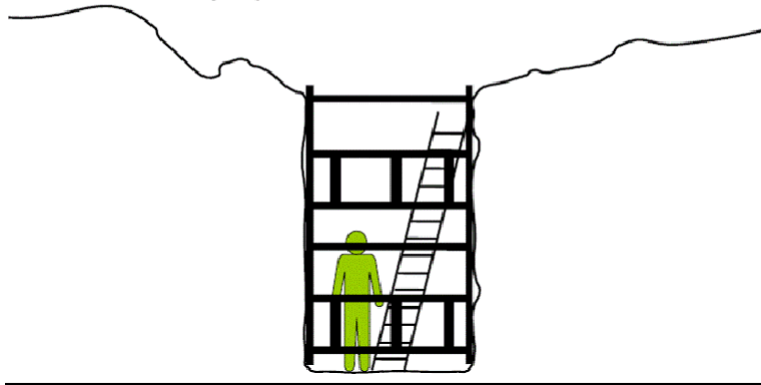
## Sloping

A method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins



## Shielding

A structure that is able to withstand the forces imposed on it by a cave-in, and thereby protect employees within the structure



- ✓ Excavations shall be protected from cave-ins, unless the excavation is in stable rock or is less than 5 feet deep and has been examined by a competent person to indicate that there is no potential of a cave-in.

### Conclusion:

- Safety and Health Compliance with 29 CFR 1910.120
- Safety and Health Construction Standards
- Toxic and Hazardous Substances Standards
- Safety and Health Program, Paragraph (b)

This page intentionally left blank.

---

# Unit 3: Overview of the Safety Officer's Role

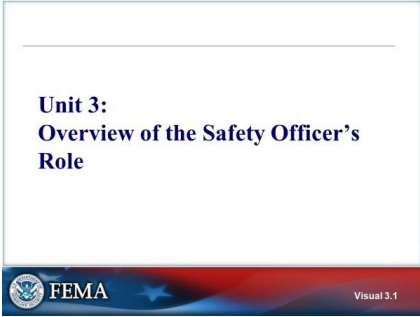
STUDENT MANUAL

---

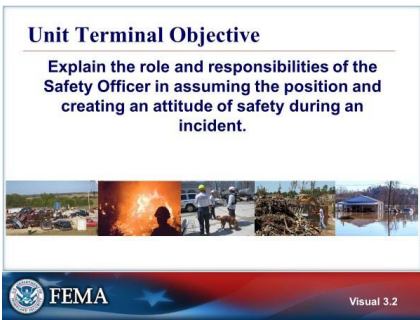
---

---

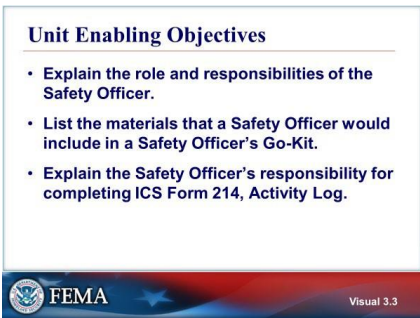
This page intentionally left blank.



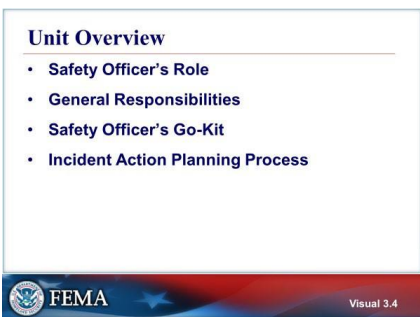
Visual 3.1



Visual 3.2



Visual 3.3



Visual 3.4

## UNIT 3: OVERVIEW OF THE SAFETY OFFICER'S ROLE

### UNIT TERMINAL OBJECTIVE

Explain the role and responsibilities of the Safety Officer in assuming the position and creating an attitude of safety during an incident.

### UNIT ENABLING OBJECTIVES

- Explain the role and responsibilities of the Safety Officer.
- List the materials that a Safety Officer would include in a Safety Officer's Go-Kit
- Explain the Safety Officer's responsibility for completing ICS Form 214, Activity Log.

The Final Exam is based on the Unit Enabling Objectives.

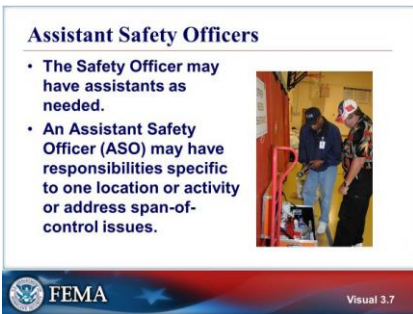
### UNIT OVERVIEW



Visual 3.5



Visual 3.6



Visual 3.7

## SAFETY OFFICER'S ROLE

The Safety Officer needs to create a culture of safety during the incident—from support personnel and incident personnel all the way to Command and General Staff.

## SAFETY IS ALWAYS FIRST!

Safety involves everyone. The role of the Safety Officer is to get every Responder at an incident to think about safety first. Ultimately, the safety officer alone can't ensure safety. Each responder must understand his or her responsibility to participate in planning for and executing incident response safely.

## ASSISTANT SAFETY OFFICERS


The Safety Officer may have as many Assistant Safety Officers as needed. Assistants may be assigned to functional areas or locations, to manage other Safety Officers, to provide technical expertise, or for any other need.

The need for Assistant Safety Officer's should be anticipated early.

**General Responsibilities (1 of 3)**

Safety Officer ensures safety, welfare, and accountability of incident personnel. Core tasks:

- Recognize potentially hazardous situations.
- Inform personnel of hazards.
- Ensure that special precautions are taken when extraordinary hazards exist.
- Ensure that adequate rest is provided to all personnel.
- Conduct accident investigations, root cause analysis and prepare related reports to be included in incident documentation.



Visual 3.8


**GENERAL RESPONSIBILITIES**

Core responsibilities of the Safety Officer:

- Recognize potentially hazardous situations: The Safety Officer needs to be able to quickly identify hazardous situations.
- Inform personnel of hazards: Everything that the Safety Officer discovers needs to be communicated up and down the chain of command—to Command and General Staff, Assistants, and incident personnel.
- Ensure that special precautions are taken when extraordinary hazards exist.
- Ensure that adequate rest is provided to all personnel: Without proper rest, or when individuals work too hard and are under too much stress, injuries, loss of temper, exhaustion, and illness occur. With the mentality of first responders, they won't stop working unless they are made to.
- Conduct accident investigations, root cause analysis and prepare related reports to be included in incident documentation.

**General Responsibilities (2 of 3)**

- Establish and maintain positive interpersonal and interagency working relationships.
- All personnel deserve equal respect.






Visual 3.9

**GENERAL RESPONSIBILITIES (CONT.)**

The Safety Officer is responsible for safety of everyone working during the incident or at the incident site. The primary focus will be responders, but the safety officer must consider the safety of everyone.

**General Responsibilities (3 of 3)**

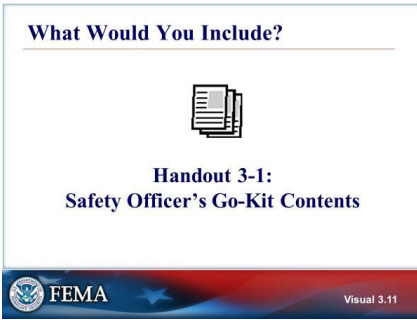
- Gather information necessary to assess incident assignment.
  - General
  - Mobilization
  - Incident Activities
  - Demobilization

Visual 3.10

**GENERAL RESPONSIBILITIES (CONT.)**

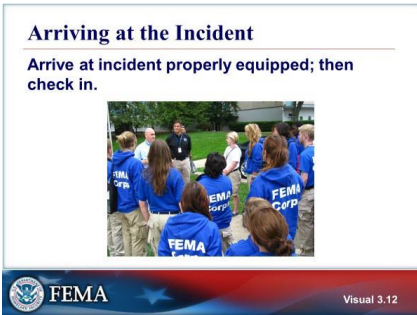
Gathering information is a main function of the Safety Officer and should begin as soon as deployment orders are issued.



Visual 3.11

## WHAT WOULD YOU INCLUDE?

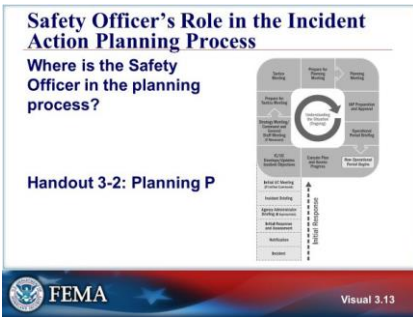
Refer to Handout 3-1: Safety Officer's Go-Kit Contents.



Visual 3.12

## ARRIVING AT THE INCIDENT

Check-in is very important to let personnel at the incident know that you are available, to make sure that your family or agency can find you if they need to, and to make sure that you get paid.



Visual 3.13

## SAFETY OFFICER'S ROLE IN THE INCIDENT ACTION PLANNING PROCESS

Refer to Handout 3-2, Operational Period planning Cycle (Planning P) and review.

The stem of the Planning P is the initial response phase. The Safety Officer may not be there, but he or she needs to know the decisions that were made about objectives, strategies, and team organization.

The Safety Officer has his or her first main role at the Tactics Meeting, which is attended by the Operations Section Chief and persons who can derail the Initial Operational Plan: the Safety Officer, who can say what safety mitigations will be required, and the Resource Unit or Planning Section, who can say whether those resources are available.

The Planning Meeting is not a formal meeting but rather a block of time where the Operations Section develops ICS Form 215, Operational Planning Worksheet. The Safety Officer works with the Operations Section Chief in this process to discover what is being planned and to begin to prepare ICS Form 215A, Incident Safety Analysis.

The Planning Meeting produces completed ICS Forms 215 and 215A that all members of the team can support. This is the Safety Officer's big role, where he or she displays and explains the mitigations that are necessary for the proposed operations. The Safety Officer also reviews and approves the ICS Form 206, Medical Plan, and provides input into the development of the ICS Form 202 (Incident Objectives) and 204 (Assignment List). He also reviews the ICS Form 205 (Incident Radio Communication Plan) for familiarity. The Safety Officer also creates the ICS Form 208, Safety Message/Plan. The Safety Message/ Plan is an optional form that expands on the Safety Message and the Site Safety Plan and may be included in the Incident Action Plan.

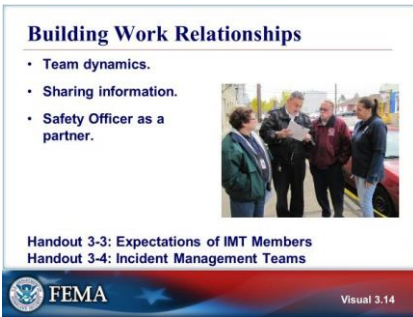
At the Operational Period Briefing, the Safety Officer reminds incident personnel about critical issues. Specific briefings for different operational groups usually follow.

As tactical operations begin and are evaluated, the Safety Officer monitors them for compliance with safety regulations and standards, recommended mitigations and any changes in the situation that renders operations unsafe, adjusting as necessary. The Safety Officer has the authority to alter, suspend or terminate unsafe acts or operations.

The Safety Officer participates in planning to help the Operations Section keep persons safe, not to derail the Operational Plan.

The Safety Officer also evaluates support operations, i.e., logistics, makes recommendations to mitigate associated hazards, and monitors along with tactical operations.

The Safety Officer has a key role in the demobilization process and ensures that all demobilization activities are performed in a safe manner, all personnel are properly rested, and all vehicles are inspected and are in safe operational condition prior to being demobilized from the incident.



Visual 3.14

## **BUILDING WORK RELATIONSHIPS**

### **Team Dynamics**

For a Type-III IMT where the players are known beforehand, it is important to get to know how the other members of the team like to work, interact, and share information, so that all personnel can function efficiently as a team under highly stressful conditions. This is work that can be done before the incident so that the Safety Officer can dive right in upon assignment.

### **Information Sharing**

The Safety Officer needs to share information with everyone at the incident, so having relationships with people and knowing how to communicate with them is important.

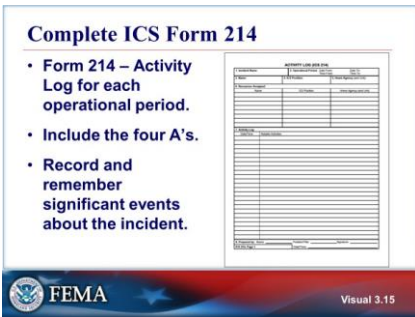
In addition, the Safety Officer needs to ensure that all personnel trust the Safety Officer and buy into his or her role so that they will volunteer information about unsafe situations.

### **The Safety Officer as a Partner**

The Safety Officer needs the cooperation of all incident personnel. It is important to be seen as a partner so that his or her observations (or investigations and mitigations) are seen as helpful, not burdensome.

The Safety Officer needs to convey the attitude of “Safety First” and get others to correct themselves when working in unsafe conditions, so it is important to be seen as a partner, not a nuisance.

Refer to Handout 3-3: Expectations of IMT Members and Handout 3-4, Incident Management Teams. Both are valuable references outside of the course.



## COMPLETE ICS FORM 214

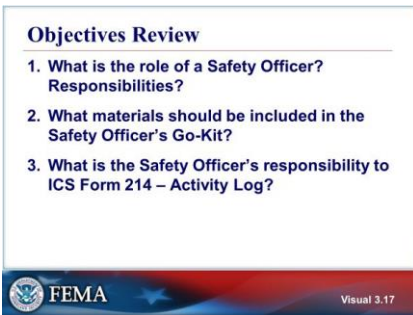
There are two reasons that the Safety Officer needs to pay particular attention to ICS Form 214:

- It is a legal document. The ICS Form 214 is a record of what the Safety Officer identified as hazards and did to prevent accidents. This ICS Form may be used to determine what actions the incident command took to ensure safety. It is possible that a safety officer could even be held personally liable for an accident that was preventable
- Because the Safety Officer can't remember everything, ICS Form 214 helps him or her develop briefings, accident reports, and after-action reports on the incident.
  - It also informs the Safety Officer about events that occurred while he or she was off-duty or off-site, and helps the Safety Officer remember and explain why he or she took certain actions at the incident site.

The Safety Officer should keep copies of the forms he or she submits to the Documentation Unit in case there are questions about an issue after the incident. The Safety Officer may be queried in a follow-up accident report or in a compensation/claims dispute, and he or she will want these notes as reminders of what happened and what he or she did.



Visual 3.16



Visual 3.17

## USING THE ACTIVITY LOG

The ICS Form 214, Activity Log can also be used during the incident to keep track of information and incident trends that need to be addressed in briefings or Safety Messages.

The Activity Log can be used to keep track of all information that comes in from different Units or Assistant Safety Officers at the incident so that the briefing to Assistant Safety Officers is complete.

The Safety Officer can also use the Activity Log to help develop ICS Form 215A, Incident Action Plan Safety Analysis, ensuring that he or she remembers what problems were encountered previously that will need to be mitigated in future operations.

## OBJECTIVES REVIEW

### Unit Enabling Objectives

- Explain the role and responsibilities of a Safety Officer.
- List the materials that a Safety Officer would include in a Safety Officer's Go-Kit
- Discuss the Safety Officer's responsibility for completing ICS Form 214, Activity Log.

This page intentionally left blank.

# Supplemental Materials

This page intentionally left blank.

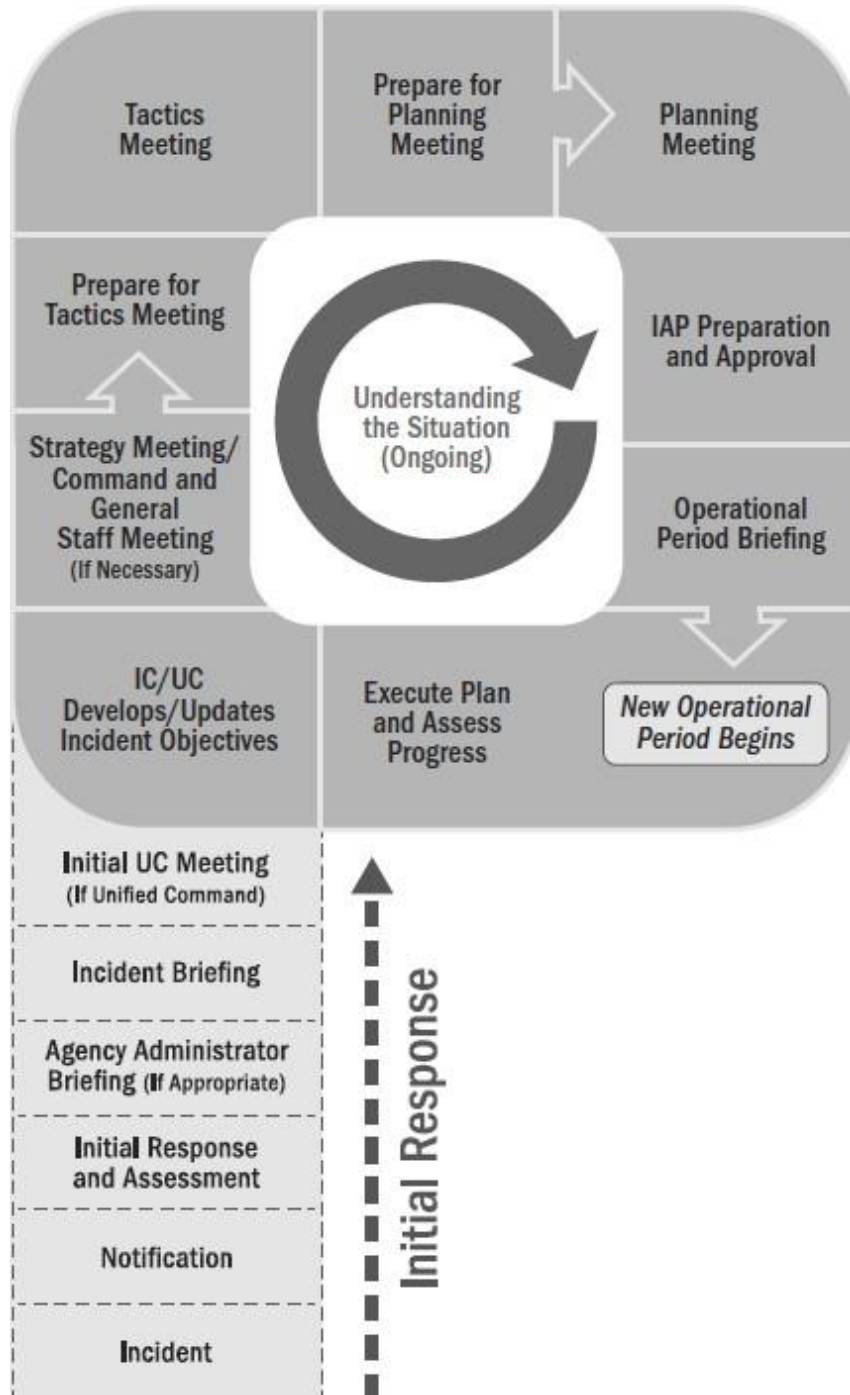
## Handout 3-1: Safety Officer's Go-Kit Contents

Suggested items for your Safety Officer Go-Kit:

- Appropriate guidelines for specific hazard (e.g., chemical, collapse, fire)
- Agency Health and Safety Code or equivalent safety handbook
- Flagging (several colors)
- Clipboard, writing tablet and pocket notebook
- Flashlight and batteries (intrinsically safe)
- Pencils and an assortment of markers
- Digital camera
- Handheld tape recorder and extra batteries
- Compass
- Alarm clock
- Rain gear
- Belt weather kit
- Light day pack
- Personal protective equipment
- Safety checklists
- Whistle
- Binoculars
- Programmable handheld radio and spare batteries
- Environmental and food safety testing equipment (such as thermometer, wet bulb for heat category, drinking water testing kit, food thermometer)
- ICS forms
  - ICS Form 206, Medical Plan
  - ICS Form 208 HM, Site Safety and Control Plans
  - ICS Form 213, General Message
  - ICS Form 214, Activity Log
  - ICS Form 215A, Incident Action Plan Safety Analysis
- Agency-specific forms/injury and accident forms
- Personalized Safety Message forms
- Cell phone, laptop, computer accessories

This page intentionally left blank.

**Handout 3-2: Operational Period Planning Cycle (Planning P)**



This page intentionally left blank.

## Handout 3-3: Expectations of IMT Members

### I. Incident Commander

#### A. Incident Commander's expectations of all Command & General Staff members

1. Attend all meetings and briefings on time and fully prepared.
2. Resolve all disputes and misunderstandings of the proposed plan PRIOR to the Planning Meeting. In other words, all IMT members should be able to support the plan as proposed by Operations at the planning meeting.
3. Essential Elements of Information (EEI): Thorough, constant and effective sharing of information as taught in the 420 class.
4. No matter how bad things may be, maintain the incident action planning process and present a positive and professional demeanor that leaves others with the knowledge that we are in control and will overcome the adversity.
5. Take every opportunity to promote NIMS and ICS and teach others how to use it.
6. Be an exemplary model of behavior and performance and take decisive and immediate action when others in your functional area are not performing to expected standards.
7. Always remember that the IMT exists to support the tactical operations. Keep them foremost in your thoughts and actions.
8. Take care of yourself; get adequate rest and nourishment.
9. Don't let setbacks or failure get you down. You didn't cause the incident; you are here to work with everyone else to bring order out of chaos, sometimes that takes a while.
10. Take care of each other. Watch for signs of stress or unusual fatigue in your team members. Help each other out when needed.

#### B. Incident Commander's expectations of Safety Officer

1. Be fully engaged in the incident action planning process and provide an appropriate and timely feedback.
2. Identify, manage, instruct and mitigate all hazards on the incident.
3. Keeps IC informed on trends/causes of accidents and illnesses.
4. Promote an attitude of 100% compliance with safety rules throughout the entire organization.
5. Provide a relevant and effective safety message in each IAP.

#### C. Incident Commander's expectations of Public Information Officer

1. Keep incident personnel up-to-date on major current affairs, both on and off the incident.
2. Coordinate with Liaison Officer in relations with Stakeholders.
3. Identify and keep IC informed of emerging issues concerning the incident in the political and public arenas.
4. Coordinate and represent the IC in off-site PIO activities such as the JIC or other agency information outlets.

5. Promote a positive impression of all information and interviews about the incident among any incident personnel who may encounter the public or media.
6. Ensure that the IC is appropriately prepared (not only mentally, but in appearance) when going in front of the camera.

D. Incident Commander's expectations of Liaison Officer

1. Address cooperating agency/stakeholder concerns and issues in a positive manner.
2. Track down, identify, and coordinate with all involved agencies and non-governmental organizations.
3. Provide a positive impression of incident to other agencies/stakeholders.
4. Exercise effective leadership and coordination of the Agency Representatives.
5. Coordinate with the PIO in relations with stakeholders.
6. Keep other IMT members constantly aware of issues of cooperating/assisting agencies.

E. Incident Commander's expectations of Logistics Section Chief

1. Manage the ordering process to ensure all incident needs are met.
2. Whenever possible, anticipate and maintain supplies ahead of the need.
3. Coordinate with supporting EOC to ensure effective and cordial relations.
4. Work closely with Operations to ensure complete logistical support and coordination with tactical operations.
5. Ensure the IC has the best facilities, equipment, and resources to manage the incident.
6. Do it all in a timely manner.

F. Incident Commander's expectations of Finance Section Chief

1. Advise and counsel all C&G staff about fiscal, contract, and other administrative matters.
2. Be prepared to provide cost analysis if requested by IC or responsible agency.
3. Attend all briefing and strategy sessions; provide input.
4. Coordinate with all staff members and cooperating agency representatives.
5. Possess good knowledge and ability to operate Finance Section effectively.
6. Coordinate with all responsible agencies to ensure their administrative requirements are met.

G. Incident Commander's expectations of Operations Section Chief

1. Recommend strategies to reach objectives.
2. Keep IC and other C&G members informed on planned tactics to ensure timely input and support by entire IMT.
3. Resource ordering within boundaries of fiscal, environmental, and other constraints.
4. Report unusual events, activities, as well as provide daily updates on the situation.

5. Insist that all known safety procedures be followed in all tactical planning and execution.
6. Maintain effective communication with all cooperating agencies and ensure that their input is solicited, respected, and given due consideration.

H. Incident Commander's expectations of Planning Section Chief

1. Exercise effective leadership and organization of all incident meetings and briefing.
2. Ensure that the entire organization follows the established incident action planning process, on time and accurately.
3. Maintain a thorough overview of all incident activities to ensure that complete information is provided for the incident action planning process.

**II. Safety Officer**

A. Safety Officer's expectations of Incident Commander

1. Emphasize safety in all communications and actions.
2. Support recommendations for changes in tactics for safety reasons.

B. Safety Officer's expectations of Public Information Officer

1. Be sensitive to any accidents or other safety problems on the incident.
2. Coordinate what is released to public, both media and locals.

C. Safety Officer's expectations of Liaison Officer

1. Provide specific information regarding problems with assisting and coordinating agencies.
2. Identify potential safety problems regarding above.

D. Safety Officer's expectations of Logistics Section Chief

1. Supply personnel/equipment needs.
2. Coordinate with Medical Unit.

E. Safety Officer's expectations of Finance Section Chief

1. Process accident reports in a timely manner.
2. Maintain constant exchange of information concerning safety matters such as excessive work hours or contract violations.
3. Coordinate accident/injury information from Compensation/Claims Unit.

F. Safety Officer's expectations of Operations Section Chief

1. Maintain a close working relationship in development of tactics.
2. Understand of possible hazards.
3. Be flexible enough to change tactics that cannot be mitigated.
4. Provide information on unusual hazards occurring in field.
5. No surprises.

G. Safety Officer's expectations of Planning Section Chief

1. Be included in strategy and tactics meetings.

2. Provide briefings on situation, critical/sensitive areas, resource types and status.
3. Be included in briefings.
4. Provide updates/feedback on safety responses.
5. Provide information on personnel/resources availability.

### **III. Public Information Officer**

#### **A. Public Information Officer's expectations of IC**

1. Approve press releases in a timely manner.
2. Cooperate with media requests.
3. Cooperate with public information meetings.
4. Provide direction on his/her media expectations.
5. Provide direction for social media messaging.

#### **B. Public Information Officer's expectations of Safety Officer**

1. Summarize safety issues.
2. Provide a daily report of any accidents/injuries.

#### **C. Public Information Officer's expectations of Liaison Officer**

1. Identify key agencies, their roles, and any issues.
2. Provide communications materials to cooperating and assisting agencies as well as outside interested organizations, as appropriate.
3. Help with communication strategy.

#### **D. Public Information Officer's expectations of Logistics Section Chief**

1. Review Communication Plan.
2. Provide transportation.
3. Provide facilities and communication equipment for information office, both at ICP and other locales.

#### **E. Public Information Officer's expectations of Finance Section Chief**

1. Provide current incident costs.
2. Provide press-worthy items.

#### **F. Public Information Officer's expectations of Operations Section Chief**

1. Provide information on resources, special activities, status of incident.
2. Be open to allowing media access.
3. Provide press-worthy items.

#### **G. Public Information Officer's expectations of Planning Section Chief**

1. Summarize development of incident.
2. Provide information on resource status.
3. Help with communication strategy.
4. Provide press-worthy items.

**IV. Liaison Officer****A. Liaison Officer's expectations of Incident Commander**

1. Advise and counsel on issues presented by assisting and cooperating agencies.
2. Provide overall mission and direction.
3. Show willingness to engage with stakeholders when necessary.

**B. Liaison Officer's expectations of Safety Officer**

1. Provide advice on hazards and issues particularly affecting cooperating and assisting agencies and organizations.
2. Provide input on "safety readiness" of above.

**C. Liaison Officer's expectations of Public Information Officer**

1. Mention cooperating and assisting agencies and organization in press releases.
2. Distribute information material so it can be given to above.
3. Provide coordination/notification of public meetings and press conferences.

**D. Liaison Officer's expectations of Logistics Section Chief**

1. Provide transportation, facilities, and communication equipment.
2. Provide status of ordered resources.
3. Provide medical status of any personnel injured or ill from cooperating and assisting agencies.

**E. Liaison Officer's expectations of Finance Section Chief**

1. Report excessive hours.
2. Report injuries and/or accidents to non-agency personnel.
3. Provide information on agency specific pay-offs.

**F. Liaison Officer's expectations of Operations Section Chief**

1. Ensure safety and welfare of all personnel.
2. Share information and rationale on use of other agency personnel.
3. Establish availability of special resources that may be available from cooperators for Operations utilization.

**G. Liaison Officer's expectations of Planning Section Chief**

1. Ensure that IAP accurately reflects all cooperating and assisting agencies and organizations.
2. Coordinate with status of above resources, e.g. planned demobilization.

**V. Planning Section Chief****A. Planning Section Chief's expectations of IC**

1. Provide incident objectives.
2. Provide Planning Meeting schedules/operational periods.
3. Provide deadlines for IAP.
4. Review and approve IAP.

**B. Planning Section Chief's expectations of Safety Officer**

1. Participate in Strategy/Tactics Meetings and preparation of ICS Form 215A, IAP Safety Analysis.
2. Continually update team on safety issues.
3. Participate in IAP (Safety message and ICS Form 204's, Assignment List).
4. Participate in Operational briefings.

**C. Planning Section Chief's expectations of Public Information Officer**

1. Provide times of press briefings.
2. Coordinate with information on ICS Form 209, Incident Status Summary.
3. Review information in press releases for accuracy.

**D. Planning Section Chief's expectations of Liaison Officer**

1. Review status of cooperating and assisting agency resources for accuracy.
2. Provide information regarding any issues of above.

**E. Planning Section Chief's expectations of Logistics Section Chief**

1. Confirm status of all resource orders.
2. Provide feedback on resource availability.
3. Timely submit Communication, Medical, Facility and Transportation Plans.
4. Provide adequate facilities and equipment for all Planning Units and preparation of the IAP.

**F. Planning Section Chief's expectation of Finance Section Chief**

1. Provide fiscal input to the Incident Action Plan.
2. Provide daily cost estimates.
3. Provide financial/cost benefit analysis information.

**G. Planning Section Chief's expectation of Operations Section Chief**

1. Provide strategy and tactics.
2. Provide timely notification of resource needs.
3. Provide necessary info for maps, etc.
4. Provide information needed to complete 204s.
5. Provide debriefing from field at end of shift.
6. Be on time and prepared for meetings.

## Handout 3-4: Incident Management Teams

### INCIDENT MANAGEMENT TEAMS

Thomas E. Tarp

California Department of Forestry and Fire Protection

#### Introduction

CONGRATULATIONS! You have been selected to be a member of an Incident Management Team. This could be a new assignment, or you could be a seasoned veteran. Regardless, to be so selected you must have demonstrated that you have the knowledge, experience and leadership felt necessary to manage some of the most complex emergencies. For many, this will be considered the pinnacle of their fire service or resource management career.

What you probably were not told about this appointment was some unique associated roles coming your way. Simultaneously, during an actual emergency, you will be considered a hero and a villain, an emergency management expert and a great waster of taxpayer money, a savior to some and a dunderhead to others.

You may also assume the positions of dictator, saint, reverend, executive, grand inquisitor, teacher, student, leader, follower, drill sergeant, politician, mother/father, as well as many others. Throw in very long work hours, more than just a little stress accompanied by too much caffeine, and it's a wonder you don't lock-up both mentally and physically. But you won't. Besides, it's not good for the image.

There are a couple of other things this appointment brings that probably were not explained either. There is an implied expectation that you will apply your training, knowledge, and experience to the best of your abilities while performing within the team setting. The other is never voiced but always expected; you will aid in the development of others encountered during a deployment so that one day they, too, can be expected to assume the responsibilities as you have. Give them an honest shot of your best and you will be personally surprised with the positive results.

There will be times when you will be blazing new trails in emergency management both for yourself and your team. There is also the chance it will be a new trial for your agency as a whole. Not much pressure, right?

Whenever an individual is faced with new and difficult challenges, some "experts" say we mentally revert to a past situation that comes close to mirroring our current problem and we base decisions and actions on that experience. It has been expressed in terms of each of us having a slide carousel in our brains with all past experiences cataloged

as individual slides. When confronted with a new challenge, we mentally hurry through the carousel looking for a situation that comes close to what is in front of us and pull successful actions from the slide to rectify whatever we are facing. As you face new challenges while on your Incident Management Team assignments, you will be tapping into your private slide collection continually. Is it current and full?

One purpose of this essay is to hopefully add some slides to your carousel based on the experiences of past Incident Management Teams. It is doubtful that any “correct” answers will be provided; in fact, that won’t even be attempted. And for very good reason.

Just as each emergency is different in demands it places upon you, your reaction to challenges presented during incidents will also be different. The fact something worked well for one but, quite possibly, will not for another is determined by each individual’s perception of a problem, finding a solution that meets his/her individual needs and different methods of actually applying resolution. Just as importantly, some situations do not have “correct” responses.

Mistakes or errors will happen to all of us. Hopefully, you will not have to make some of those accomplished during past deployments. There are more than enough new ones out there to stumble through that you should not plow old ground others have explored. One intent of this essay is to demonstrate some of those past experiences and their lasting impacts.

This material is presented only for your consideration when confronted with a new challenge. Some of the items detailed have successfully met the need on past incidents. Some are thoughts about what should have been applied.

None of the material presented is to be construed as policy, procedures or regulations condoned by any agency. Only thoughts on methods, processes and directions drawn from past experiences are offered for your consideration. If you happen to develop a few new slides for yourself along the way, so much the better.

### **Team Make-up and Procedures**

Some basic procedures are needed to streamline and codify team operations during times of emergency stress. By identifying certain performance standards prior to the crunching of time during an actual incident, all members will be able to react with less confusion and in a more professional manner. Some of the areas to consider are:

Written operating procedures. Different Incident Commanders (ICs) may expect different operations to be performed within a team setting. This is acceptable.

However, team members scurrying around trying to figure out what and how to perform is not. IC's should take time to write out basic operating guidelines so members know what is expected.

How an IC expects the team to work. This will include meeting schedules and acceptable timeframes (i.e., planning meetings lasting no more than 30 minutes requiring everyone to be ready for the meeting). Also included are acceptable get-away times for a dispatch, communication procedures while responding, which team member(s) go to the responsible Emergency Command Center and retrieve what information, as well as other basic information on what an IC feels is necessary for the most professional performance by the team. Detailed directions could easily become over-kill. Team specific guidelines should be developed and endorsed by all team members. Buy-in is paramount.

Position specific expectations the IC has for all team members. We all know what position training delineates for each role; this reinforces and places additional specific responsibilities on a position. These types of expectations, when stated, give a person clear direction to meet. These can be as detailed as felt is necessary by an IC so that he/she is comfortable all areas of concern are clearly assigned to specific team personnel. It would be helpful if position expectations also included the IC's own role so that all personnel understand what that person sees as the primary responsibilities of his/her command position. Position statements should also include direction to those personnel the IC expects/requires written summaries from for addition into the team's Narrative Report.

Explanation and examples of Performance Rating that will be used by team members. It is highly recommended that each IC mandate a rating process for all team members as well as personnel who become assigned to an incident. Specific responsibilities delineated in team guidelines should be individual rating factors for the specific position.

Pre-Incident Communications. Intra-team communications are key to a smooth operating group during an incident. ICs will find communications during incidents will flow smoother if members have routinely shared information prior to a deployment. An IC should take the lead in facilitating this flow. With the Internet electronic mail system, this could be as simple as messages to the team as information becomes available that could impact their performance during an incident. Developing a team phone list with all member's pertinent numbers including cell, pager and fax will greatly assist personnel with communicating.

One thrust of these communications is to keep all members apprised of changes and news, but another is to develop the group into more than a collection of people. The word “team” comes to mind; the goal is best team interactions possible.

Continuing personnel development. Neither an IC nor the agencies can afford placement of personnel onto an Incident Management Team that are neither experienced enough or willing to perform at a high level during complex incidents. Reasons should be obvious. Therefore, it is incumbent upon all ICs to facilitate an environment within their respective teams that provides the best “hands-on” personnel development possible. After all, who is better suited to become the next major incident planning section chief than personnel who have repeatedly and successfully worked a unit-level position in a team setting within the planning section? Just being exposed to the dynamics of another position during an actual incident has to be some of the best training agencies can provide. This exposure should include development of selected personnel for the IC’s own role. Some ideas to consider:

- Other qualifications; e.g., situation unit leader also qualified as a food unit leader or finance section chief as a safety officer with accident investigation experience.
- Keep all allocated trainee positions full for each deployment. Each team member should strive to make a trainee assignment as meaningful as possible for participants. Once a trainee has demonstrated knowledge and abilities to perform that person should become eligible for placement onto an Incident Management Team and another person afforded the trainee slot to develop their skills
- Assure that currently assigned personnel have all necessary position training for their position. Require new assignees to meet these standards.
- Become proactive in recommending advanced position training for those team personnel who successfully perform their positions and demonstrate abilities for future roles.
- Members become much more valuable when cross-trained in multiple functions. Knowledge of the other jobs is required.
- Have a “Team Building” atmosphere. Encourage the command and general staff to delegate responsibilities and authorities where appropriate. This will require the IC to do the same.
- Encourage/require functional leaders to “step-back” as incidents allow so that subordinates may perform as a well supervised “lead person” (i.e., the situation unit leader becomes the acting planning section chief during stabilization/mop-up of an incident, etc.). Team members must consider “mentoring” as key important roles.
- Encourage team personnel involvement as instructors of training for those positions that they are qualified. A person naturally becomes more proficient when giving instructions than receiving them.

- Require performance ratings for all team members during activations. One theory of such ratings is to identify a person's preparedness for advancement as well as identification of areas requiring improvement.

Post-incident critiques for team members only must be performed. This should become a standard team process. Identification of areas that went really well and those requiring improvement, what material items are necessary for the next activation and additional training requirements of members are but a few of the desired outcomes. Build towards an improved response for the next activation.

Professionalism. One goal all team members should strive to attain is bringing the highest level of professional management possible to an incident. This concept is difficult to define in that there are as many thoughts on what a "professional" management group is as there are people to ask. Clearly, your agency expects and has the right to accept nothing less than a group performing management tasks during an incident in a manner that will bring only highest respects from all observing persons. Some items to consider for developing a professional atmosphere:

- Team members know their jobs, roles and required interactions. Obviously, this will entail all members to be position literate and also to understand what is needed to communicate and perform well within a team setting. Being literate of other functions will reinforce the timely and essential transfer of proper information. Written team guidelines further describe specific tasks, communications and relationships that are expected of them.
- Identification of team members. Any person around an incident, including those not attached but interested, should be able to easily identify the incident's management group by name and position. Rapid procurement of standard identification items; e.g., hats, name tags, vests, etc., must be done as new members come onto a team.
- Punctuality in all actions. If a planning meeting is set and advertised for a specific place and time, the meeting must begin at that time and place, regardless of who is missing. This will aid in setting the "tone" for all observed actions conducted by a team. It clearly tells all: "this group means to approach the profession of complex incident management in a businesslike manner". All other actions must also be punctual and purposeful. Routinely, a person will only be late for one such meeting if there is a standard method of recognizing tardiness.
- Team members are approachable and open to input. This sounds fairly simple, but it is not an action always seen. The troops out on the lines have been there. Team members need to listen to what they have to say. One approach could be a directive announced during Operational Briefings that all persons assigned above a certain position (division/group supervisor, as an example) must report

to a designated location upon relief for debriefing. However, if this is announced, someone from the management group must be at the location until all debriefings are received.

- Incident Action Plans (IAPs) are available to all that need them. Is it correct for a management group to determine personnel below a certain level of the organization (division/group supervisor, as an example) doesn't need one? Watch what happens when there is a serious accident and investigators ask survivors if they knew the overall plan of action or communications for the incident. If time or machines don't allow timely reproduction to meet this demand, posting copies of it allows anyone interested enough to review it.
- Timely and meaningful interaction with the responsible jurisdiction or agency: When invited, an Incident Management Team is a guest expected to perform a mission. By transferring information to the responsible jurisdiction throughout the incident, questions that always seem to arise after the fact should have been covered during the incident for those persons left with its aftermath. This communication will not be limited to the IC's position. Team members must consider themselves an "extension" of someone from the responsible jurisdiction; find out who this is and develop a rapport. This is the person(s) you want pleased at the end.
- Orderly and complete paperwork. Time records, documentation package, fiscal records, a team's Narrative Report are just a few written documents which will be available forever to tell history a team came, they conquered and they left. Make sure you go down in history correctly! Addition of internal audits and/or settlement of a cost apportionment only adds to the possibility your historical documentation will be received by a vast number of people. Don't let an excellent job performed under adverse conditions be judged later by substandard documentation.
- Visual presentations are used. Posting the current Incident Action Plan as well as the next operational period (when available), news from the world outside the incident, meeting schedules and required attendees are but a few to consider. How about posting directions to drop points, Medical Plan, and updated Safety Message, vehicle-parking directions, menu of the day, etc.? Think of visuals as a tool: a team does not have time to tell everyone on an incident everything, but everyone is expected and wants to know everything. Assume they can read!

## **Transitioning**

What is involved when transitioning an emergency incident to an Incident Management Team? Actual definition of the transition should be: "a process to familiarize a group of persons to a situation in progress as well as setting agency strategic priorities for its control." For an Incident Management Team, this situation is routinely some major

complex emergency incident and this familiarization is to give real-time knowledge of the incident along with local operating procedures for the team. Pretty straightforward, right?

Think about the act of transitioning an incident to a team. It hasn't been a good day with all control actions working splendidly or you wouldn't be there. Not only is the incident not going well but also there could be tremendous amounts of property loss, injuries or deaths associated with it by the time the team arrives. You normally will be dealing with an agency administrator who may or may not have been part of the decision to activate your team and has an unfathomable amount of details and/or possible political pressures to deal with while wanting only one thing from this group, all who might be strangers: **MAKE IT BETTER!** All an Incident Management Team wants is all necessary pertinent information, official authority to perform their mission and to go to work; the faster the better. Obviously, if a transition isn't done efficiently, something important could easily be lost. Missed items at this point will be detrimental to the incident, impacting a team's efforts and recovering them could be difficult. A rapid transition could well be the worst action taken on an incident.

To avoid "dropping the ball," transitions should be approached in a clear and systematic manner that transfers the most information possible. Documentation of this transfer is required for later reference. These documents will become the cornerstone to an Incident Management Team's actions and written history of the incident.

Teams should also view the transitioning process as an opportunity to make that lasting "first impression" upon the responsible agency. Don't miss this opportunity.

So, with all the hazards identified, how is a transition done to minimize adverse impacts? Some issues to consider:

An Agency Administrator Briefing to Incident Management Team or a similar transition form provides a good basis to transfer items proven necessary on past deployments. The form's questions also require a responsible agency to contemplate items that might otherwise go by the wayside. Yearly review of this form's make-up should be undertaken by team ICs to incorporate new information items that have surfaced as needed on recent incidents.

Most federal agencies use an Agency Administrator Briefing to Incident Management Team form or a similar version. States and other departments may have a different version of the form or no form at all. When responding to an activation, the IC may want to call the responsible agency to see if they use a transition form. If no transition form is used by the responsible incident jurisdiction the IC may suggest they consider using one and fax a copy, followed with confirmation it arrived. During these deployments, teams should expect the form to be incomplete and lacking a depth of information. It is

not unusual for the IC/team and agency administrator to jointly fill out the form. This may require some education (for both parties) and negotiation. There could be instances where the form will not work at all. However, it can serve as a guide to develop some other mechanism of pertinent information transfer and documentation.

A formal transition takes place at a specified time and location with the completed form. Negotiation by an IC may be necessary on timing of this. A vast majority of team members need to be present for the transition. Travel times for some members could require transition to be delayed beyond a responsible agency's expectations. This will be especially true on incidents where agencies expect a team to assume command upon arrival of the first member. It will be incumbent upon the IC, with the agency administrator's assistance as necessary, to negotiate a realistic timeframe that allows proper personnel to arrive.

- The team should set a professional tone for the briefing by being punctual, identifiable, prepared and attentive
- All team members should be in well-marked Personnel Protective Equipment (PPE) or their agency's work uniform with issued team identification clearly displayed
- Team members should form a group close to the agency speaker, command and general staffs to the front, with notepaper and, hopefully, a copy of the completed transition form available. If a completed form is not available, a blank form can serve as a guide for team members to generate questions pertaining to their specific roles. It is not unusual to have many people other than the Incident Management Team and key agency personnel present. Determine who everyone is and their role.
- An agency administrator briefing should start with introductions of the key agency personnel by name, title and incident function. Teams should introduce themselves by name and position.
- Routinely, the agency administrator conducts the briefing with an overview of the incident's history, projections, resources status and conditions. However, a team should be prepared to assist this effort.
- After the agency administrator briefing, the IC should negotiate a question period for team members to retrieve necessary information that might have not been dispensed. It may be best for the IC or planning section chief to facilitate this portion, going through team functions ("resource unit leader, any further questions?", etc.). Team members need to be prepared with questions restricted to pertinent issues only.
- Prior to the briefing, the agency administrator and IC should have set an actual time for team actions to begin on the incident. This should be a portion of the briefing. If not mentioned, this will be one of the questions to bring out.

- Collect any written materials or displays presented to the team by the agency administrator, regardless of their value.

TIP! Team members should view the agency administrator briefing as the opportunity to make a lasting “first impression” on the requesting agency/jurisdiction. This could quite possibly be the first meeting the agency administrator has ever had with any member. As an old saying goes, “first impressions are lasting impressions.” Take every opportunity to leave the impression that a first-rate professional management group is there to perform a required mission.

The Initial Attack Incident Commander (IAIC) will need to brief the team. The most current incident situation status should be available from this person and his/ her staff. Many times, this briefing is conducted concurrently with the agency administrator briefing. This has pluses and minuses but is normally something a team cannot control. Expected outcomes should be:

- The team will need the best incident information available, e.g., what has happened, what has been attempted, and any projections of incident size, resource status, locations and serviceability. Situation maps, weather forecasts, traffic maps, and Incident Briefing Form, ICS-201 if available, should be obtained.
- The team will need direction on future involvement of agency personnel currently on the incident. Do they stay to be incorporated into the incident’s structure or are they to be released and when? This is decided between the agency administrator and IAIC.
- Teams can leave a lasting positive impression if a request is made to have a “local” person assigned to them for the purpose of local knowledge availability. Routinely, they will want the IAIC to stay assigned and available to the team. This person had the agency’s trust to manage to this point; an assumption must be made he/she is the best available.

TIP! A word of caution: information from the IAIC could be less useful than one might believe. Some become withdrawn and “beat” because the incident escalated to the point of having to bring in a team. A lot of negativity could be present, and this could sway a team without them even seeing the situation.

Team members must assemble as a unit for the purpose of affirming dispensed information and conduct a strategy meeting upon completion of the briefing.

- Confirmation of received information and materials should be done so that all team members start on the same footing. Just as everyone seems to hear an item differently, group knowledge could be disjointed. Do we all have the same information and, if not, where do we get differences ironed out? Take some time

to confirm that what information you have is the same information everyone else has.

- Based on known status at the time, a general strategy for the team must be set to facilitate actions. This could be as simple as all functions checking on actions to this point that will affect their roles, or it could be setting a time for the first planning meeting should the team be assuming immediate command.
- A signed copy of the Delineation of Roles and Authorities – Administrator’s
- Instructions (Delegation of Authority) should also be given an Incident Management Team, along with the Agency Administrator Briefing form. These documents clearly set team actions into motion. Roles and authorities become extremely important for team non-agency incidents as well as for non-wildland fire incidents (mobilization centers, etc.). Things to consider:
  - When an Incident Management Team is requested immediate contact should be made by the Team IC with the agency administrator to explain the transitioning process including the Delegation of Authority. Remember, some jurisdictions don’t routinely transition incidents to teams, and this could easily be the first such occurrence. Any expectations that our routine will be known and smoothly take place could be severely shaken.
  - Special attention should be taken when a team activation is for an assignment other than assuming command of an incident. Team deployments that are intended to provide management for a part of an incident should trigger an alert to have very specific roles and authorities identified. As an example, during a major multi-county flooding incident, a team is deployed to manage the care and housing of evacuees only and will not participate in the overall management of response to the incident. A team would need their specific roles defined and a clear understanding of their authorities.

TIP! When response is to a non-wildland fire agency, an Incident Management Team will routinely find that requesting jurisdictions will not be familiar with the capabilities of what they have asked for. However, there is an expectation that a team will know all and the jurisdiction will normally be willing to participate in and provide anything the team suggests.

One of the best ways to demonstrate professional leadership during times of responses to another jurisdictions is to “walk” the jurisdiction through the Transition Briefing (w/form) and assist with the completion of the Delineation of Role and Authorities-Administrator’s Instructions. Time taken at this first meeting will reap benefits throughout a deployment.

TIP! This is also time to determine if all of the jurisdiction’s key personnel are involved with delegation to a team. There is nothing worse than to discover later that someone

forgot to tell the county sheriff that an Incident Management Team is being brought in to manage a flood within the county. Not only is a sheriff the highest elected peace officer in the county, but he/she might not necessarily ascribe to the notion that assistance is needed at all. More importantly, they are usually armed! Count the noses and ascertain if all key folks are involved.

TIP! This may be the first, last and only opportunity to gather information before the team assumes an incident. Go slow. Be thorough. Try not to let key players get away before you have gotten all of your questions answered.

### **That First Operational Period**

That first operational period faced by an Incident Management Team is a kaleidoscope of efforts. Each team function is furiously gathering, exchanging, and disseminating information, formulating plans and structuring their specific jobs with needed staffing. Initial/extended attack troops need relief and retrofitting, new line folks need to go out under direction, incident facilities need development,

long-range planning begins and an in-depth view of all safety aspects of the incident is required. These and many other tasks must be undertaken beneath the pressures of interagency coordination and the ever-watchful eye of media. Not much happening, right?

The state of the Incident Management Team is also a composite of effects. Personnel are routinely working extended hours. They have hopefully gotten their direction and written authority after participating in a Transition Briefing. The incident's setting could be unfamiliar to them. Personnel currently working on the incident may have limited information. Resources and materials of all types are invariably still "en route". Mentally, the team knows what to do and desires to do it. Physically, frustration will set in when demands outdistance ability to supply.

Experience will assist in limiting this frustration. Once you've lived through a "first operational period," the next is taken in stride. Some details felt to be critical have proven to be less so. Shortages have been compensated for. Information lacks have become expected.

While it is not acceptable for a team to just throw their hands up in disgust, knowledge that an initial start-up of team operations could be a little rough should be learned. One of the strongest points of an experienced Incident Management Team is ability to recognize and adapt to situations thrown at them. Professionally bringing control to chaos during a start-up is one of the brightest attributes and lasting impressions a team can impose on an incident. Some tools to consider for coping with this "first operational period" are:

- Recognize and expect shortages. Not resources, but information of all types will be in short supply. ETAs of ordered resources/supplies, situation reports or maps with little useful information, announcements of important person visits, accurate reports of resources currently assigned, timely reports of past injuries, losses or costs will all be among the missing. EXPECT THEM! Develop a sense of adaptation to work around them.

Team Guidelines can lessen chaos. Directions to specific functional roles to gather the best available information PRIOR to arriving can attempt to shortstop the “it’s lost in the system” syndrome. Consider if time/travel allows:

Directing a team “logistics” person to routinely go to the responsible agency dispatch center. Their mission is to:

- Get copies of all agency documents utilized while gathering resources and supplies.
- Ascertain exact procedures and identification of contact person(s) for the continuation of ordering/confirmation with pertinent contact methods and numbers.

Directing a team “planning” person to the responsible agency dispatch center. Their mission is to:

- Retrieve copies of any agency incident situation and resource status documentation developed from the start of the incident.
- Obtain copies of any news releases, incident cost calculations and weather forecasts/projections.
- Get any information available concerning past incidents within the general area of the current one.
- Determine exact procedures for situation updates and other dispatch contacts desired with contact person(s), methods and numbers.

Assign a team “operations” person to personally recon the current situation. This may be done rather than attending the Transition Briefing as long as another operations representative is present for the briefing. Hands-on review of current strategies, resources and projections will greatly enhance a team’s ability to produce a useful Incident Action Plan (IAP) when called upon to do so. Provide multiple briefings for “late” resources. If suppression resources are limited, continue to work on part of the incident where they will do the most good.

A pitfall all team members need to be aware of and recognize is the ease of working themselves beyond usefulness during the first operational period. Commonly members have been working at regular assignments when activated for a team response. Travel

is conducted to the incident, a transition takes place and the team goes to work. A team routinely assumes an incident in time to brief and get the second day's operational period to the line. Work continues through day two to prepare facilities, accomplish planning and generally organize a large incident. Even if the incident does not enlarge significantly during day two, team members work all of that day to get their functions staffed and performing well.

Studies show that "burn out" occurs at about hour 11 when under stress. Efficiency, production, and safety become real concerns. Team functions require a mental state capable of simultaneously performing multiple tasks. Everyone has a point of diminishing return with regard to the ability to cope with demands placed upon them. Not only can a forgotten item become lost, personnel can be left in unsafe situations and needs go unmet. Team members can become exhausted without getting dirty. All members must recognize this fact.

Some items to consider for safeguarding against over-extension of team personnel:

- Team positions having a second person assigned will require a conscious division of workload. Team ICs may have to monitor this division to assure it is working. The person not "on" must attempt some rest in an effort to relieve his/her partner at the appropriate time.
- Use of twenty-four hour operational periods has proven to ease compression of time for some functions; i.e., logistics, planning and operations. Not that the workload goes away, only more time is available in an operational period to accomplish it.
- Team guidelines can require certain sections to have deputy positions filled whenever the crunch of an incident is expected to exceed a certain operational period (beyond the team's second).

Experience will teach to expect the unexpected. Being dependent on others will always leave the possibility of letdown. Ordering more assistance is not always an answer either. Availability, travel times or other incidents can severely impact accumulation of more staff. The best word of caution could be to have another plan available when chips don't all fall together.

A common practice during that now famous "first operational period" is a tendency to overestimate production. While this happens less in the Operations, others do fall prey. Our system builds this, i.e., the kitchen's ETA is 1100 hours and an unknown breakdown delays it until 1600 which impacts feeding of troops going out, etc. Overestimation can fell any team member in their quest to accomplish their function

Teams should consider the possibility of overestimating their own production, especially during that first operational period. Is it really possible to draw together a current IAP, be

working on the next and correctly look at contingency planning? Can necessary facilities be developed, communications organized and drop points marked with available staff? Can each member realistically accomplish all required actions within that “first operational period”?

Some items to consider:

- While developing Incident Objectives, ICS-202 for that first operational period, an IC could list specific objectives/goals for non- operations functions, e.g., logistics develop a 2,000 person camp; finance/administration assure all contracted equipment time is started, etc. This prioritizes actions and accomplishments. It also implies recognition of limited resources. A posted visual display of this could be helpful.
- Individual function heads must prioritize specific work to be accomplished. Functional staffing is routinely still short and only so many “things” can be accomplished; what is most “important”? List them and get them done in that order. Should an individual’s priorities impact other team functions (and, THEY ALL WILL!) this must be shared with the other team members. A full team meeting four to five hours into that first operational period works excellent for this intra- team sharing of information about projected shortfalls and accomplishments.
- Recognize when the impossible just takes a little longer to accomplish. Most challenges faced by a team when organizing an incident can be successfully met in numerous ways. Be adaptive and creative while guarding against expending precious time on a scheme with marginal chances of success. A standard “book” answer is not always needed or required.
- Rely on past experiences (mental slides) to meet significant challenges. There is a depth of collective knowledge when an Incident Management Team is assembled. That first operational period team meeting could produce problem solving suggestions from a most unlikely source if members are made aware of a mate’s difficulty and feel free to offer assistance. Use someone else’s slide when necessary.

TIP! Learn to recognize the abilities of other team members. You could and should have cross-trained folks at your disposal. That information officer might also be an outstanding logistics section chief. The strongest attribute of real good management teams is an openness to share ideas and work. Too many times a person’s focus becomes so narrow chasing their individual challenging demons that they forget that there are a lot of folks on a team, all with the common goal of making the entire production work. Share your needs and ideas. Each incident will impact each team member differently. That information officer might not have a lot to do on this incident

due to its extremely remote location and, therefore, could be of assistance to logistics. At meetings have team members brain storm and prioritize what needs to be done. Encourage team members to help out where help is in short supply.

## **Communicating**

During an Incident Management Team deployment, proficient communication becomes extremely important. This includes not only internal incident communications that utilize radios, phones and face-to-face to transmit information used towards control of an incident, but intra-team communications as well as off- incident transfer of information. Effectiveness of communications will directly impact a team's success and impression they leave behind.

Basically, communications can be broken down into three major categories:

- Intra-team
- Intra-incident
- External

Unsuccessful accomplishment of any category will impact a team and incident adversely. A variety of methods exist to avoid this.

Intra-team communicating is the essence of team interaction and requires a conscious effort by all members. It is not that people are excessively introverted but, some do find it extremely difficult to share thoughts and ideas before a group. Some avenues to consider:

- Sincerely welcome new members to the team.
- Efforts must be expended to maintain an intra-team atmosphere that advocates smooth and healthy communications. This is easier said than done. Many obstacles can lead a member to be reluctant to participate.
  - Agency affiliation: Some team members may be hesitant to actively participate in open team communications until it becomes obvious their input is welcome and, yes, needed. Personal discussions with the IC or other team members could help; it may take repeated team interfacing for a person to loosen up enough to participate. All team members need to be aware of this situation and ready to rectify it
  - Rank: Unfortunately, some folks will hesitate to participate because they are outranked. An IC should make it crystal clear that, in a team setting, all collar brass was checked at the door; every member is just that a member! Your only "rank" is that afforded to your team position. Again, this may take repeated demonstration by all team members to loosen up the rank consciousness.

- Abilities: A person might be self-conscious of what they perceive as a lack of experience or knowledge compared to other team members, subscribing to the theory of not demonstrating this lack by opening their mouths. Again, the team atmosphere will need to recognize that there are as many different levels of experience as there are members and that's OK. Besides, those with loads of experience had to start somewhere too.
- Team guidelines can describe and structure team operations in a manner that clearly requires and promotes communication's importance to team intra-actions.
  - Team structure requires numerous meetings Transition Briefing

### Strategy Meeting

Planning Meeting(s) Operational Briefing(s) Daily Team Meeting(s) Demobilization Planning

Meeting Transition Out Briefing

Post Incident Team Meeting (critique)

- It would be advantageous to discuss meeting processes in team guidelines. Expectations on length, contents, participants, and required interactions as well as need for documentation should be explained.
- Continually drive home the idea that gathering, exchanging and disseminating information is a shared responsibility of all team members. Assure a clear process to accomplish this is understood and expected of and by all.
- Position specific expectations within team guidelines could list those types of information required by team members. This alerts members to the nature and detail each other member expects from them.
- Team ICs and functional section chiefs should monitor conduct of meetings and member's participation to assure an open working atmosphere is cultivated and maintained.

TIP! Meetings by team members coordinate a vast majority of team management efforts. They are required BUT, the abundance of them can become overwhelming for personnel attempting to accomplish something (such as managing an emergency). A watchful eye should track all meetings to eliminate unproductive or counterproductive time. Having a clear posted agenda with outcome expectation, along with member's knowledge of the expectation of their punctuality and preparedness, should maintain the businesslike team attitude. A team member assigned as the team's meeting facilitator (team guidelines) or "Sergeant-at-Arms" could also help. Leave the rabbits for after the incident. Every team meeting should start with, "the purpose of this meeting is \_\_\_\_\_".

The following people must be present , , , .

TIP! Teams should develop a standard procedure for documenting all meetings. Too many key decisions and directions develop during meetings that seem to require later review. Bring in a scribe or delegate this task via team guidelines.

Intra-Incident communications are obviously key to transferring information for the purpose of control. However, even as much as this type of communicating is performed by our troops day-to-day, there are areas for improvement during major incidents.

- Keep the incident's troops informed. We have all been on incidents where no one outside of the incident management's upper echelon had any idea what was going on or projected. Really makes you feel that there was a rudder on those ships, huh? Routinely updated bulletin boards and single page briefings within the base are but two of the ways to accomplish the task of informing the troops. Decide early how and by whom this will be accomplished, then make it happen. Utilize visual displays within the ICP as much as possible. If someone can locate their needed information without asking, a manager's time is not spent answering questions.
- TIP! Each team should have some pre-developed "standard" documents available from personal word processing systems that can be used as needed. Motel policies, personnel standards of conduct, and release priorities are but a few of the documents consistently used incident-to-incident. Teams will develop more upon each activation. Availability will assure use.
- An IAP that cannot be read is less than worthless. Its construction wasted a lot of valuable time and, except for meeting certain personal needs in a biological sense, it isn't worth carrying. Recognize that IAPs must be reproduced; reproduction requires a clean original. At present, the cleanest way to develop an IAP worthy of reproducing is to employ the InciNet and other computer systems. Get one and use it! To meet the need prior to the system's arrival, copies of this program are available for personal computers (laptops) which should be in every planning section chief's possession. If an IAP must be handwritten, find someone who can write legibly and produce the best IAP possible. IAP maps are also a problem to reproduce; the GIS mapping system cranks out great maps in 8-1/2 x 11 inch format that can be reproduced with outstanding results. Use it!
- As a communications plan develops, assure all pertinent information is on each Assignment List, ICS-204 of the IAP as well as the Communication Plan, ICS-217. Complex incidents require complex communication plans. The Assignment List, ICS-204 reflects the Communications Plan specific only to the assignment of resources to that division/group. However, reassignment of personnel about the incident during an operational period affords everyone information needed to

properly communicate. Likewise, LCES information developed should also be on each specific Assignment List, ICS-204 for the same reasons. Build in flexibility while keeping troops informed

- Each IAP should include a listing of staff cell phone numbers. Begin building a cell phone/pager directory early and update it with every new IAP. Teams should have one started in their portable word processor prior to an activation. In areas with adequate cell phone coverage (or made to have adequate coverage when you brought in that portable cell), radio traffic will be freed up for important operations-based communications. Use the radio for operations messages so that others can eavesdrop.
- Operations leaders (chiefs, directors, supervisors and leaders) must be cognizant that certain communications should NOT be conducted via cell phone. It is entirely possible to isolate a large segment of an incident's organization by not using common communications methods for information needed by many. For instance, if one division had a blow-up condition and reported this via phone only, would adjacent divisions (or anyone else on the incident) have all information necessary to them? Certain items need to be heard via common communication methods.
- Operations leaders and incident dispatchers need to maintain radio discipline on the incident. Not only will this eliminate untimely use of congested airwaves, it should maintain a professional sounding incident for all those listening (like an agency administrator or the media).

TIP! In areas of highly concentrated cellular telephone coverage (heavily populated or with major transportation routes) cellular companies have portable cells as well as large numbers of portable phones available. FCC licensing for these high use areas normally contains a clause that requires companies to provide this service to responders without cost (including the cost of the calls made) during times of disasters. Check with your logistics folks to assure they know how to access this service when needed.

External communications are those made from the incident to the outside world. This will include, but not be limited to, briefing the agency administrator, working with the agency dispatch center, tracking down vendors for specialized items, or transmitting cost information to an appropriate source. These and many other communications will say volumes to legions about the team and its personnel.

Therefore, team members need to be aware of the expectation that all communicating will be of the highest professional level. Some items to consider:

- The most off-incident reviewed and discussed document a team will produce during a deployment is the Incident Status Summary, ICS-209. Accept this fact. Completeness, accuracy and timeliness are paramount. There are deadlines for

the ICS-209 that must be met as this document is used to allocate resources to your incident. It must be on time.

TIP! There are currently many documents required to be transmitted off an incident throughout its life. ICS-209s and cost estimates are but a couple. Assure you know them all. Reconfirm early during the incident with the receiver a timetable and method to be used for each. Entirely too much time can be wasted by too many people tracking down late or incomplete documents.

- Agency administrator briefing times and methods will normally be set during the Transition Briefing. The IC or deputy will routinely do these. Regardless who does them, reviewing the latest intelligence just prior to the event will allow transmission of the best information while making a professional presentation. Agency administrators want the best “feel” for the incident that the experience of a team can give him/ her. Being forthright and honest can ease the making of off-incident decisions.

TIP! Awareness of the importance that is to be given external communication by all team members will go a long way to having the team perceived as a structured and accomplished group who can meet deadlines in a professional manner while facing many difficult tasks.

TIP! Some have found that local Internet providers have been known to provide access for use of an incident free of charge. Check on it if this could be of value

### **So, You’re in Unified Command Now What?**

It is common for significant incidents to involve more than a single jurisdiction. This is an accepted fact and management of these types of incidents has been addressed under the Incident Command System’s provision of Unified Command. What impacts can an Incident Management Team expect under Unified Command? What are some of the pitfalls and what are some “tricks” to making it work?

When transitioning into an incident which is being managed under Unified Command, some immediate alert bells should loudly sound.

Is this legitimately a Unified Command Incident? Unified Command was designed to “allow all agencies with responsibility for the incident, either geographical or functional, to manage an incident.” Do you have such an incident? If not clearly understood, ask your agency administrator for clarification. You need to know when an agency is including (or pacifying) a cooperator in Unified Command when in reality the cooperator has no jurisdiction or functional responsibility for the incident.

Has a single ordering point been established? The quickest and longest lasting way to adversely impact a Unified Command incident is to have involved agencies continue processing orders for additional resources/supplies through their normal channels. Incident personnel delegated as having overall incident responsibility for their agency (Incident Commanders) must immediately agree what method (single point) will be used for such ordering, advise their respective agency, and assure all incident personnel from their agency know of and abide by this decision.

Is this a cost share incident? This will be a tough topic to broach. However, it is one that needs an immediate answer. Some agencies do cost sharing as a matter of policy; others will not have a clue what this is about. With "...responsibility for the incident..." should come some expectation of financial support for that responsibility. Impasse on this subject must be referred to your agency administrator immediately. If there is to be a cost share of the incident, some tools are necessary:

- Have cost share technicians been ordered? Very seldom will personnel from the team's finance/administration section have time or expertise required to produce an agreement necessary for cost sharing. Get the help you need. A technician should represent each agency involved.
- Do you have on-hand necessary maps accurately delineating each agency's area of responsibility? If not, get them. If you are not intimately familiar with the areas, have your agency administrator or a designee verify the map's accuracy. This is important!

OK, so all of the immediate bells went off and you got satisfactory answers to the first issues. Now what? To proceed smoothly, some preliminary actions, which are different from a single agency incident, are necessary.

- Establish Unified Command's objectives for the incident that meet all involved agencies' needs. This could be understood as necessary by your counterparts or it could be an entirely new concept. Availability of a blank Incident Objectives, ICS-202 form could aid in this effort. Keep the development clearly as objectives, not tactical actions. Good luck!
- Establish the management staff who will fill "lead" section chief and officer roles. A team IC can be intimidating here as he/she just showed up with a whole fleet of highly regarded personnel who normally operate as a high-performance team. Should all agencies elect to use the Incident Management Team intact, this job is done. However, should another agency feel it is necessary to insert staff from their agency into the management structure, things can become a little more complicated, but there are a couple of avenues to consider:
- Keep the bulk of the Incident Management Team intact as "lead" person in each function while negotiating for a limited number of "deputy" roles for other team

members. Normally emphasis will be for another agency's person in an operations section chief role. Can your team function correctly if the team operations section chief becomes a deputy? This will be a question each team IC will have to answer for themselves and their team. Make sure your agency administrator reviews any negotiated staffing settlement.

- Should qualified personnel from another agency be available to fill all "lead" roles, your entire Incident Management Team could become deputies. This will need to be immediately reviewed with your agency administrator; he/she might not have brought you in with this in mind. The issue is thrown back to the administrators from all involved agencies for settlement. It's not the best avenue for a team, but it could be the only way to settle it.
- Establish information release procedures for the incident. All agencies on the incident will need to agree to a single source for development of information released. The information section may well have personnel from all involved agencies but released stories must all be the same. This can become the second leading source of problems within a Unified Command setting if left to chance.
- Agreement on incident facilities, location, purpose and size must be mutual.

The ICs come out of their meeting and announce the outcome of their agreements. Now what? All team members need to consider some thoughts:

- Regardless if the Incident Management Team is to be the "lead" group or if the team is the only command structure present save the other agency(s) ICs; team attitude will set an everlasting tone for the incident. There is a new player in the position of leader; could there be several? Now what? Team intra-actions must continue as normal. React equally to all ICs. This is easier said than done with some. There will be some agency specific needs which might have to be met by staff. While just what they need is more to do, these are the "little" things which could derail a Unified Command with the best intentions. Any questions concerning conflicts of direction should be immediately referred to the team IC for rectification. All team members must want the other agency IC(s) to say after the incident that "the team took me in and accepted me as a full member."
- Be open and honest with your counterparts. Whatever command structure agreed to will have to work and work well. The attitude and cooperation by the Incident Management Team cannot become a basis for problems.
- Realize that you may be training your counterpart in his/her functional role. Incident Management Teams have qualified and experienced personnel assigned; other agencies may find it hard to match up person-for-person. All team members should expect being relied on to pass along some of this hard-earned experience. It can become a full-time task. Remember, you may well be developing a future member of your team.

- Remain approachable and open to input. For many of the same reasons as providing on-scene training to counterparts, team members must demonstrate untiring desire for input and interaction. By setting an example of cooperation, a team will stimulate and maintain a desire in all to work together in a common cause.
- With minor exceptions, all management functions must be collocated. This includes the Incident Command Post (ICP). We have all been on incidents that clearly had multiple ICPs yet were called “Unified Command.” Not True. Get it together and assist keeping it together.

A few hard-earned thoughts which could make future Unified Command incidents easier for a team:

- Establish agency specific finance/administration personnel within this section. This may only need to be a deputy to the section chief, but assures proper procedures and documentation are followed for each agency.
- Establish agency specific time recorders within the incident’s finance/administration section. These people work and report to the finance/administration section chief. However, specific time recording requirements of each agency will be met.
- Establish agency specific compensation/claims personnel within the finance/administration section. Depending on which agency’s jurisdiction a claim might generate from, the process for submitting claims could be different. By having a person from that agency handle the claim from the start, settlement delays will be avoided. Again, these people would work for and report to the finance/administration section chief.
- Should you be involved in a cost share agreement, consider:
  - A division-by-division percentage split is required for each operational period of the incident. This assigning of percentages is done by the ICs. Whenever ICs do this, it should be done in private with the cost share technicians, only. Too much pressure is implied to an IC if someone from his/her agency is present/observing; especially a superior.
  - Operations section chiefs have an important and pivotal role in cost share agreements. They will be required to verify, at the end of each operational period, where each resource was actually used during that operational period. This should be made known early so they may employ whatever means necessary to track resource use. Should there be air resources involved, air operation branch directors will be required to do the same. Tell them.

### **Some Other Things to Consider**

Some issues have arisen over the course of past Incident Management Team deployments that warrant consideration, should there be a need for slide development by you. Something similar could surface again:

Two agencies each have an Incident Management Team assigned to an incident. Complicated? Yes. Impossible? Not necessarily. Think about:

- An incident is large enough geographically to require excessive travel times to encircle. While not specifically outlined in ICS, splitting a large incident into two separate areas/zones with clearly defined boundaries can work. However, there can only be one set of incident objectives! Objectives are negotiated between two zones so all needs are met. Although workable, this is not an ideal situation to be in. This setup really calls for an Area Command to be established to coordinate two efforts and prioritize resource usage.
- Agency administrators jointly negotiate that one team will be primary or lead and the other will perform as deputies. Hopefully, team ICs would be consulted on workability of such an arrangement. This is the second-best alternative.
- One team works one operational period, the other works the following. This is not good. There is too much loss of command continuity as well as too great of a chance for details to “fall through the cracks.” Stay away from this if at all possible.
- One team is released from the incident at the direction of the agency administrators. This is the best solution and reduces a wasteful commitment of resources

Your position on a statewide priority list during a time of multiple incidents is very low. Resources (especially those of a normally limited nature) are going to be very few and far between. Expect over-using the resources you do have and long delays on orders. Even items like the Incident Base will be limited at times. Plan accordingly. Your creativeness and flexibility will be tested. DO NOT resort to hedging reports of your situation should nothing current or predicted exist which could change your priority. These embellishments seldom work as you hope. Live through it and see how the team’s collective imagination produces results. After all, some incident has to be on the bottom of the list; it’s just your turn. Consider using non traditional approaches such as large numbers of rental dozers; making local government engine crews into a fire crew, etc.

You have a significant incident near a major center which attracts a lot of attention. The team’s information section is doing a good job, however, expect repeated requests to interview the IC. In today’s world, the media eventually want and need to hear from “the person in-charge.” Consider an organized news conference to fulfill this demand. Advertise a conference time which will meet a majority of deadlines of the media

present, find an area of adequate size, get good visual aids, brief the presenter(s) on the latest status/possible question areas and do it.

Reporters from most major media sources understand this format and process. However, the team's information officer should facilitate the conference by opening with an explanation that there will be a situation overview and a question/answer period; all to be accomplished within a set timeframe. The information officer should be ready to "rescue" the IC(s), if necessary

You have an incident with a significant number of structures destroyed. Lucky you. While firefighters did their best, the incident "took" xxx number of structures. Now what? Consider:

- Specific instructions to the entire information section should be: their theme is to be; "firemen SAVED xxx (number) of structures, unfortunately, the fire DESTROYED xxx (number). . . Firemen DONOT lose structures; we save them!
- You will need to organize a triage group to rapidly count foundations. Media want a number and will harass the information section until given one or will develop their own from any talking source around the incident.
- Determine as soon as practical the identification of those structures destroyed. Addresses, assessors plot maps or anything else, which will positively locate the structures, will aid in this. Assuming the area has been evacuated and residents have not been allowed back due to on- going control activities, you can set in place some processes to ease this situation for the citizens involved.
- As soon as operations can work around limited traffic, announce availability for firefighter-escorted trips during specified times for owners of known destroyed structures. Proof of residency should be required.
- Have agency vans or other suitably marked agency transportation available. Assign compassionate agency fire personnel in uniform with PPE to function as escorts. Outfit the affected citizens in well-marked PPE. Take them to their structure. Reason; too many experiences with this situation have shown that people, even though it is confirmed for them that their structure is destroyed, HAVE to visit the site for personal closure. When performed correctly, this service will generate rave reviews and leave a lasting impression.
- Discuss this sort of action with a local mental health department or other appropriate agency prior to implementation. They routinely have excellent suggestions and counselors available for this type of traumatic undertaking.
- Consider having Advanced Life Support available during such an operation. This has proven worth the effort as reaction to individual trauma can be overwhelming for some; plan for it.

- The media will want to record these returns for human interest. You cannot stop them unless they are considered a hazard to on-going operations (difficult to do if you are taking citizens in). Information could have them elect a representative to travel with the escorts/ victims in your vans to get a story that they will share. Or, selected victims amenable to media attention could provide this coverage. Check on it. Also, check those that aren't and protect them.
- You have a need for damage assessment for structures destroyed. Place an order for this specialized resource when you have some idea of numbers. It could take awhile to assemble the necessary staff to do the job correctly. Consider tapping the county assessor and/or building departments for resources necessary to perform assessments; they have methods we don't, familiarity with what is an inhabitable structure, and resources (plot maps, etc.) which could speed the process. Know what you want from damage assessment; count, photos, prevention information, etc.

You have to recommend evacuation of citizens from the incident. Alert bells should be loudly sounding now. Consider:

- We don't order evacuations; this is a law enforcement function and they have the responsibility. However, they don't have knowledge of incident spread that you do and will be relying on you to trigger the need.
- Get the highest-ranking responsible law enforcement agency official you can. Install him/her into your command structure as a "branch director law enforcement" (put the name on the organization chart quickly). Responsibilities are evacuation, traffic control and security as well as their routine duties. Make this person feel a part of the incident's organization by involvement throughout your planning process and IAP implementation. Make sure this person understands you consider him/her as the law enforcement head for the incident that is working within your structure.
- Bring in the county emergency services coordinator (or someone with these responsibilities; different titles exist). This person has (or should have) pre-planned evacuation centers located, contacts with appropriate social response organizations (Red Cross, etc.) and mass transportation contacts. Develop an appropriate level within your organization for this person and delegate necessary responsibilities. This will be fairly easy in those locations with an active disaster planning effort. It is likely an Emergency Operations Center (EOC) will be established.
- If evacuees are placed into incident generated shelters, have your information section place a team information officer into each shelter. Evacuees will need periodical updates of the current and projected situation. A uniformed person from your staff is best.

- Negotiate early with your law enforcement branch director procedures to be followed once your situation allows reoccupation of the area. Make sure all staff know how this will be announced and what preparatory steps are needed. Law enforcement makes the actual evacuation; they should announce and coordinate reentry.
- There can be pressure (even unvoiced pressure developed within the team) to get people back into their residences as soon as possible. Guard against inhibiting operation's efforts and/or possibly needing to evacuate again (very bad)! Human nature will want to get folks back in quickly; just don't make it too fast. By the same token don't delay unnecessarily. The occupant can help the operation by being present.

Community relations is a broad term for efforts to meet the need of local citizens and elected officials to be informed/involved with your emergency mitigation job. This is an unexplained, but inherent mission each management group has and one the fire service as a whole has never done well. Consider the following:

- Your incident is burning or seriously threatening to burn (or flood, or...) within a community. Citizens have a right and expectation to be informed BY THEIR FIREFIGHTERS what is happening and being done versus getting this information from the media or word of mouth. One avenue is to organize public briefings within the affected community.

Coordinate any of these efforts with local elected official (city council person or board of supervisors for the affected area). They need to be afforded the opportunity to be present and/or participate with these briefings.

- Depending on the incident's magnitude or "feel" for community concern, the first such briefing within specific areas might need to be done by the IC(s) with assistance from your information section. Repeat briefings at a location can be delegated to information if this is felt to be appropriate.
- Daily updated single page informational handouts developed by Information and dispersed from places of community gathering and with IAPs are generally well received. Announce in the last one to be published that future issues will not be done.
- Long-term or damaging incidents will generate a lot of interest by elected officials. You have a responsibility to brief them also. Consider the following:
  - Make sure firefighters themselves know the big picture and can provide accurate information to the public, the media, and officials.
  - Check with an appropriate source to determine if the entire group of community elected officials (city council/board of supervisors) would entertain a briefing during a public comment section of their organized

agenda. This assumes their regular meeting day would be of benefit (incident is still active). Recommend the IC(s) make these presentations.

- Visual displays will greatly assist in such presentations.
- Don't get too technical. These are laypersons, not firefighters. They will be most interested in damages done, projections for control and problems encountered.
- If you are unfortunate enough to have an incident that remains active through another scheduled meeting, see if they would like an update briefing.
- Invite the elected official(s) to attend your Planning Meetings and Operational Briefings. We do not operate in secrecy; invite them and assign a knowledgeable staff to escort them through the processes. If they do attend, announce their presence to the group so your folks know who is in the room.
- If you have a final package of incident maps, damage assessments, rehab plans, team narrative report and the like, have enough packages developed for presentation to the elected officials who have interfaced with you during the incident.

TIP! View the need to meet expectations of citizens and elected officials in the context of; these are your "customers." We have a responsibility to meet the expectations of our customers. DO IT! This might all seem to be a real waste of the team's valuable time, but we do have a responsibility to keep citizens/elected officials informed. The benefits of expanding this effort will be generally well rewarded. Agency folks left behind after a team mitigates the incident will enjoy an improved respect for the fire service.

Very Important Persons (VIPs) Visits. Incident visits by interested important people will happen. VIPs could be just about anyone; politicians, government department heads, etc. Be prepared for them! Some will be invited, some will appear unannounced. Regardless, teams should have internal procedures in-place and known by all members to deal with these important visitors (team guidelines?). Consider the following:

- A team function is designated as responsible for VIPs. Routinely, this falls to information. It really doesn't matter who, just so long as there is a function responsible and staffed to handle these folks. The goal is to brief the VIPs on the incident's history, what is projected and what problems exist. Visual aids in a briefing area will make this much easier. Dependent upon the visitor, ICs may be expected to make this presentation.
- Tour incident developed facilities with VIPs. Without disturbing work being conducted, orientations to the planning section's efforts will usually amaze folks

seeing this activity for the first time. The same is true with the finance section. Of course, a tour of facilities isn't complete without trying the kitchen.

- Requests for tours to the front lines can be expected. If practical, go with appropriately marked PPE and in agency marked vehicles. Expect and plan for over-flight requests; these are appropriate when correctly licensed aircraft are available and such movement does not interfere with operations.
- Upon their departure, ask if a follow-up personal briefing is of value for them. A simple phone number exchange will allow rapid transfer of information to them and could limit return visits
- Accountability is an often discussed and noble issue, but one which is difficult to see results with. In a team setting, accountability has to start with the team. Team guidelines have laid out specific expectations; did they get met? Your agency administrator laid out expectations (strategic goals/objectives) for the team; did they get met? Section chiefs laid out expectations for their subordinates; did they get met? How do you know? We historically have done poorly when recording job performance with proper documentation. Be a part of a force to change this trend!
- Team members with written guidelines know what is expected of them. Performance ratings should have these expectations incorporated as rating factors. If met, say so. If not, explain why performance was less than adequate. Improvement for a next deployment is the goal.
- Routinely, agency administrators will be very satisfied with a team's performance when the incident is successfully controlled. Sometimes, to the point of embarrassment. However, do they really review your documentation, ask for final cost figures, demand reviews of accidents/injuries or feel free to discuss on-going political problems in an incident's aftermath? No, but these are the issues that administrators deal with. As a last professional gesture, what would an administrator do with a performance rating sheet listing these types of issues handed to him/her by an IC? It might be worth doing just that to watch their expression. If you get one honestly filled out, it will make a great learning tool for the entire team.
- Section heads must feel it's an obligation of their position to honestly rate subordinates. The team should decide early (in their guidelines) to what level of the organization performance ratings would be required. Once done, make the forms available and have a central location staffed for their collection. Distribute off the incident under direction of agency policy or the agency administrator.

Substandard or non-performance is not a frequent occurrence, but one that will need to be faced. If performance impacts the incident detrimentally; release and send them home. Follow with immediate contact to their home supervisor advising of the situation and reason for early return. Follow it with written documentation. Include all pertinent

facts. You had better be right as this is about the biggest action you can take against a professional and one that may take follow-up action after the incident. But hey, that's what you get the big money and title for.

TIP! Personnel problems must be referred to the IC immediately. Some tough decisions have to be made. Is the transgression or act sufficient to warrant future punitive action? If so, recommendation is that a specific investigator for the occurrence be requested. Current personnel assigned to the incident already have a job and/or might not have expertise to perform and document a needed investigation properly. Get specialized help when needed.

TIP! Teams should have base/camp rules of conduct available in their portable word processing. This will need to detail acceptable/unacceptable conduct and attire for personnel to adhere to. Post on bulletin boards and include in IAPs as deemed appropriate. Then BACK IT UP!

Your incident has numerous resources from the state's Mutual Aid System assigned. A common situation but one that does have implications associated with it.

- Require a conscious and periodical review by operations on the effectiveness and value of these resources. On many occasions, we can look back and confidently say these resources were held too long. These have, at times, become a security blanket in case "something goes wrong". In many cases, their true value ended 24 hours previously. Monitor.
- Why do we continue to associate "structure protection" needs with Type I engines? In many locations, these monsters have limited applications. Nearly as many Type II and III engines are available through the system and these lend themselves better for many more applications. Think about it when ordering
- When you have enough advance knowledge of need, request those state-owned engines available through the system. They are cheaper and have adequate capabilities for most applications. Response times can normally be the limiting factor.
- Demobilizing a large collection of mutual aid resources can become a nightmare. Plan early and staff up. The vehicle safety inspection portion takes a while.

You have stabilized the incident and begin planning for demobilization. As the primary thrust to accumulate resources was driven by operation's needs, this section has primary responsibility to generate information on their future needs and scale-back of the incident. One tool to assist in this "crystal ball" projecting is a matrix developed by operations. The matrix lists different types of resources to be used, each operational period out for a minimum of three days and projected needs of each type of resource for each subsequent operational period. Operations should review this matrix often. With

exception of the following operational period, numbers can be modified as each operational period completes their assignment and the needs change up or down. Armed with this type of information, the team can begin demobilization planning and proceed. Plan early, review often and demobilize resources that are not needed

### **What's Coming Your Way Next?**

What is on the horizon for Incident Management Teams? Who knows. However, if recent deployments are an indicator of the future, things will be interesting. New challenges exist and possible assignments for situations yet unknown surely will test skills of current and future team members.

The adoption of the Standard Emergency Management System (SEMS) guidelines by the State of California could impact teams deployed to that state. Incident management and coordination have been given new emphasis. Availability of trained/experienced Incident Management Teams is becoming known by many jurisdictions that previously had very little knowledge of or exercise in emergency management. Most are attempting to train and learn a system that will routinely be exercised annually or when “the big one” hits. Many have already demonstrated and acknowledged limited ability to function proficiently due to a lack of continuous application of these skills. With these specialized skills available on demand, many jurisdictions will look to Incident Management Teams to fill their occasional needs. What will this entail?

New types of incidents will need to be managed. Large scale Hazmats, civil disturbances, earthquakes, floods and, yes, an occasional tsunami will all impact California and possibly other locations. Who knows what other calamity will jolt nature's playground for disasters. However, all will require massive amounts of resources for mitigation. Will managing these effectively be that much different than a wildland fire? No, only the actual application of these resource's skills will be somewhat different. In other words, effectively dealing with large numbers is not any bigger deal than what we routinely do; only the application will differ.

What can a team expect? Consider:

- Teams will not normally have knowledge or training in many areas needed; dealing with large numbers of displaced citizens (both short and long-term), addressing water and air pollution concerns on a large scale, restoring basics of life needed to survive like emergency drinking water systems and food as well as many other aspects. What to do?
- Get the most knowledgeable technical specialist for areas where the corporate knowledge of the team is lacking; just like on a wildland fire incident. Then listen to them!

- Develop interpersonal skills that will be necessary to coordinate and interact with personnel from many different agencies and jurisdictions. This is not as easily accomplished as you might think. You will have inherent problems with some because of the “what do a bunch of wildland firefighters know” syndrome. Show em!
- You will not have that warm fuzzy feeling that you have done this particular type of incident a hundred times to fall back on. However, you will have tested emergency management skills exceeding those around you. Use em!
- Expenditure of dollars will be a nagging hindrance to feeling free to accomplish what is needed. “Where is all of this money coming from” will become a steady nightmare.
- Pressure to perform without a hitch will be ever present. This could be voiced or personally felt by individual team members. Effects might become overwhelming. Teams should discuss this and recognize its symptoms.
- Possible concerns for team member’s personal property and family could surface. Were member’s residences within an affected area? Deal with this straight away
- Teams need awareness of, but avoid, intra and interagency political wars. Our presence at non-wildland fire incidents will incite some while soothing others. Regardless, you have a job to do; just do it and leave the infighting to the real wheels.
- With new types of incidents will come new types of assignments.
- You might not be in charge of the big picture; a portion or role could have been delegated, e.g., managing the receipt and distribution of relief supplies, restoration of water supplies, etc.
- You could be working for another management organization (team) on a portion of the overall incident that may or may not be experienced/ knowledgeable. Expect it.

With expansion of emergency response coordination and management under SEMS legislation comes the requirement for Emergency Operation Centers (EOCs) at various levels of government. Training continues for personnel for EOC staffing. A problem with this system is that a majority of the personnel will perform these EOC duties as an additional responsibility to their normal job. Many have only limited knowledge of performing in an emergency response mode.

Fewer have actually performed on emergency incidents. Obviously, many agencies will look toward Incident Management Teams for assistance based on known capabilities and input from their counterparts throughout the states.

Many jurisdictions and various levels of government have already discovered the abilities and availability of Incident Management Teams. This knowledge is being shared and expanded within those circles. What will a team face while filling a request to function within an EOC?

- A clear delegation of roles and authorities will be required. This should be a must even if the team has to assist in developing them (and you should/will). You could be operating in an arena without benefit of legal backing; may not be legislated to do some of the roles as expected on wildland fires. Get your delegation right and in enough detail to cover you and the agencies you represent.
- A team could be delegated to act as the sole management representative of the responsible jurisdiction. Delegation would need to be very specific and complete. Ramifications from an indiscriminate delegation could become monumental. This could equate to being delegated responsibility for a fire emergency.
- A team could be requested to perform as “shadows” or deputies within an EOC with responsible jurisdiction personnel filling all “lead” roles. The easiest way to visualize this scenario is a team would be performing a “training” mission of walking the other personnel through the para-military organization of ICS and developing team building skills of the personnel. True delegation of authority would never leave the jurisdiction, but a team will need clear definition of their expected role.
- A team could be delegated portion(s) of large incidents to manage. Again, very specific delegations would need to be documented.

---

# Unit 4: Obtaining Incident Safety Information

STUDENT MANUAL

---

---

---

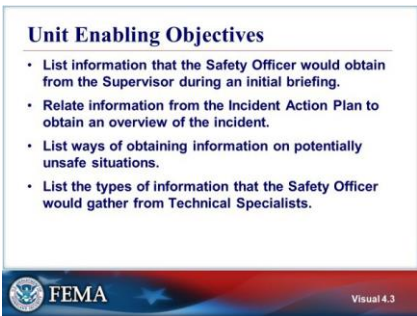
This page intentionally left blank.



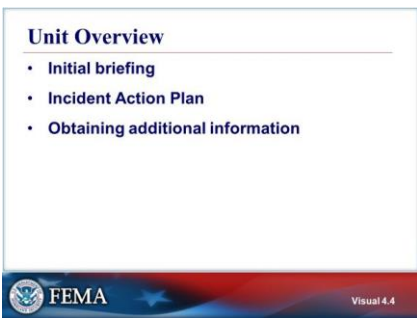
Visual 4.1



Visual 4.2



Visual 4.3



Visual 4.4

## UNIT 4: OBTAINING INCIDENT SAFETY INFORMATION

### UNIT TERMINAL OBJECTIVE

Identify the information that the Safety Officer must obtain when beginning work on an incident and potential sources for obtaining that information.

### UNIT ENABLING OBJECTIVES

- List information that the Safety Officer would obtain from the Supervisor during an initial briefing.
- Relate information from the Incident Action Plan (IAP) to obtain an overview of the incident.
- List ways of obtaining information on potentially unsafe situations.
- List the types of information that the Safety Officer would gather from Technical Specialists.

The Final Exam questions are based on the Unit Enabling Objectives.

### UNIT OVERVIEW

**Initial Briefing**


As the Safety Officer, you are responsible for obtaining the information necessary to do your job.

**You** are responsible for asking adequate questions!



FEMA Visual 4.5

Visual 4.5



Handout 4-1: Initial Briefing

FEMA Visual 4.6

Visual 4.6

**Incident Action Plan**

- ICS forms are “controlled notes.”
- Every incident has an Incident Action Plan (IAP), but not all IAPs are written.

Handout 4-2: Sample IAP

FEMA Visual 4.7

Visual 4.7

## INITIAL BRIEFING

As the Safety Officer, you are responsible for obtaining information and you should receive an Initial Briefing when you first arrive. Your first source of information will be your Supervisor—the Incident Commander for the Lead Safety Officer and the Lead Safety Officer, if you are functioning as an Assistant Safety Officer.

You—and only you—are responsible for asking adequate questions.

### HANDOUT 4-1: INITIAL BRIEFING

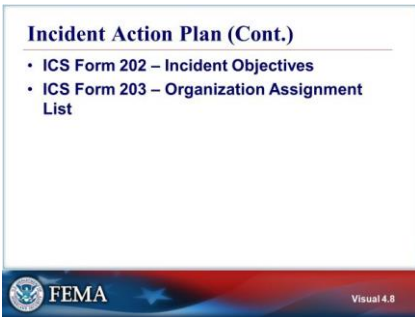
Refer to Handout 4-1: Initial Briefing.

## INCIDENT ACTION PLAN

ICS forms are “controlled notes” and they tell the Safety Officer the data points that he or she needs to gather, but this does not mean that the Safety Officer needs to put all of the information on a form or only needs what is asked for on the forms.

Not all IAPs are written. A Safety Officer may also review the ICS Form 201, Incident Briefing, for additional information.

Refer to Handout 4-2: Sample Incident Action Plan.



Visual 4.8

## **INCIDENT ACTION PLAN (CONT.)**

### **ICS Form 202 Incident Objectives**

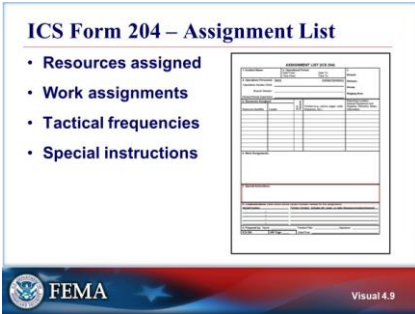
ICS Form 202 includes general weather information, Safety Messages, and objectives for each Operational Period. The objectives put some control methods around the incident response and what it will accomplish.

The Safety Officer will contribute a very general safety note for each Operational Period, which are applicable to all personnel but not as detailed as the full Safety Message. This can be recorded on an ICS Form 208, Safety Message/Plan.

### **ICS Form 203 Organization Assignment List**

ICS Form 203 shows the organizational chart for Command and General Staff, Unit Leaders, Division Supervisors, and so forth. This is the team with whom the Safety Officer will be working.

The Safety Officer should note span-of-control considerations from a safety perspective, as well as who to contact with regard to various issues that may arise (for example, the Ground Support Unit Leader for fuel issues).



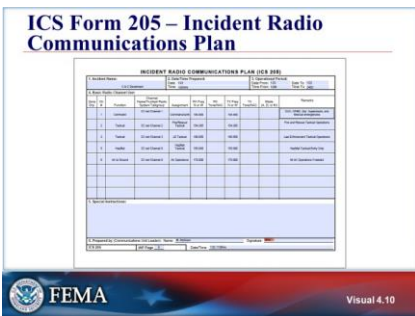
Visual 4.9

## ICS FORM 204 ASSIGNMENT LIST

ICS Form 204 shows who has key roles in each Division, Branch, or Unit. It also shows the resources that they have and the objectives they are pursuing, and communications that they will use so that the Safety Officer can monitor them.

The Special Instructions box (Box 7) on ICS Form 204 is where the Safety Officer lists specific safety issues for that Division, Branch, or Unit. For example:

- Hazards specific to one geographic location: weather, heavy equipment operating, oil spills, animals/insects, and so forth.
- Hazards specific to one functional area.
- Issues related to a specific activity, such as structural collapse issues for an Urban Search and Rescue (USAR) Team.
- Medical emergency procedures, even if it repeats the Medical Plan.



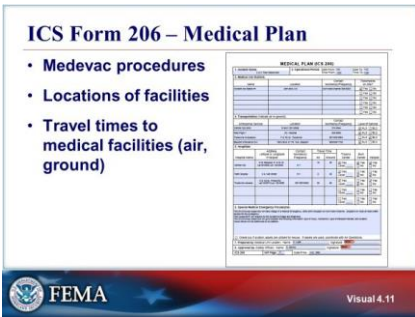
Visual 4.10

## ICS FORM 205 INCIDENT RADIO COMMUNICATIONS PLAN

ICS Form 205 identifies the frequencies that are being used at the incident site. The Safety Officer must monitor all incident communications in order to identify safety issues that are occurring or may occur, including sudden spikes in communications activity or the presence of media or civilians on incident radio frequencies.

The Safety Officer must also be able to contact the Incident Command Post, and be contacted by everyone at the incident site.

Monitoring communications can be very complex and may require several radios and an Assistant Safety Officer to manage them.



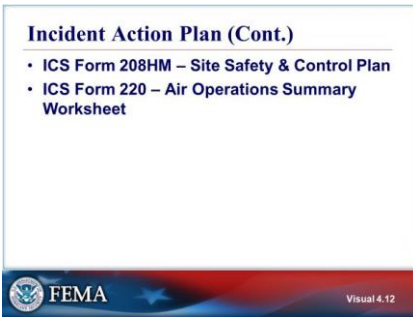
Visual 4.11

## ICS FORM 206 MEDICAL PLAN

ICS Form 206 informs everyone at the incident site about what happens when there is an accident or injury involving incident personnel. The procedures should be written out so that no one has to stop to think about what to do.

The Medical Plan should have specific information about the hospitals (capabilities, ability to cooperate with incident personnel) and specific instructions for personnel. Box 8 on the Medical Plan supplies this information, including what to do, who to call, what happens to the injured personnel, and how to proceed with the investigation.

The Safety Officer approves and signs the Medical Plan (or may write it if there is no Medical Unit). The Medical Unit reports to the Logistics Section, but must satisfy you with the plan.



Visual 4.12

## INCIDENT ACTION PLAN (CONT.)

### ICS Form 208HM: Site Safety and Control Plan

ICS Form 208 HM is a derivation of the ICS Form 208 (Safety Message/Plan). It is not contained in the FEMA ICS Forms Booklet (FEMA 502-2, September 2010).

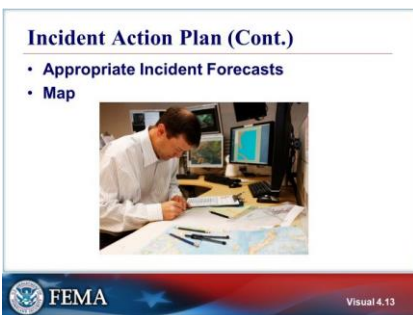
ICS Form 208HM was built to plan entry for HAZMAT incidents, but it is a tool for many things. It is a good, quick way to get control of the incident and see where there may be problems.

The Safety Officer must fill out ICS Form 208HM for any HAZMAT incident. Because of the complexity of these operations, it is generally a good idea to assign an Assistant Safety Officer with special experience in HAZMAT to this task.

### ICS Form 220: Air Operations Summary Worksheet

Using ICS Form 220 requires knowledge of Air Operations and will either be completed by an Assistant Safety Officer with Air Operations experience or by an Aviation Safety Officer teamed with the Air Operations Branch Director.

Personnel in charge of Air Operations are familiar with completing ICS Form 220. The assigned Safety Officer should be aware of what aviation assets are assigned to the incident and the associated safety hazards they present.

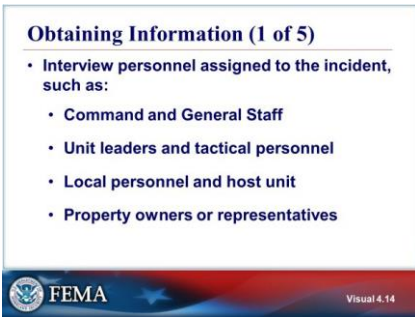


Visual 4.13

## INCIDENT ACTION PLAN (CONT.)

Incident analysis and forecasts from Technical Specialists can provide the Safety Officer with a wealth of information about specific issues (for example, weather, fire and chemical behaviors).

Additional components of the IAP that the Safety Officer should review are transportation plans, ingress and egress routes, incident maps, incident base and camp maps, etc.



Visual 4.14

## OBTAINING INFORMATION (1 OF 5)

### Command and General Staff

They are likely to have good information on safety issues because of their incident experience and because they have the most information about the incident as a whole.

### Unit Leaders and Tactical Personnel

They see the injuries and accidents that their personnel are experiencing. The Medical Unit will be able to report on accident or injury trends that may lead you to a safety concern that you must address.

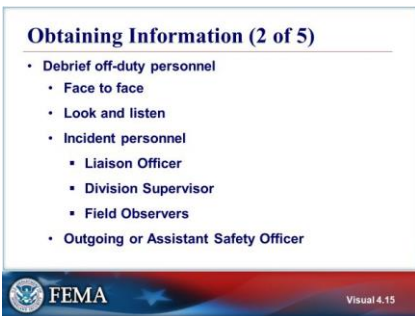
The personnel who are doing the work and facing the hazards often have the most information about the dangers associated with it. They know when they are not in a safe situation and can tell the Safety Officer about it.

### Local Personnel and the Host Unit

The jurisdictions may track common injuries or diseases in their area and may help the Safety Officer identify what is happening to personnel. They also have special knowledge that the Safety Officer should warn personnel about, such as whether there are mine shafts in a wooded area or buildings that are prone to structural issues in a city.

### Property Owners or Representatives

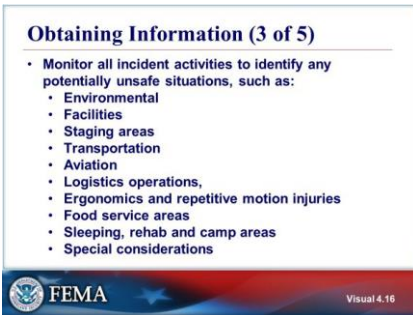
Local people may know things that the Safety Officer won't see on a map (for example, mine shafts, weak bridges, hunting traps, or when to expect traffic). This can go beyond official representatives and local personnel to asking locals in restaurants, stores, and so forth.



Visual 4.15

## OBTAINING INFORMATION (2 OF 5)

One of the important reasons that the Safety Officer needs to consider team dynamics is so incident personnel are comfortable sharing information with him or her.

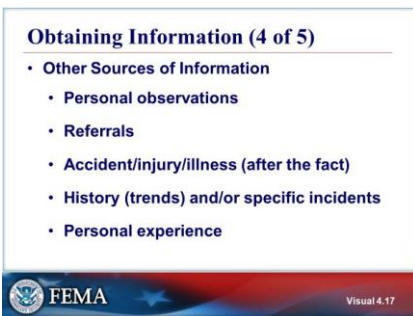


Visual 4.16

## OBTAINING INFORMATION (3 OF 5)

Monitor all incident activities to identify any potentially unsafe situations, such as:

- Environmental: Animals, terrain, insects, and so forth
- Facilities: Tripping hazards like lines coming off of tents; equipment not properly stored; or traffic issues in camps (roads that are too small for two-way traffic), parking, and sleeping areas that are too close together
- Staging areas-exhaust fumes, lighting, personnel sleeping under apparatus,
- Transportation: Unsafe vehicles, unsafe roads, safe ingress and egress routes
- Aviation
- Logistics operations-receiving, loading/unloading of delivery vehicles, refueling operations,
- Ergonomics and repetitive motion injuries in ICP
- Food service areas
- Sleeping, rehab and camp areas
- Special considerations: Incident that is near a historic landmark or archeological site where these issues will create complications for safe incident operations.



Visual 4.17

## OBTAINING INFORMATION (4 OF 5)

**Obtaining Information (5 of 5)**

- Use specialists to identify (and mitigate) hazards.  
For example:
  - Group Supervisor
    - Structure Protection Specialist
    - Search and Rescue
  - Technical Specialists
    - Wildlife/Fisheries
    - Public Health
    - Engineers



Visual 4.18

**OBTAINING INFORMATION (5 OF 5)**

The Safety Officer should request a specialist any time that there is something unique at the incident site that the Safety Officer is unfamiliar with and needs advice on.

Technical Specialists are often tied to an Assistant Safety Officer because while they have knowledge of their discipline, they may not be trained in the Incident Command System (ICS) or as a Safety Officer.

Technical Specialists can include structural engineers, hazardous materials experts, chemists, meteorologists, seismologist, hydrologists, etc.

**Technical Specialists**




Visual 4.19

**TECHNICAL SPECIALISTS**

The image on the left shows a HAZMAT Specialist. The image on the right shows a Structural Specialist after an earthquake.

It is not the role of the Safety Officer to know everything, but to recognize when a situation is sufficiently unfamiliar and specialized experience is required.

**Consult with Technical Specialists**

What types of technical specialists could provide incident forecasts?



Visual 4.20

**CONSULT WITH TECHNICAL SPECIALISTS**

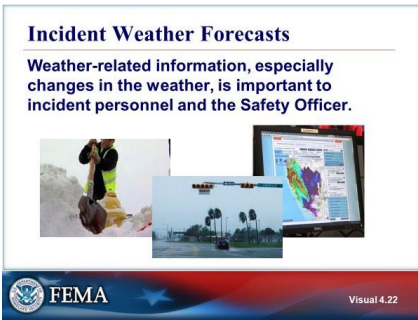
**Chemical/Fire Behavior Forecast**




Visual 4.21

**CHEMICAL/FIRE BEHAVIOR FORECAST**

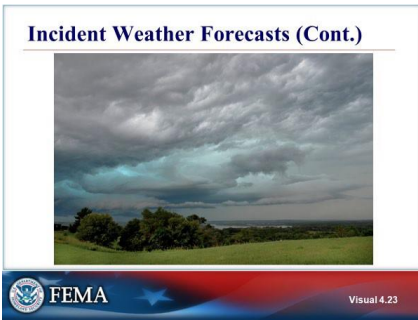
For a chemical incident, a Technical Specialist can get a plume model for the smoke from burning chemicals, from the release of airborne chemicals, or the expected behavior of a hazardous material that has leaked on the ground or in water.



Visual 4.22

## INCIDENT WEATHER FORECASTS

All incidents are influenced by weather, so it is important for the Safety Officer to have an up-to-date forecast, especially in a place where weather can change suddenly.



Visual 4.23

## INCIDENT WEATHER FORECASTS (CONT.)

The Safety Officer should gather information not just from weather forecasts, but also from physical weather signs that can be seen. For example, cloud formations may indicate that storms are likely. In this case, the Safety Officer needs to warn everyone about the potential hazards so personnel are ready to seek shelter.



Visual 4.24

## INCIDENT WEATHER FORECASTS



Visual 4.25


## ACTIVITY 4.1: EXPLORE SAFETY RESOURCES

The instructor will explain Activity 4.1.

You will have 30 minutes to complete this activity.

**Objectives Review**

1. What information would you obtain during an initial briefing?
2. What information from the Incident Action Plan provides an overview of the incident?
3. How could you obtain information on potentially unsafe situations?
4. What information could Technical Specialists provide to the Safety Officer?



The image shows the FEMA logo on the left and the text 'Visual 4.26' on the right, set against a red and blue background.

Visual 4.26

## OBJECTIVES REVIEW

### Unit Enabling Objectives

- List information that the Safety Officer would obtain from the Supervisor during an initial briefing.
- Relate information from the Incident Action Plan (IAP) to obtain an overview of the incident.
- List ways of obtaining information on potentially unsafe situations.
- List the types of information that the Safety Officer would gather from Technical Specialists.

This page intentionally left blank.

# Supplemental Materials

This page intentionally left blank.

## Handout 4-1: Initial Briefing

Suggested information that you should obtain during an Initial Briefing:

- Current status
- Incident size
- Numbers (e.g., personnel, operational groups)
- Incident staging
- Contaminants of concern
- Terrain
- Exposures
- Threats
- Weather conditions
- Current resource commitments
- Incoming and demobilizing resources
- Identified hazards/risks
- Reportable injuries/accidents
- Incident communications status
- Organizations, policies, and operating procedures
  - Restrictions
    - Archeological site
    - Culturally or historically protected site
    - Restrictions on operations in residential areas
  - Host agency jurisdiction
    - Unified Command
    - Multiple jurisdictions
  - Meeting schedule, operational period(s)
  - Others needs
    - Status Report
    - Attendance at meetings
- Special considerations
  - Urban interface
  - Cultural
- Transportation system
  - Your needs

This page intentionally left blank.

## Handout 4-2: Sample Incident Action Plan

Refer to EL\_954\_HO\_4-2\_ICCS\_Form\_202.pdf

Refer to EL\_954\_HO\_4-2\_ICCS\_Form\_203.pdf

Refer to EL\_954\_HO\_4-2\_ICCS\_Form\_204\_1\_of\_7.pdf

Refer to EL\_954\_HO\_4-2\_ICCS\_Form\_204\_2\_of\_7.pdf

Refer to EL\_954\_HO\_4-2\_ICCS\_Form\_204\_3\_of\_7.pdf

Refer to EL\_954\_HO\_4-2\_ICCS\_Form\_204\_4\_of\_7.pdf

Refer to EL\_954\_HO\_4-2\_ICCS\_Form\_204\_5\_of\_7.pdf

Refer to EL\_954\_HO\_4-2\_ICCS\_Form\_204\_6\_of\_7.pdf

Refer to EL\_954\_HO\_4-2\_ICCS\_Form\_204\_7\_of\_7.pdf

Refer to EL\_954\_HO\_4-2\_ICCS\_Form\_205.pdf

Refer to EL\_954\_HO\_4-2\_ICCS\_Form\_206.pdf

Refer to EL\_954\_HO\_4-2\_ICCS\_Form\_208.pdf

### Use of Force Statement for IAP

Officers shall use or allow to be used, only that amount of force reasonable and necessary to accomplish the mission. Authorization for use of force for "target specific" purposes will be dictated by Central City Police Department Use of Force Policy & Procedure. Squad, Team, and Platoon Leaders shall closely monitor the use of force by their members.

Prior to the deployment of any specialty weapons, the Incident Commander shall be contacted and provided with an update and assessment of the situation. The Incident Commander's authorization shall be required prior to deployment of special munitions. Once authorized by the Incident Commander, particular deployment of target specific specialty and chemical munitions (i.e. pepperball) by any Team shall require prior authorization by the Operations Section Chief. The deployment of non-target specific specialty munitions (i.e. stinger balls) shall require authorization by the Operations Section Chief. The deployment of chemical munitions for other than target specific purposes will require prior authorization from the Operations Section Chief who, if practicable, will first consult with the Incident Commander. A Technical Specialist shall be available to commanders for consultation with regard to the use of chemical or specialty munitions.

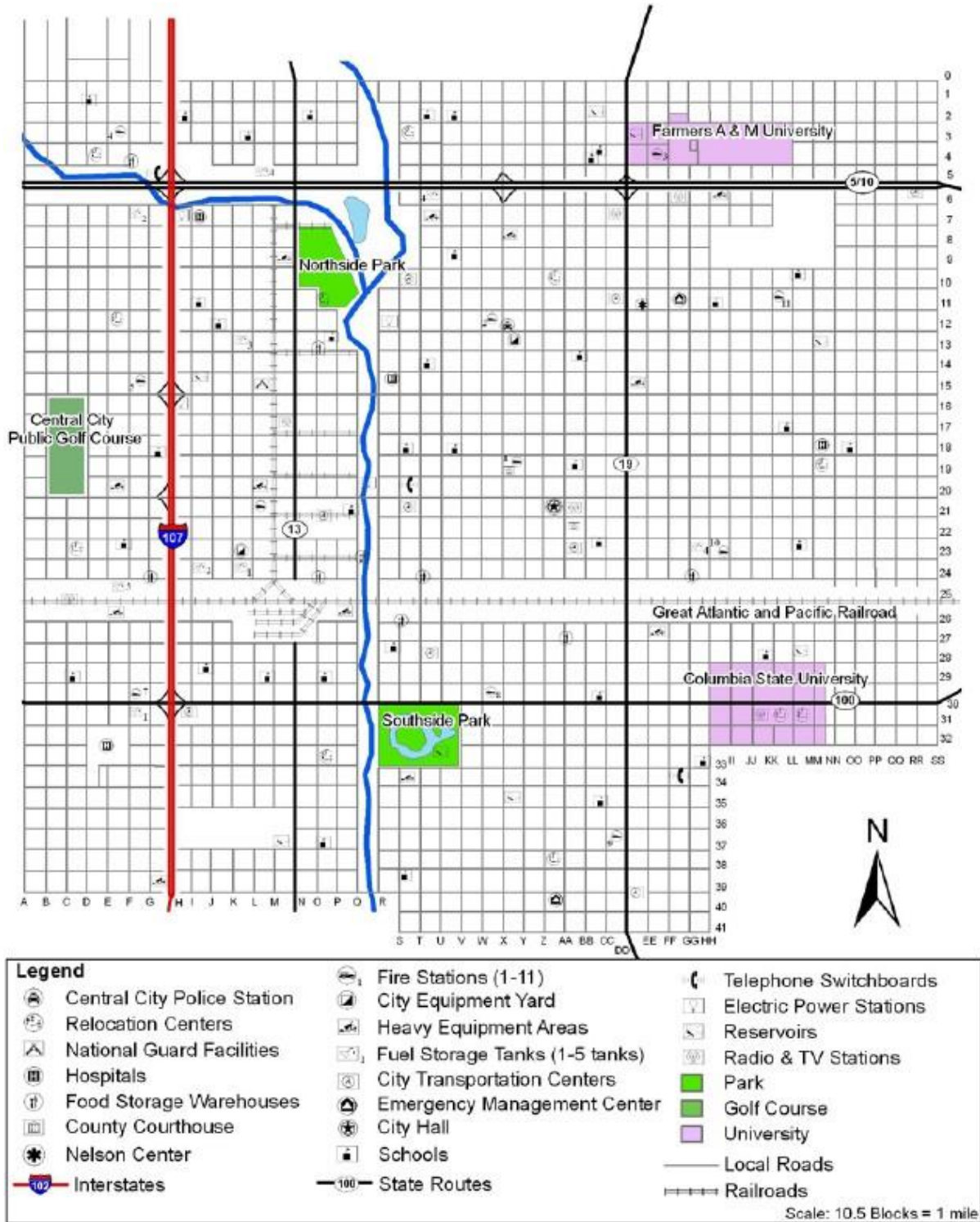
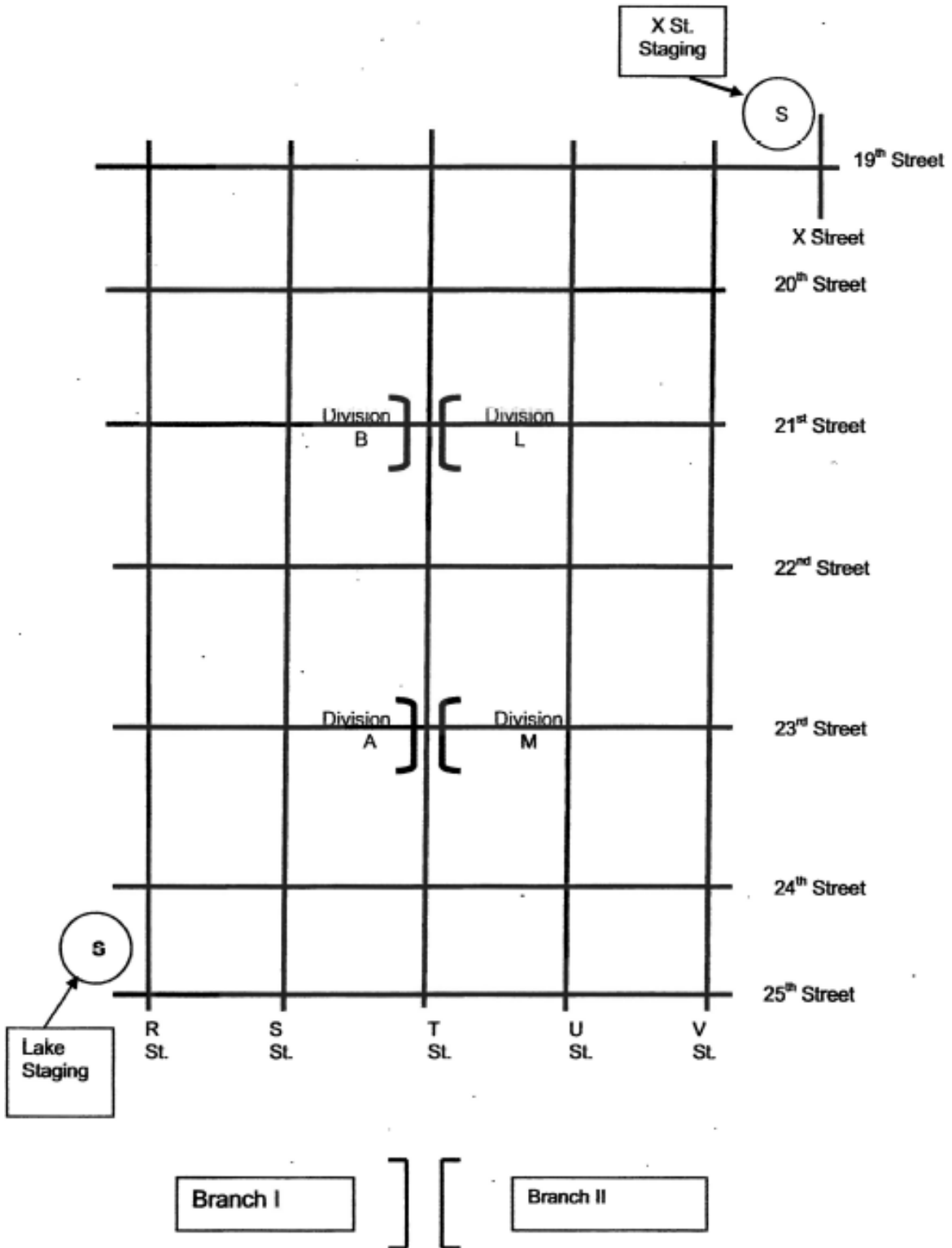


Figure Z.6. Central City Map

Incident Area: 20th Street North, 24th Street South, R Street West, V Street East



This page intentionally left blank.

## Activity 4.1: Explore Safety Resources

### Unit 4

#### Purpose

The purpose of this activity is to provide students with an opportunity to explore the sources of any necessary safety information that is not contained in an existing written Incident Action Plan upon their arrival at an incident site.

#### Objectives

Students will:

- Brainstorm the hazard-specific information that a Safety Officer would need before or upon reporting to a given type of incident.
- Identify where the Safety Officer would obtain that information if there was no written IAP.

#### Activity Structure

This activity will last approximately 30 minutes, including small group discussion and presentation of group findings. Students will gather in small groups to discuss the information that they would need to gather when reporting to an assigned type of incident, and brainstorm potential sources of that information if it is not contained in an IAP. Each group will receive an assigned incident type: flood, fire, hostage situation, or biological event (ricin). Each group will present their findings to the rest of the class.

#### Rules, Roles, and Responsibilities

The following are the specific activities and instructions for your participation in this activity:

1. Within your small group, select a group spokesperson.
2. Receive your group's assigned incident from the Instructor.
3. Brainstorm the hazard-specific information that you would need to gather to understand and identify the safety issues applicable to your incident type.
4. List potential sources of that information if it were not contained in a written IAP (e.g., in a hazardous materials incident, you would need to know about the toxicity of the chemical, which would be found on the Materials Safety Data Sheet [MSDS] for that chemical).
5. Present your list to the rest of the class.

The Instructor assigns incident types, moderates discussions, answers questions, and provides additional information as required.

## Activity 4.1 Schedule

Activity	Duration	Participation Type
Activity Introduction and Overview	2 minutes	Classroom
Discuss and Document	15 minutes	Small groups
Debrief and Review	13 minutes	Classroom

---

# Unit 5: Identifying Hazards and Risks

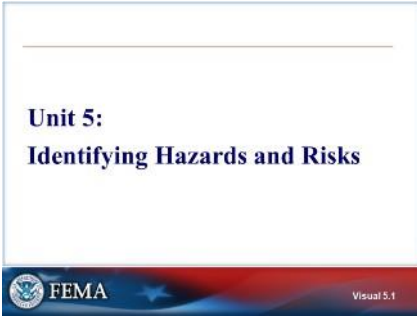
STUDENT MANUAL

---

---

---

This page intentionally left blank.



Visual 5.1

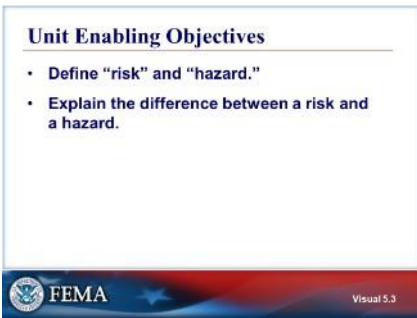
## UNIT 5: IDENTIFYING HAZARDS AND RISKS



Visual 5.2

### UNIT TERMINAL OBJECTIVE

Contrast between a hazard and a safety risk.

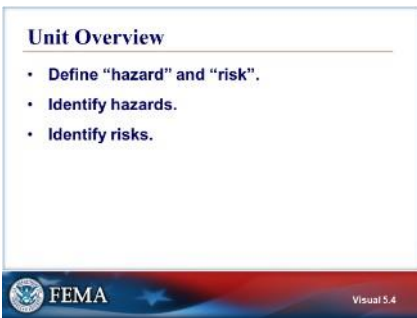


Visual 5.3

### UNIT ENABLING OBJECTIVES

- Define “risk” and “hazard”.
- Explain the difference between a risk and a hazard.

The Final Exam questions are based on the Unit Enabling Objectives.



Visual 5.4

### UNIT OVERVIEW

This unit explains the types of hazards and risks that the Safety Officer might encounter. Rather than list all potential hazards and risks, this unit offers you a chance to build your knowledge of hazards and risks that you might encounter and to recognize the potential issues that you may need to learn about.

**Hazards**

Hazards – Things in the environment that can cause harm to people or equipment.




FEMA Visual 5.5

Visual 5.5

## HAZARDS

**Risks**

Risks – The chances that people take in relationship to hazards.



FEMA Visual 5.6

Visual 5.6

## RISKS

**Hazard vs. Risk**

- A hazard does not necessarily put you at risk.
- Everything we do exposes us to hazards.
- HOW we do things is what determines the risk.

FEMA Visual 5.7

Visual 5.7

## HAZARD VS. RISK



**Activity 5.1:  
Identify Hazards and Risks**

Allotted Time: 30 minutes

FEMA Visual 5.8

Visual 5.8

## ACTIVITY 5.1: IDENTIFY HAZARDS AND RISKS

The instructor will explain Activity 5.1.

You will have 30 minutes to complete this activity.

**Identify Hazards and Risks**

The Safety Officer is expected to be highly experienced, but still might not know all the hazards that are present.




Visual 5.9

**IDENTIFY HAZARDS AND RISKS**

The Safety Officer is NOT expected to know all of the hazards that are present. Experience helps the Safety Officer learn more of them, but Assistant Safety Officers and Technical Specialists can augment that knowledge.

**Identify High Potential Risks**

- Identify risks with the greatest potential for serious accident or injury.
- What are the most dangerous actions people take while responding to an incident?



Visual 5.10

**IDENTIFY HIGH POTENTIAL RISKS**

**High Potential Risks: Transportation**




Visual 5.11

**HIGH POTENTIAL RISKS: TRANSPORTATION**

This is Ground Zero at the World Trade Center on September 11th, 2001.

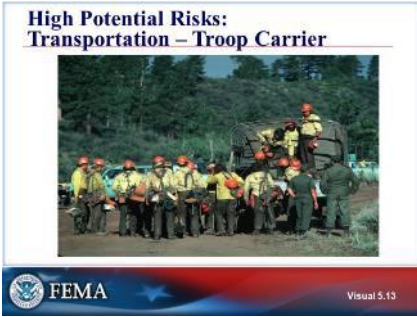
**High Potential Risks: Transportation - Boats**




Visual 5.12

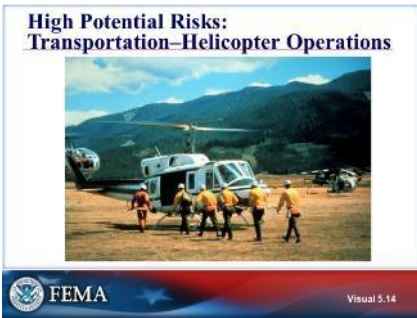
**HIGH POTENTIAL RISKS: TRANSPORTATION - BOATS**

This is wildland fire season in the summer.



Visual 5.13

**HIGH POTENTIAL RISKS: TRANSPORTATION – TROOP CARRIER**



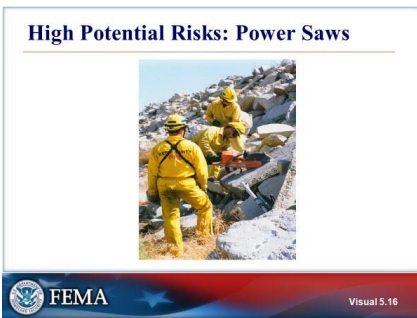
Visual 5.14

**HIGH POTENTIAL RISKS: TRANSPORTATION – HELICOPTER OPERATIONS**



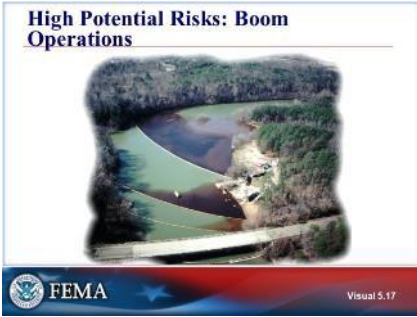
Visual 5.15

**HIGH POTENTIAL RISKS: TACTICAL ASSIGNMENT**



Visual 5.16

**HIGH POTENTIAL RISKS: POWER SAWS**



Visual 5.17

**HIGH POTENTIAL RISKS: BOOM OPERATIONS**



Visual 5.18

**HIGH POTENTIAL RISKS: SPECIALIZED EQUIPMENT**



Visual 5.19

**HIGH POTENTIAL RISKS: TRENCHING AND SHORING OPERATIONS**



Visual 5.20

**HIGH POTENTIAL RISKS: BUILDING COLLAPSE**



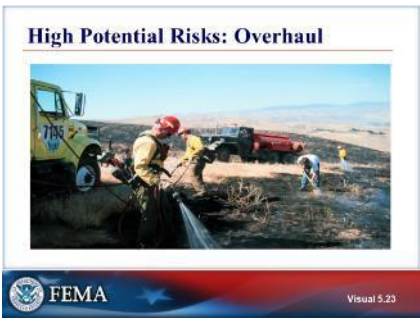
Visual 5.21

**HIGH POTENTIAL RISKS: FELLING OPERATIONS**



Visual 5.22

**HIGH POTENTIAL RISKS: NIGHT OPERATIONS**



Visual 5.23

**HIGH POTENTIAL RISKS: OVERHAUL**




Visual 5.24

**HIGH POTENTIAL RISKS: AIR OPERATIONS**

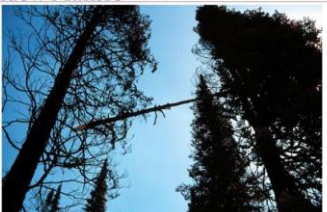

**Identify High Potential Hazards**

- Identify hazards with the greatest potential for serious accident or injury.
- What are the most dangerous things people can encounter while responding to an incident?



Visual 5.25

**High Potential Hazards: Snags & Widow Makers**



Visual 5.26

**High Potential Hazards: Chemical and Biological Hazards**




Visual 5.27

**High Potential Hazards: Chem-Bio Hazards (Cont.)**

Visual 5.28

**IDENTIFY HIGH POTENTIAL HAZARDS**

**HIGH POTENTIAL HAZARDS: SNAGS & WIDOW MAKERS**

Terminology explanation: A Snag is a standing dead tree or part of a dead tree from which at least the leaves and smaller branches have fallen. A Widow-Maker is a loose limb, top, or piece of bark lodged in a tree, which may fall on anyone working beneath it.

Reference NWGC Glossary - <https://www.nwgc.gov/glossary/a-z>

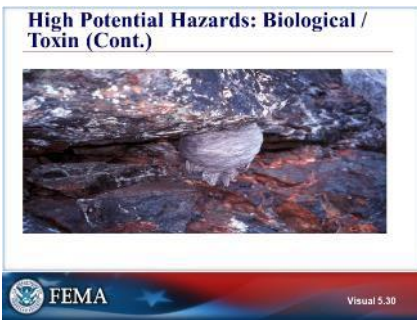
**HIGH POTENTIAL HAZARDS: CHEMICAL AND BIOLOGICAL HAZARDS**

**HIGH POTENTIAL HAZARDS: CHEM-BIO HAZARDS (CONT.)**



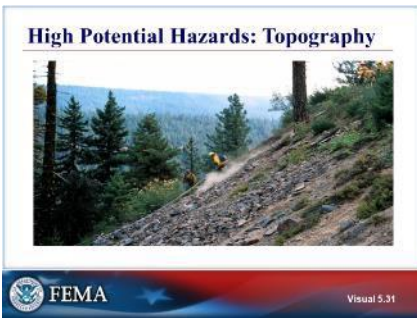
Visual 5.29

**HIGH POTENTIAL HAZARDS: BIOLOGICAL/TOXIN**



Visual 5.30

**HIGH POTENTIAL HAZARDS: BIOLOGICAL/TOXIN (CONT.)**



Visual 5.31

**HIGH POTENTIAL HAZARDS: TOPOGRAPHY**



Visual 5.32

**HIGH POTENTIAL HAZARDS: CHEMICAL/FIRE BEHAVIOR**



Visual 5.33

### HIGH POTENTIAL HAZARDS: CHEMICAL/FIRE BEHAVIOR (CONT.)

This is a model from EPA's ASPECT aerial modeling platform, which examines chemical releases over large areas and helps you to predict the hazard area. It tells you how big your evacuation needs to be.



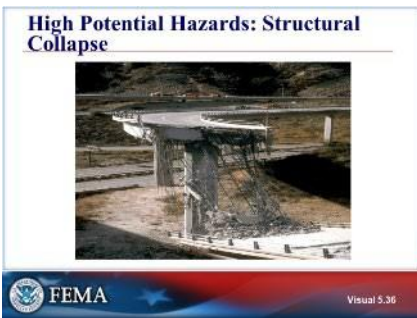
Visual 5.34

### HIGH POTENTIAL HAZARDS: WEATHER



Visual 5.35

### HIGH POTENTIAL HAZARDS: WEATHER (CONT.)

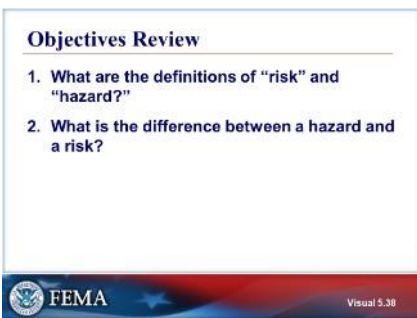


Visual 5.36

### HIGH POTENTIAL HAZARDS: STRUCTURAL COLLAPSE



Visual 5.37



Visual 5.38

## ACTIVITY 5.2: IDENTIFY HAZARDS AND RISKS POSED BY TACTICAL OPERATIONS

The instructor will explain Activity 5.2.

You will have 45 minutes to complete this activity.

## OBJECTIVES REVIEW

### Unit Enabling Objectives

- Define "risk" and "hazard".
- Explain the difference between a risk and a hazard.

# Supplemental Materials

This page intentionally left blank.

## Activity 5.1: Identify Hazards and Risks

### Activity 5.1: Identify Hazards and Risks Overview Unit 5

#### Purpose

The purpose of this activity is to provide students with an opportunity to identify hazards and risks.

#### Objectives

Students will fill in the accompanying activity handout, discussing in groups whether each item is a hazard or a risk.

#### Activity Structure

This activity will last approximately 30 minutes, including small group discussion and presentation of group findings. Students will gather in small groups to discuss the items on the worksheet and determine whether each is a hazard or a risk. Each group will present their findings to the rest of the class.

#### Rules, Roles, and Responsibilities

The following are the specific activities and instructions for your participation in the activity:

1. Within your small group, select a group spokesperson.
2. Determine whether each item is a hazard or a risk, marking either the H or R column on the worksheet as appropriate.
3. Present your responses to the rest of the class.

The Instructor moderates the discussion, answers questions, and provides additional information as required.

### Activity 5.1 Schedule

Activity	Duration	Participation Type
Activity Introduction and Overview	2 minutes	Classroom
Reading Background Information	10 minutes	Individual
Discuss and Document	10 minutes	Small groups
Debrief and Review	10 minutes	Classroom

This page intentionally left blank.

## Hazard or Risk Worksheet

Identify the following items as Hazards (H) or Risks (R)	H or R
Excessive vehicle speed in an incident base or camp	
Driving an ambulance at high speed	
Directing traffic	
Exposed electrical wires	
Handling needles	
Use of power equipment	
Fog or dust on roads	
Snakes/bugs/bears	
Using heavy equipment	
Use of power equipment	
Night operations in unfamiliar surroundings	
Use of power equipment	
Unknown product/chemical release	
Unstable structural damage	
Evacuating residents door-to-door	
Drinking untreated tap water	
Untreated tap water at an incident base	

This page intentionally left blank.

## Activity 5.2: Identify Hazards and Risks Posted by Tactical Operations

### Activity 5.2: Identify Hazards and Risks Posted by Tactical Operations Overview - Unit 5

#### Purpose

The purpose of this activity is to provide students with an opportunity to identify the hazards and risks posed by Tactical Operations.

#### Objectives

Students will:

- Become familiar with the Train Derailment Scenario Incident Action Plan (Handout 5-1).
- Identify and list potential hazards posed by the Tactical Operations planned in the Train Derailment Scenario ICS Form 215, Operational Planning Worksheet.
- Determine 10 hazards and risks for use in later activities.

#### Activity Structure

This activity will last approximately 45 minutes, including small group discussion, presentation of group findings, and class discussion. Students will first individually review the Train Derailment Scenario and become familiar with the incident and proposed operations. Then, they will gather in small groups to discuss the hazards and risks associated with the Tactical Operations presented in the scenario's ICS Form 215. Each group will present their findings to the rest of the class, which will then identify 10 hazards and risks that are suitable for use in later activities.

#### Rules, Roles, and Responsibilities

The following are the specific activities and instructions for your participation in the activity:

1. Read the IAP for the Train Derailment Scenario.
2. Within your small group, select a group spokesperson.
3. Identify and list the potential hazards posed by the Tactical Operations planned on ICS Form 215, Operational Planning Worksheet, for the Train Derailment Scenario (Handout 5-1).
4. Present your responses to the rest of the class.
5. Determine, as a class, 10 interesting hazards and risks that are suitable for further discussion in later activities.

The Facilitator moderates discussions, answers questions, and provides additional information as required.

## Activity 5.2 Schedule

Activity	Duration	Participation Type
Activity Introduction and Overview	2 minutes	Classroom
Read Background Information	10 minutes	Individual
Discuss and Document	15 minutes	Small groups
Debrief and Review	20 minutes	Classroom

## Handout 5-1: Train Derailment Scenario IAP

In the early morning today a Central and Columbia (C&C) freight train derailed and rolled down an embankment along the Roaring River. Parts of the front of the train lay on its side in the river and along the steeply sloping river bank. The area along the river bank is part of the Central City Riverfront Park. The train consisted of 4 diesel locomotives, 23 tank cars (pressurized and non-pressurized), 12 hopper cars, and 2 cryogenic liquid tank cars containing liquid oxygen (LOX). Initial assessment indicates that several of the pressurized tank cars containing chlorine and anhydrous ammonia have ruptured. Two of the LPG tank cars exploded on impact during the derailment, causing a fire. The hopper cars containing ammonium nitrate lie on their sides, and the contents have spilled onto the banks of the river. The locomotive diesel tanks have ruptured, spilling diesel into the river. The cryogenic tank cars appear to be intact; however, several of the non-pressurized tank cars have released an unknown quantity of crude sulfate turpentine into the river.

The Engineer driving the train managed to get to the river bank and is being treated at Central Hospital for serious injuries sustained in the derailment. Central City Police Department cars are on both sides of the river at the derailment. Their police radio picks up a report of a chlorine gas cloud forming immediately downstream from the leaking rail cars. This report was picked up by several citizens who contacted the local news stations in Central City. Reporters from the major local TV, radio, and newspaper news bureaus are on the way to the incident. One of the TV news crews is already shooting pictures. The local TV reporter is asking to do an interview for their evening news, and other reporters are lining up for interviews as well.

There is uncertainty about whom or which agency is in charge of the incident. There is a pervasive rumor that the train Engineer's license to operate the engine had expired, but that is being checked out. The neighborhoods immediately adjacent to the spill on both sides of the river are being evacuated due to the danger posed by the chlorine gas. The area about 200 yards from the derailment has been cordoned off. Hazmat crews and rail crews are busy containing the spill and bringing in equipment to remove the derailed cars. The mayor has issued an evacuation order for residents in the surrounding area, and is requesting assistance from the state. The Red Cross is establishing an evacuation center at North High Schools in Central City.

There are rumors that hundreds of Coho salmon, a federally listed threatened species have been killed in the river. The Parks Department, County, and State Dept of Natural Resources have issued an advisory and closed the river to fishing, recreation and other uses for 25 miles down river from the rail bridge site. The Emergency Medical Agency (EMA) in Liberty County is reporting numerous incidents of burning eyes and lungs. The Central City hospital has exceeded its capability to staff the emergency room. There are numerous water intakes along

this stretch of the Roaring River.

Liberty County, in the State of Columbia, is the largest county in the State in terms of population, and includes Central City, the largest and densest population center in the State of Columbia. The population of Central City is approximately 149,000 and the metropolitan area population is approximately 302,412. Central City serves as a major transportation hub within the state: commercial river traffic, rail, air, and interstate traffic and is 40 miles from the Port of Charlotte, on the Big Ocean.

Refer to EL\_954\_HO\_5-1\_ICCS\_Form\_202.pdf

Refer to EL\_954\_HO\_5-1\_ICCS\_Form\_203.pdf

Refer to EL\_954\_HO\_5-1\_ICCS\_Form\_204\_1\_of\_5.pdf

Refer to EL\_954\_HO\_5-1\_ICCS\_Form\_204\_2\_of\_5.pdf

Refer to EL\_954\_HO\_5-1\_ICCS\_Form\_204\_3\_of\_5.pdf

Refer to EL\_954\_HO\_5-1\_ICCS\_Form\_204\_4\_of\_5.pdf

Refer to EL\_954\_HO\_5-1\_ICCS\_Form\_204\_5\_of\_5.pdf

Refer to EL\_954\_HO\_5-1\_ICCS\_Form\_205.pdf

Refer to EL\_954\_HO\_5-1\_ICCS\_Form\_206.pdf

Refer to EL\_954\_HO\_5-1\_ICCS\_Form\_208\_1\_of\_3.pdf

Refer to EL\_954\_HO\_5-1\_ICCS\_Form\_208\_2\_of\_3.pdf

Refer to EL\_954\_HO\_5-1\_ICCS\_Form\_208\_3\_of\_3.pdf

---

# Unit 6: Prioritize and Manage Hazards and Risks

STUDENT MANUAL

---

---

---

This page intentionally left blank.



Visual 6.1

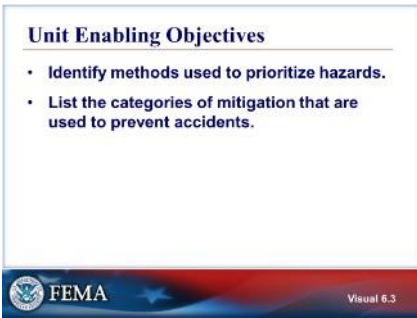
## UNIT 6: PRIORITIZE AND MANAGE HAZARDS AND RISKS



Visual 6.2

### UNIT TERMINAL OBJECTIVE

Identify techniques used to prioritize hazards for mitigation as well as several types of mitigation and accident prevention.



Visual 6.3

### UNIT ENABLING OBJECTIVES

- Identify methods used to prioritize hazards.
- List the categories of mitigation that are used to prevent accidents.

The Final Exam questions are based on the Unit Enabling Objectives.



Visual 6.4


### UNIT OVERVIEW

This unit explains the importance of hazard and risk prioritization and suggests some methods for prioritization. It also introduces the concept of mitigation and describes methods for reducing the potential impact of hazards and risks.

**Risk Management (1 of 3)**

- **Hazards:** Things in the environment that can cause harm to people, property, equipment, or environment.
- **Risks:** The chances that people take in relationship to hazards.


A hazard is what exists at an incident; a risk is the result of actions by personnel at the incident.



Visual 6.5

**Risk Management (2 of 3)**

- **Monitor:** To check, test, and observe for safe operations at an incident.
- **Mitigation:** Regulations and controls to ensure safety.




Visual 6.6

**Risk Management (3 of 3)**

What are the five steps in risk management?


- Identify hazards and risks.
- Evaluate hazards and risks.
- Prioritize hazards and risks.
- Mitigate hazards and risks to reduce the potential for harm to people and property.
- Monitor control measures.



Visual 6.7

**Risk Management Concepts**

- All projects have hazards connected with them.
- Identified hazards can be controlled or mitigated.
- It is not possible to identify and control ALL hazards.



Visual 6.8

## RISK MANAGEMENT (1 OF 3)

## RISK MANAGEMENT (2 OF 3)

Safety Officer's role is to:

- Identify and prevent unsafe acts by checking, testing, and observing for safe operations
- Ensure that safe procedures exist, create specific safety measures, and monitor to ensure that safe procedures are being followed.

## RISK MANAGEMENT (3 OF 3)


Five steps in risk management:

1. Identify hazards and risks. (previous unit)
2. Evaluate hazards and risks.
3. Prioritize hazards and risks. (this unit)
4. Mitigate hazards and risks to reduce the potential for harm to people and property. (remaining units in the course)
5. Monitor control measures.

## RISK MANAGEMENT CONCEPTS

**Risk Management Concepts (Cont.)**

- The incident must balance the risks and the benefits of taking them.
- Some hazards are worse than others.
- Priority for monitoring and mitigation should be given to the “killer” items.



Visual 6.9

**RISK MANAGEMENT CONCEPTS (CONT.)**

The project must balance the risks and the benefits. Ultimately, this is the call of the Incident Commander/Unified Command. A risk may be accepted when the benefits outweigh the potential costs:

- Risk a lot to save lives, risk a little to save property, and risk nothing when there is no benefit.
- Sometimes, doing nothing is the best option (for example, some hazardous materials operations may not be worth undertaking because the risks for outweigh any benefit).
- “Killer” items are the most important priorities.

**Priority: Unimproved Helispots**




Visual 6.10

**PRIORITY: UNIMPROVED HELISPOTS**

Unimproved helispots are an example of a “killer” item that is a hazard that the Safety Officer can and should mitigate.

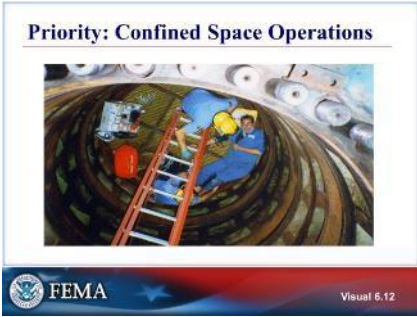
- Sometimes this becomes a necessary risk, or a risk worth taking.
- Take action to make an unsafe operation as safe as possible.

**Priority: Flood Operations**

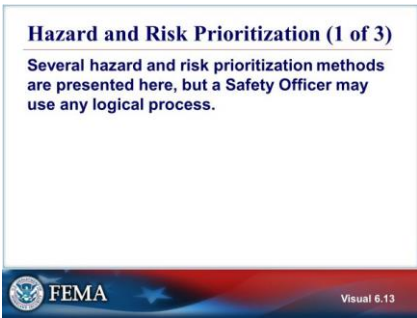



Visual 6.11

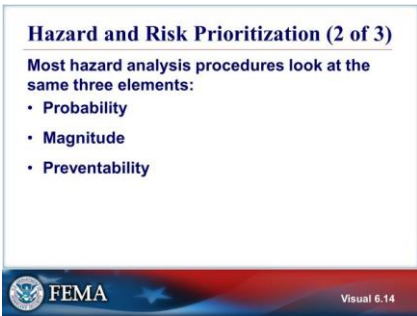
**PRIORITY: FLOOD OPERATIONS**



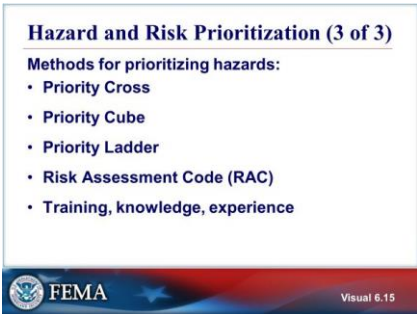
Visual 6.12



Visual 6.13



Visual 6.14



Visual 6.15

**PRIORITY: CONFINED SPACE OPERATIONS**

Operations undertaken in a confined space are always a serious risk that must be monitored closely.

Remember that 60% of fatalities in confined space are rescuers.

**HAZARD AND RISK PRIORITIZATION (1 OF 3)**

This course cannot teach exactly how to prioritize hazards and risks or give a checklist for every case.

The Safety Officer does not have to choose to use any of these methods; just use some logical process so that you can explain your decision to personnel, the Incident Commander, or after-action investigators.

You can use multiple processes in the course of an incident or even combine them.

**HAZARD AND RISK PRIORITIZATION (2 OF 3)**



If you walk past a hazard, you have accepted it! You may not have time to do anything about it, but make the decision to do something else more pressing, not a decision not to act.

**HAZARD AND RISK PRIORITIZATION (3 OF 3)**

**Priority Cross**

		Great Loss Potential?	
		YES	NO
Preventable?	YES	1	2
	NO	3	4

1 = highest priority 4 = lowest priority

Visual 6.16

## PRIORITY CROSS

With regard to prioritizing, we will use a flood as an example:

Increased traffic as people evacuate:

- This could potentially be a great loss, but this is unlikely; so “no” moves you to the right side of the cross.
- This is pretty easily monitored and prevented by using defined routes for evacuation and responders, a traffic plan, and law enforcement direction; so “yes” moves you to the top line.

This item is priority level 2.

Flooded roadways:

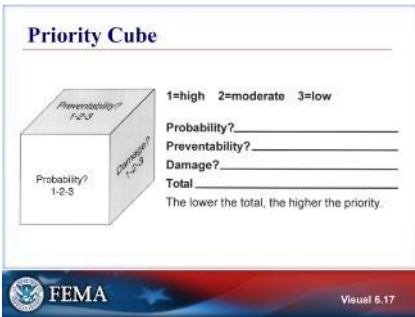
- This could potentially be a great loss for responders who try to drive through water.
- The loss is easily prevented by monitoring and using roadblocks and defined routes.

A great loss that is easily prevented makes this item priority level 1.

Chemical fire:

- This is potentially a great loss.
- Hazardous materials operations can be monitored but not really mitigated.

This item is priority level 3.



Visual 6.17

## PRIORITY CUBE

Using a flood as an example:

Increased traffic as people evacuate:

- Probability: High, 1
- Preventability (easy to mitigate; can control traffic even if you can't stop the flood): High, 1
- Damage: Low, 3

Total score: 5, moderate priority

Flooded roadways:

- Probability: High, 1
- Preventability (can block the roads even if you can't stop the flood): High, 1
- Damage (major problem if responders try to cross flooded roads): High, 1

Total score: 3, high priority

Chemical fire:

- Probability (during a flood): Low, 3
- Preventability (you may or may not be able to predict this, so this may not be possible): 2, moderate
- Damage: Extremely high, 1

Total score: 6, so this is your lowest priority of the three.

**Priority Ladder**

YES NO	YES NO	YES NO	YES NO	
				1
				2
X				3
Start Here				4
				5

FEMA Visual 6.18

Visual 6.18

## PRIORITY LADDER

Using a flood as an example:

The Safety Officer needs to know the training, experience, and level of rest (or fatigue) of the personnel involved in order to rank priorities. To demonstrate the Priority Ladder, we will walk through the same flood example. Assume that you are dealing with experienced law enforcement personnel who start with adequate rest, but will become fatigued as the incident wears on (and as you move through the three sample hazards).

Increased traffic as people evacuate (any operation regarding the evacuation of civilians):

- Is it high risk?
  - No.
- Personnel lacking in training or experience?
  - Law enforcement personnel are probably used to working near people and would be executing the evacuation, so they probably are trained.
- Fatigued?
  - Not at the outset of the incident.
- Great loss potential?
  - No.

Result: Line 5, lowest priority

Flooded roads (crossing flooded roads):

- High risk?
  - Yes, can lose control of vehicle.
- Lacking in training or experience?
  - Yes, no one drives through water often.
- Fatigued?
  - Not yet.
- Great loss potential?
  - Yes.

Result: Line 2, relatively high priority

Chemical fire:


- High risk?
  - Always.
- Trained and experienced?
  - Probably not for law enforcement because HAZMAT is usually a fire department responsibility (however, they would be experienced with regard to site control).
- Fatigued?
  - Yes, by this point using our assumptions.
- Great loss potential?
  - Yes.

Result: Line 1, highest priority

**Risk Assessment Code**

		Mishap Probability			
		A – likely to Occur immediately or within a short period	B – probably will occur in time	C – may occur in time	D – unlikely to occur
Hazard Severity	I Catastrophic	1	1	2	3
	II Critical	1	2	3	4
	III Marginal	2	3	4	5
	IV Negligible	3	4	5	5

Results: 1=Critical 4=Minor      2=Serious 5=Negligible      3=Moderate



Visual 6.19

## RISK ASSESSMENT CODE

Using a flood as an example:

Increased traffic as people evacuate:

- Mishap probability is moderate
  - While increased traffic is likely, it won't always result in an accident; however it may occur in time: C
- Hazard severity is marginal
  - III (it could be negligible, IV)

Result: Column C and row III meet in a cell with a value of 4, minor priority (not a big deal with regard to incident safety).

Flooded roadways:

- An accident involving flooded roadways isn't guaranteed; however, it probably will occur in time: B
- Hazard severity is critical, II, because serious damage can occur, but it is not catastrophic.

Result: The intersection is 2, serious priority.


Chemical fire:

- Mishap probability is unlikely to occur, D, because chemical fires can happen during a flood but are not expected to occur
- Hazard severity is catastrophic: I

Result: The intersection is 3, moderate priority.

**Methods Summary**

Hazard	Method			
	Cross	Cube	Ladder	RAC
Scale (highest to lowest priority)	1 to 4	3 to 9	1 to 5	1 to 5
Traffic	2	5	5	4
Flooded Road	1	3	2	2
Chemical Fire	3	6	1	3



Visual 6.20

## METHODS SUMMARY


Different methods will result in different solutions. You need to understand the biases of the method that you choose and be prepared for the results. Use whatever method makes the most sense to you.

The Safety Officer can change the methods for different situations, for example:

- Use the Priority Ladder or Priority Cross for a quick assessment, but the RAC or Priority Cube for pre-planning.
- Use the Priority Ladder when you have specific factors in mind.
- Use the Priority Cross or RAC when you are determining which hazards and risks should be monitored closely, but are not dealing with preventability.
- Use the Priority Cross when you can mitigate some, but not all, of the hazards and risks, and need to decide where to focus your resources.

**Training, Knowledge, Experience**

This is the simplest method for prioritizing hazards because it means you have internalized the process and are able to do it instinctively.



Visual 6.21

## TRAINING, KNOWLEDGE, EXPERIENCE



**Activity 6.1:  
Prioritize Hazards and Risks**

Allotted Time: 45 minutes

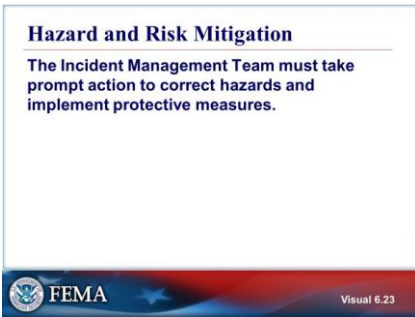


Visual 6.22

## ACTIVITY 6.1: PRIORITIZE HAZARDS AND RISKS

The instructor will explain Activity 6.1.

You will have 45 minutes to complete this activity.



Visual 6.23



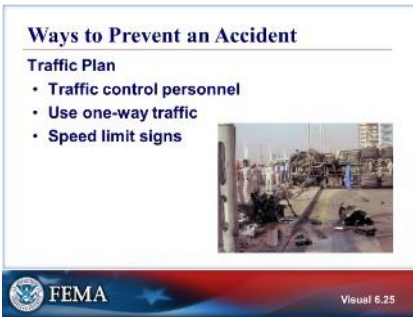
Visual 6.24

## HAZARD AND RISK MITIGATION

### HAZARD AND RISK MITIGATION (CONT.)

Most corrective actions will fall into one of the following categories:

- **Design Out:** Change the design of equipment to eliminate the hazard (for example, add better sound mufflers to minimize noise damage), or change a process so that you can work around the hazard.
- **Safety Devices:** Personal protective equipment, guard, etc.
- **Warning Devices:** Signage, alarm, traffic lighting, traffic cones, etc.
- **Special Procedures:** Have a backer when moving equipment backwards.
- **Barrier Tape:** Keeps responders out of unsafe areas.



Visual 6.25

## WAYS TO PREVENT AN ACCIDENT

Along with mitigation, there are many other ways to prevent an accident.

Direct interventions include setting up guidelines, policies and physical signs, markings and barriers around the incident. An example is a Traffic Plan. The Ground Support Unit can set up one-way roads, incident speed limit signs, barriers and traffic controllers at key points to ensure safety. Barrier tape is one of the most effective methods for keeping responders out of unsafe areas.

Indirection interventions include bulletin boards, safety briefings, Safety Messages, and personal contacts. Preventing an accident may be as simple as warning people about a hazard. All personnel should be informed of hazards and mitigation efforts at the incident site.

Identify the Safety Officer and make him or her visible during operations. If incident personnel know who the Safety Officer is and see him or her during operations they may be more likely to bring information to him or her.




Visual 6.26

## STRUCTURE FIRE

**Hazard and Risk Mitigation (Cont.)**  
If corrective actions will not reduce the hazard, two other options remain.

- Reduce exposure
- Avoidance



Visual 6.27



## HAZARD AND RISK MITIGATION (CONT.)

If corrective actions will not reduce the hazard, two other options remain:

- Reduce exposure:
  - Use smaller crews to subject fewer responders to a risk or hazard.
  - Limit the amount of time that responders spend in operations (for example, when working with hazardous materials or in extreme temperatures).
  - Increase shielding and protection to the highest levels.
  - Use the most experienced, best trained, and best equipped crews.
- Avoidance:
  - Find something else to do or another way to do the job.

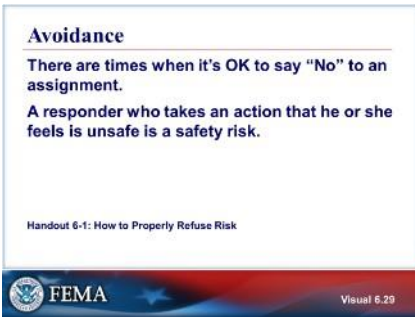
**Reduce Exposure**  
For example:

- Use proper Personal Protective Equipment



Visual 6.28

## REDUCE EXPOSURE



Visual 6.29

## AVOIDANCE

There are times when it's OK to say "No" to an assignment. A responder who takes an action that he or she feels is unsafe is a safety risk.

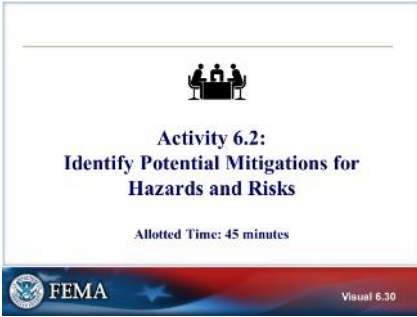
Ultimately, everyone is their own Safety Officer and cannot be forced to undertake an action that they believe to be unsafe. When a responder believes that the operation will result in certain harm, he or she has the right to refuse the risk.

The job of responders is to accept risk and operate where their safety is not guaranteed. There are times when a responder will take a risk to complete the operation, for example, to save lives. The right to refuse a risk does not mean that the responder must refuse a risk.

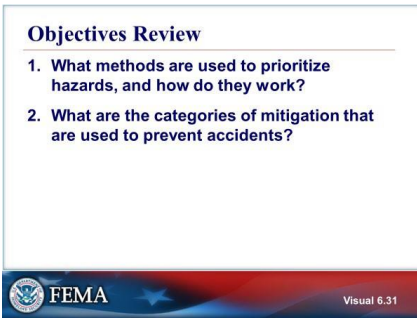
Refer to Handout 6-1: How to Properly Refuse Risk.

The Safety Officer (along with the individual's Supervisor) is responsible for listening to the explanation from anyone who refuses a risk. There are several possible outcomes:

- The operation may simply be unsafe and should be stopped.
- A simple modification could satisfy the concerns of the individual.
- There may be a better way to accomplish the objective.
- A different responder may be better trained for the operation.
- The individual may not understand the reason that the Supervisor accepted the risk and may agree to the risk if he or she is given more information.



Visual 6.30



Visual 6.31

## ACTIVITY 6.2: IDENTIFY POTENTIAL MITIGATIONS FOR HAZARDS AND RISKS

### Introduce

The instructor will explain Activity 6.2.

You will have 45 minutes to complete this activity.

## OBJECTIVES REVIEW

### Unit Enabling Objectives

- Identify methods used to prioritize hazards.
- List the categories of mitigation that are used to prevent accidents.

This page intentionally left blank.

# Supplemental Materials

This page intentionally left blank.

## Activity 6.1: Prioritize Hazards and Risks

### Activity 6.1: Prioritize Hazards and Risks Overview Unit 6

#### Purpose

The purpose of this activity is to provide students with an opportunity to prioritize hazards and risks.

#### Objectives

Students will:

- Use an assigned method to prioritize the list of 10 hazards and risks that the class identified in Activity 5.1.
- Compare the results of the different prioritization methods.

#### Activity Structure

This activity will last approximately 45 minutes, including small group discussion and presentation of group findings. The Instructor will assign each group one of the four prioritization methods discussed in Unit 6. The students will gather in small groups to discuss the hazards and risks identified by the class in Activity 5.1 and prioritize each hazard or risk using their assigned method. Each group will present their findings to the rest of the class to compare the results of the different prioritization methods.

#### Rules, Roles, and Responsibilities

The following are the specific activities and instructions for your participation in the activity:

1. Within your small group, select a group spokesperson.
2. Prioritize the hazards and risks that the class agreed to use at the end of Activity 5.1.
3. Present your responses to the rest of the class.
4. Compare the results of the different prioritization methods.

The Instructor moderates discussions, answers questions, and provides additional information as required.

## Activity 6.1 Schedule

Activity	Duration	Participation Type
Activity Introduction and Overview	2 minutes	Classroom
Discuss and Document	15 minutes	Small groups
Debrief and Review	30 minutes	Classroom

## Handout 6-1: How to Properly Refuse Risk

Every individual has the right and obligation to report safety problems and contribute ideas regarding their safety. Supervisors are expected to give these concerns and ideas serious consideration. When an individual feels an assignment is unsafe, they also have the obligation to identify, to the degree possible, safe alternatives for completing that assignment. Turning down an assignment is one possible outcome of managing risk.

A “turn down” is a situation where an individual has determined they cannot undertake an assignment as given **and** they are unable to negotiate an alternative solution. The turn down of an assignment must be based on an assessment of risks and the ability of the individual or organization to control those risks.

- Individuals may turn down an assignment as unsafe when:
  - There is a violation of safe work practices.
  - Environmental conditions make the work unsafe.
  - They lack the necessary qualifications or experience.
  - Defective equipment is being used.
- Individual will directly inform their Supervisor that they are turning down the assignment as given. The most appropriate means to document the turn down is using the criteria (Standard Firefighting Orders, 18 Watchout Situations, etc.), outlined in the Risk Management Process.
- Supervisor will notify the Safety Officer **immediately** upon being informed of the turn down. If there is no Safety Officer, notification shall go to the appropriate Section Chief or to the Incident Commander. This provides accountability for decisions and initiates communication of safety concerns within the incident organization.
  - If the Supervisor asks another resource to perform the assignment, they are responsible to inform the new resource that the assignment has been turned down and the reasons that it was turned down.
  - If an unresolved safety hazard exists or an unsafe act was committed, the individual should also document the turn down by submitting a SAFENET (ground hazard) or SAFECOM (aviation hazard) form in a timely manner.

These actions do not stop an operation from being carried out. This protocol is integral to the effective management of risk, as it provides timely identification of hazards to the chain of command, raises risk awareness for both leaders and subordinates, and promotes accountability.

From the *Fireline Handbook* (March 2004)

This page intentionally left blank.

## Activity 6.2: Identify Potential Mitigations for Hazards and Risks

### Activity 6.2: Identify Potential Mitigations for Hazards and Risks Overview - Unit 6

#### Purpose

The purpose of this activity is to provide students with an opportunity to identify potential mitigations for the hazards and risks identified in Activity 5.1.

#### Objectives

Students will identify potential mitigations for each hazard and risk identified in Activity 5.1.

#### Activity Structure

This activity will last approximately 45 minutes, including small group discussion and presentation of group findings. The students will gather in small groups to suggest potential mitigations for the hazards and risks identified in Activity 5.1, beginning with the list of 10 hazards and risks selected by the class during that activity. Each group will present their findings to the rest of the class.

#### Rules, Roles, and Responsibilities

The following are the specific activities and instructions for your participation in the activity:

1. Within your small group, select a group spokesperson.
2. Discuss potential mitigations for each hazard and risk identified in Activity 5.1.
3. Present your responses to the rest of the class.

The Instructor moderates discussions, answers questions, and provides additional information as required.

### Activity 6.2 Schedule

Activity	Duration	Participation Type
Activity Introduction and Overview	2 minutes	Classroom
Discuss and Document	15 minutes	Small groups
Debrief and Review	30 minutes	Classroom

This page intentionally left blank.

---

# Unit 7: Incident Action Plan Safety Analysis

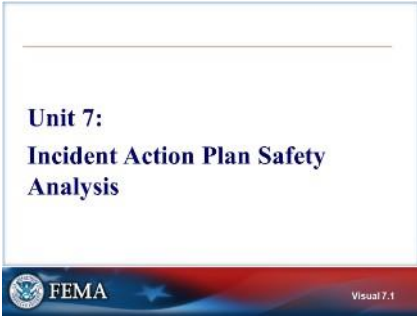
STUDENT MANUAL

---

---

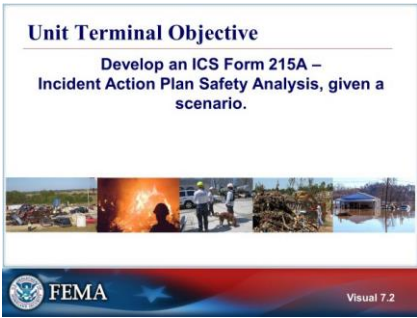
---

This page intentionally left blank.



Visual 7.1

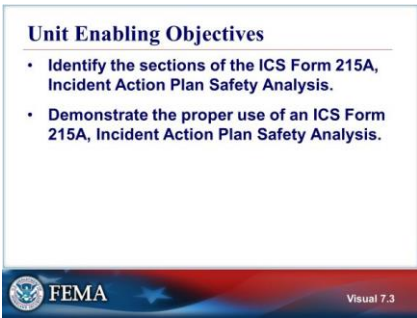
## UNIT 7: INCIDENT ACTION PLAN SAFETY ANALYSIS



Visual 7.2

### UNIT TERMINAL OBJECTIVE

Develop an ICS Form 215A, Incident Action Plan Safety Analysis, given a scenario.

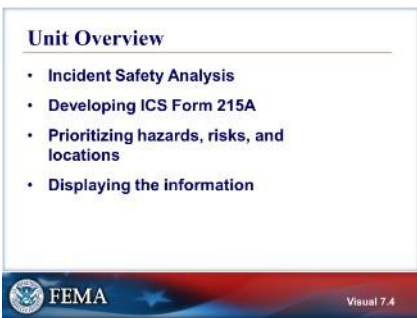


Visual 7.3

### UNIT ENABLING OBJECTIVES

- Identify the sections of ICS Form 215A, Incident Action Plan Safety Analysis.
- Demonstrate the proper use of an ICS Form 215A, Incident Action Plan Safety Analysis.

The Final Exam questions are based on the Unit Enabling Objectives.




Visual 7.4

### UNIT OVERVIEW

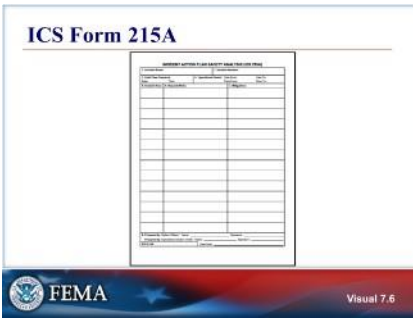

**Incident Safety Analysis**

- Once the hazards have been identified and prioritized, the next step is to communicate specifically what will be done to mitigate them.
- This is done with ICS Form 215A – Incident Action Plan Safety Analysis.



Visual 7.5

**ICS Form 215A**

Visual 7.6

## INCIDENT SAFETY ANALYSIS

### ICS FORM 215A

The purpose of the Incident Action Plan Safety Analysis (ICS Form 215A) is to aid the Safety Officer in completing an operational risk assessment to prioritize hazards, safety, and health issues, and to develop appropriate controls. This worksheet addresses communications challenges between planning and operations and is best utilized in the planning phase and for Operations Section briefings.

In Box 5, Incident Area, enter the incident areas where personnel or resources are likely to encounter risks. This may be specified as a Branch, Division, or Group.

In Box 6, Hazards/Risks, list the types of hazards and/or risks likely to be encountered by personnel or resources at the incident area relevant to the work assignment.

In Box 7, Mitigations, list actions taken to reduce risk for each hazard indicated (e.g., specify personal protective equipment or use of a buddy system or escape routes).

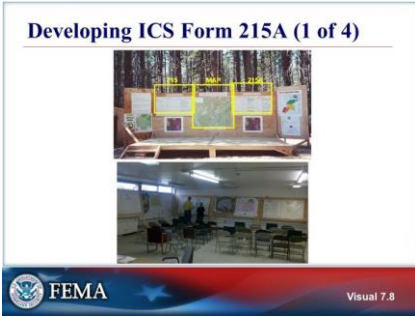


Visual 7.7

## TACTICS MEETING

The Tactics Meeting is led by the Operations Section Chief, who tells the rest of the group the plan for the next operational period. This could be done verbally, but after the first few operational periods, it will most likely be on an ICS Form 215, Operational Planning Worksheet. The remaining participants give feedback on the plan and determine whether they can support it.

- **Operations:** Briefs plan for the next operational period.
- **Safety:** Makes a quick judgment about the safety of the suggested operations and recommends changes that should be made before the Planning Meeting.
- **Logistics:** Obtains what is needed.
- **Air Operations (or other specific Branches, depending on the incident, for example, industry representative for HAZMAT incident):** Is present if there is a large tactical and support role for that Branch.
- **Communications:** Communications is always a big issue, especially as incidents become more complex.
- **Planning (Resource Unit):** Determines whether the needed resources are available on hand.

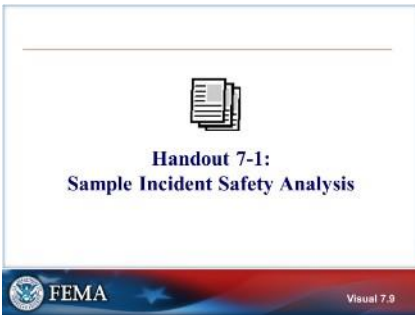


Visual 7.8

### DEVELOPING ICS FORM 215A (1 OF 4)

The ICS Form 215A is typically prepared by the Safety Officer during the incident action planning cycle. When the Operations Section Chief is preparing for the tactics meeting, the Safety Officer collaborates with the Operations Section Chief to complete the Incident Action Plan Safety Analysis. This worksheet is closely linked to the Operational Planning Worksheet (ICS Form 215). Incident areas or regions are listed along with associated hazards and risks. For those assignments involving risks and hazards, mitigations or controls should be developed to safeguard responders, and appropriate incident personnel should be briefed on the hazards, mitigations, and related measures.

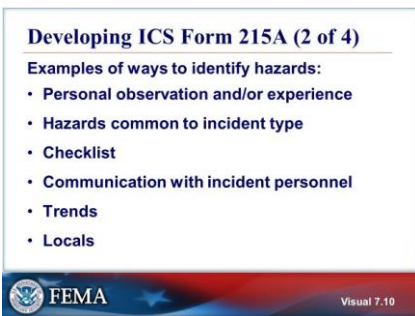
Note that Incident personnel receive safety information through other sources in addition to the ICS Form 215A, such as the Special Instructions box on ICS Form 204, Assignment List, and through briefings.



Visual 7.9

### HANDOUT 7-1: SAMPLE INCIDENT SAFETY ANALYSIS

Refer to Handout 7-1, Sample Incident Safety Analysis.



Visual 7.10


### DEVELOPING ICS FORM 215A (2 OF 4)

- Developing ICS Form 215A (2 of 4)**
- Examples of ways to identify hazards:
- Personal observation and/or experience
  - Hazards common to incident type
  - Checklist
  - Communication with incident personnel
  - Trends
  - Locals

**Developing ICS Form 215A (3 of 4)**

Examples of risks:



- Hazard mitigation
- Confined space
- Downhill line construction
- Air Operations
- Slip, trip, and fall



Visual 7.11

**DEVELOPING ICS FORM 215A (3 OF 4)**

**Mitigation as a Risk**




Visual 7.12

**MITIGATION AS A RISK**

**Mitigation as a Risk (Cont.)**

What if mitigating the hazard of long, dusty roads causes other risks?




Visual 7.13

**MITIGATION AS A RISK (CONT.)**

**Developing ICS Form 215A (4 of 4)**

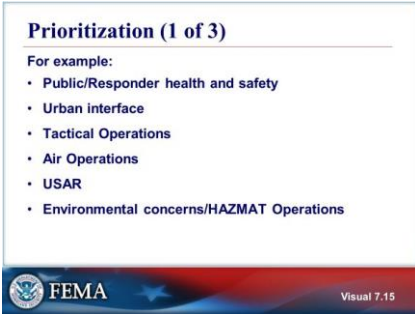
Prioritize the hazards and risks. For example:

1. Road Conditions
2. Crew Shuttles
3. Urban Search and Rescue (USAR)



Visual 7.14

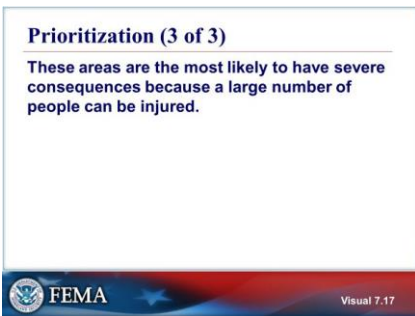
**DEVELOPING ICS FORM 215A (4 OF 4)**



Visual 7.15



Visual 7.16



Visual 7.17

### PRIORITIZATION (1 OF 3)

### PRIORITIZATION (2 OF 3)

Public and personnel safety is the highest priority of an incident. Hazardous material that spills into water is a threat to personnel, who are the responsibility of the Safety Officer.

However, this is also a threat to public health. The Safety Officers, Assistant Safety Officers, and Technical Specialists assigned to Safety Operations will have a role in minimizing the harm that these incidents can cause the public.

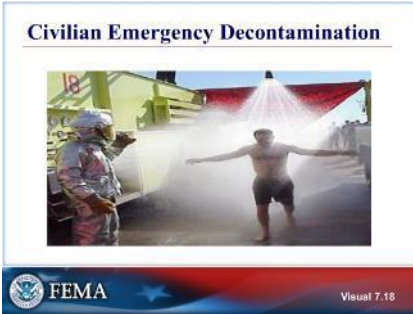
### PRIORITIZATION (3 OF 3)

Every State has an urban interface issue, whether it is where wildland abuts a town, or where a highway divides farms and fields from residential and commercial areas.

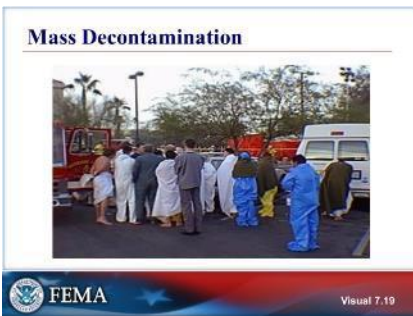
In addition, railroads and highways transport a lot of hazardous material and there is the possibility of creating an incident that can affect a lot of people.

Any event that happens near people is likely to attract spectators, and every incident will attract the media. You may not have invited these people to the incident, but their safety becomes the Safety Officer's responsibility while they are present.

Political considerations can complicate response issues where people and businesses are concerned. The Safety Officer may have to deal with a demand to rush through operations to appease political pressures on the IMT.



Visual 7.18



Visual 7.19



Visual 7.20

## CIVILIAN EMERGENCY DECONTAMINATION

## MASS DECONTAMINATION

Decontaminating a lot of people quickly has many associated problems:

- Privacy.
- Cold water use in winter.
- People who refuse to go through the line.
- People who refuse to give up personal belongings.
- Law enforcement officer's weapons when requiring decontamination.
- Non-ambulatory persons and those with special needs.

## PRIORITIZATION – TACTICAL ASSIGNMENTS

Frontline operational and tactical activities during any incident are inherently dangerous. These are typically more hazardous than other parts of the incident (e.g., demobilization, overhaul) and are a priority.

One photo is from the rescue of a person who fell off of the road, broke an ankle, and had to be airlifted out. The other shows firefighters investigating a fire-damaged structure in an area with heavy smoke.

**Prioritization – Air Operations**

- Air Operations have less exposure to incident personnel.
- Much higher risk due to extreme consequences.

Visual 7.21

**PRIORITIZATION – AIR OPERATIONS**

Air Operations have less exposure to incident personnel, but much higher risk due to the extreme consequences of any error.

Assign someone with air operations experience as an Assistant Safety Officer for air operations.

**Prioritization – USAR**

This is a high priority due to the unique hazards and complexity of the USAR environment.

Visual 7.22

**PRIORITIZATION – USAR**

USAR is a priority because it is a very complex and unique operation.

USAR teams might have safety officers trained for these complex operations already embedded within the team which can be assigned as Asst. Safety Officer.

**Prioritization - HAZMAT**

Visual 7.23

**PRIORITIZATION - HAZMAT**

Hazardous materials spills always bring environmental concerns that must be kept in mind while focusing on life-saving operations.

Tactical changes for environmental concerns are another example of where mitigation creates more risks.

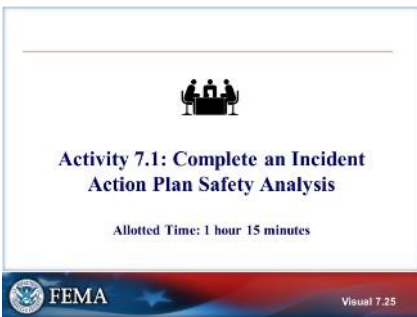
**ICS Form 204 – Assignment List**

Visual 7.24

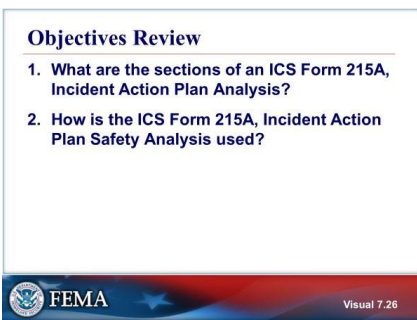
**ICS FORM 204 – ASSIGNMENT LIST**

Mitigations for each Group, Division, and Branch are included on ICS Form 204, Assignment List. Use the Special Instructions box (Box 7) for the mitigations, as well as to outline the specific hazards and risks for that Unit.

The SOFR has a responsibility to review each ICS Form 204 prior to its addition to the Incident Action Plan.



Visual 7.25



Visual 7.26

## ACTIVITY 7.1: COMPLETE AN INCIDENT ACTION PLAN SAFETY ANALYSIS

The instructor will explain Activity 7.2.

You will have 1 hour 15 minutes to complete this activity.

## OBJECTIVES REVIEW

### Unit Enabling Objectives

- Identify the sections of ICS Form 215A, Incident Action Plan Safety Analysis.
- Demonstrate the proper use of an ICS Form 215A, Incident Action Plan Safety Analysis.

This page intentionally left blank.

# Supplemental Materials

This page intentionally left blank.

## **Handout 7-1: Sample Incident Safety Analysis (ICS Form 215A)**

Refer to EL\_954\_HO\_7-1\_ICs\_Form\_215a.pdf

This page intentionally left blank.

## Activity 7.1: Complete an Incident Action Plan Safety Analysis

# Activity 7.1: Complete an Incident Action Plan Safety Analysis Overview – Unit 7

### Purpose

The purpose of this activity is to provide students with an opportunity to practice informing responders of the hazards and risks of tactical operations, as well as the mitigations planned for those hazards and risks.

### Objectives

Students will:

- Fill out ICS Form 215A - Incident Action Plan Safety Analysis.
- Fill in the Special Instructions box on ICS Form 204 –Assignment List for one Division/Group.
- Deliver the Incident Safety Analysis in a Planning Meeting.

### Activity Structure

This activity will last approximately 75 minutes, including small group discussion and presentation of group findings. The students will individually fill out ICS Form 215A, Incident Action Plan Safety Analysis, and the Special Instructions box (No. 7) on ICS Form 204, Assignment List, for one Division/Group, using ICS Form 215 for the Train Derailment Scenario and the mitigations listed in Activity 6.2. In their small groups, students will select one student's ICS Form 215A and fill in a wall-sized version of the form, which will then be presented to the rest of the class.

### Rules, Roles, and Responsibilities

Following are the specific activities/instructions for your participation in the activity:

1. Review the mitigations listed in Activity 6.2 and the ICS Form 215 for the Train Derailment Scenario.
2. Individually, fill out ICS Form 215A, Incident Action Plan Safety Analysis.
3. Individually, fill in the Special Instructions box (No. 7) on ICS Form 204, Assignment List for one Division/Group.
4. Within your work group, select a group spokesperson.
5. Fill out the wall-sized chart version of ICS Form 215A with the spokesperson's responses.
6. Present your responses to the rest of the class.

The Instructors moderate discussions, answer questions, and provide additional information as required.

Refer to EL\_954\_ACT\_7.1\_ICCS\_Form\_215.pdf

Refer to EL\_954\_ACT\_7.1\_ICCS\_Form\_215a.pdf

Refer to EL\_954\_ACT\_7.1\_ICCS\_Form\_204.pdf

## Activity 7.1 Schedule

Activity	Duration	Participation Type
Activity Introduction and Overview	2 minutes	Classroom
Individual Work	25 minutes	Individuals
Discussion/Documentation	10 minutes	Small Groups
Debrief/Review	25 minutes	Classroom

## **Handout 7-2: Train Derailment Scenario ICS Form 215**

Refer to EL\_954\_HO\_7-2\_ICs\_Form\_215.pdf

This page intentionally left blank.

## Handout 7-3: Sample Planning Meeting Script

### Planning Meeting Demonstration Role-Player Script

*This is the 1600 Planning Meeting.*

**Planning Section Chief:** We are having the Planning Meeting for the first operational period beginning at 1200 today. I would ask everyone to put your cell phones and pagers on vibrate and have someone outside monitor your radios to eliminate interruptions so that we can get through this meeting rapidly. Thank you. First, the Operations Section Chief will give us a brief overview of the incident.

**Operations Section Chief:** In the early morning today, a Central and Columbia (C&C) freight train derailed and rolled down an embankment along the Roaring River.

The train consisted of:

- 4 diesel locomotives,
- 23 tank cars (pressurized and non-pressurized),
- 12 hopper cars, and
- 2 cryogenic liquid tank cars containing liquid oxygen (LOX).

An initial assessment indicates that several of the pressurized tank cars containing chlorine and anhydrous ammonia have ruptured. Two of the Liquefied Petroleum Gas (LPG) tank cars exploded on impact during the derailment, causing a fire. The hopper cars containing ammonium nitrate lie on their sides, and the contents have spilled onto the banks of the river. The locomotive diesel tanks have ruptured, spilling diesel fuel into the river. The cryogenic tank cars appear to be intact; however, several of the non-pressurized tank cars have released an unknown quantity of crude sulfate turpentine into the river. There are numerous water intakes along this stretch of the Roaring River.

There is an unconfirmed report of a chlorine gas cloud forming immediately downstream from the leaking rail cars. The Emergency Medical Agency (EMA) in Liberty County is reporting numerous incidents of burning eyes and lungs. The Central

City hospital has exceeded its capability to staff the emergency room. The mayor has issued an evacuation order for residents in the surrounding area and is requesting assistance from the State. The neighborhoods immediately adjacent to the spill on both sides of the river are being evacuated due to the danger posed by the chlorine gas. The Red Cross is establishing an evacuation center at North High School in Central City.

Central City Police Department cars are deployed on both sides of the river at the derailment. The area about 200 yards from the derailment has been cordoned off. HAZMAT crews and rail crews are busy containing the spill and bringing in equipment to remove the derailed cars.

There are rumors that hundreds of Coho salmon, a federally listed threatened species have been killed. The Parks Department, and County and State Departments of Natural Resources have issued an advisory and closed the river to fishing, recreation, and other uses for 25 miles downriver from the rail bridge site.

Next, we have posted the incident's objectives. I'll ask our Incident Commander, (*use the role player's name*), to very quickly review them with you (*point to Incident Commander*).

**Incident Commander:** The current incident objectives are:

1. Provide for the safety of the public and a safe work environment for all responders.
2. Identify current and potential HAZMAT releases and potential impacts to the public and environment, including Human Exposure, Municipal Water Supplies, Air Quality, Flora and Fauna.
3. Establish safety mitigations for firefighters and extinguish fires as soon as possible.
4. Prepare and initiate a plan to contain and prevent further release of hazardous materials by 1200 tomorrow.
5. Complete a damage survey within 24 hours.
6. Establish HAZMAT cleanup activities with a target completion time of 72 hours.

7. Return all public facilities used for the response to at least minimal operational condition within 48 hours.

We have been delegated authority from the Mayor's office. Finance needs to determine the spending limits under the delegation of authority.

**Planning Section Chief:** Thanks, *(use the Incident Commander's name)*.

Next, as you can see, the sketch map has the incident and surrounding area plotted.

Ops *(look at Ops)*, any changes or additions? (The answer is "No.") Thanks.

Next, I'll ask Operations to go over the tactics and the resource commitment for his plan. Ops?

**Operations Section Chief:** We will deploy five groups to respond to this incident. All groups and resources will report to DP-1 at 1245 hours.

1. **Fire and Rescue Group** will continue containment and extinguishment of LPG cars and other fires, eliminate any potential ignition sources, and search for injured where safe to do so.
2. **HAZMAT Group** will complete the identification of train contents, coordinate with Fire/Rescue Group, contain spills around train and downriver, and provide decontamination for all personnel.
3. **Law Enforcement Group** will maintain perimeter and restrict access to authorized personnel along the perimeter: North (17<sup>th</sup> Street), East (Z Street), South (29<sup>th</sup> Street), West (L Street). Law Enforcement will also complete any evacuation within the perimeter and continue river closure to all river traffic in the immediate incident area. One boat will patrol upstream from the incident and one boat will patrol downstream from the incident.
4. **EMS Group** will continue treatment of injured; support Fire, HAZMAT, and Law Enforcement Groups with EMS needs; and coordinate EMS needs with Red Cross Evacuation Center. EMS will provide air support as needed for evacuation of injured personnel or residents.

5. **Damage Assessment Group** will coordinate with all groups to assess damage throughout the incident area, assess public facilities for use within 48 hours, and assess impacts to threatened and endangered species.

**Planning Section Chief:** Safety would you please go over ICS Form 215A for the designated groups.

**Safety Officer:** Yes (Safety Officer goes over ICS Form 215A).

*As you know, we have an extremely hazardous situation given the hazards presented by the involved materials and we want to keep ourselves and citizens safe as we work to respond to this situation. Situational awareness will be critical for safe activities.*

*First, because of the danger of chlorine gas and shifting winds, post lookouts to ensure that there are no surprises from the damaged rail cars and be continually aware of our escape routes. In addition, we need to ensure that our escape routes are effective, so we need to mark the escape routes and control traffic access to these routes.*

*Personnel engaged in direct response activities (Fire and Rescue, EMS, and HAZMAT crews) need to maintain situational awareness, post lookouts, and ensure that you have the proper PPE for this effort. HAZMAT crews will manage and staff temporary decontamination facilities if you get exposed or if anyone else gets exposed. Those managing the decontamination sites will need to manage runoff so be sure that you have set up using best practices and comply with local and State requirements.*

*Damage assessment teams will need to maintain situational awareness, post lookouts, and ensure that you have the proper PPE for this effort.*

*Because of the heat and PPE, you will need to be more vigilant about hydrating yourself, be aware of signs of dehydration and heat exhaustion [the symptoms should*

*be included in the Safety Message in the IAP, not the Planning Meeting] in yourself and your teams.*

*Communications will be essential to ensure that we all remain safe. No unnecessary chatter on your radios and be sure that you have the correct frequencies from our Communications Plan.*

*We'll be moving in heavy equipment to handle the rail cars and clean up the contaminated soil. Maintain your situational awareness and where the equipment is and will be moving to.*

**Planning Section Chief:** Thanks, Safety. Okay, Logistics, can we get an update from you?

**Logistics Section Chief:** We have placed all the orders for resources that Operations has requested. We have received confirmed ETAs for the Group Supervisors and all of the Assistant Safety Officers, and all should be here in time for the 1900 Operational Briefing.

The C&C Railroad HAZMAT specialist is en route and should be here by 0700. Do you want him to come into the ICP or go directly to their tactical assignment with the on-scene HAZMAT Strike Team?

**Operations Section Chief:** I would like him to report to me at the ICP for a Briefing.

**Logistics Section Chief:** It appears that two of the Type 2 crews may not be here until 2300; all other crews will be here for the Operational Briefing. What do you want to do with the crews coming in later?

**Operations Section Chief:** Have them report to me for assignment upon arrival for a Briefing.

**Logistics Section Chief:** We have no information on the other additional resources as yet. It appears that they may be coming from the local jurisdictions, but I really don't know as of now. I will let you know as soon as we hear anything regarding their ETAs.

We have recommended that we use XXX as our ICP site and have passed it on to Finance for a Land Use Agreement.

We have the needed flagging tape and traffic cones on hand. We also are bringing a truck load of bottled drinking water for incident personnel. As soon as it arrives, we will get it to you. My folks will contact Operations for delivery points.

We will have our feeding up and available by 1800 and should be able to get the responders fed before the Operational Briefing.

**Planning Section Chief:** Okay, thanks, Logistics. Moving right along, Logistics has developed a Communications Plan that will provide a Tactical channel for each Group and separate dedicated channels for Air-to-Ground communications, Logistics, and Command. It appears that this will work in our area and not have any outside interference. Logistics, I will need your Medical Plan and Communications Plan by 1800 for addition to the IAP. *(The Logistics Section Chief will confirm that he or she can produce them within the timeframe.)* Also, I will need a Traffic Plan by the same time. *(“No problem.”)* Okay, we have a plan. Can I get your support for this plan? *(Go around the group, one at a time, and get confirmation of their support for the plan.)*

**Planning Section Chief:** PIO?

**Public Information Officer:** I can support the plan. We are formulating a media release for 0400. *(Look at the Incident Commander.)* I will bring it by for your approval.

After your approval, I'll send it to the mayor's office for release. (*Look at the Incident Commander.*) We rescheduled the public meeting for 0800 tomorrow.

**Planning Section Chief:** (*Look at the Liaison Officer.*) Liaison Officer?

**Liaison Officer:** I can support the plan. If you get notified that the other additional resources do come from local jurisdictions, could you let me know so that I can make contact with the agencies?

**Planning Section Chief:** Safety Officer?

**Safety Officer:** I feel that we have addressed all of the safety concerns. In the Safety Message, I will emphasize that the Search and Rescue Group will need to maintain communications with Operations as they may be in danger if heavy equipment working in the area of their operations causes debris to shift. Yes, I can support the plan.

**Planning Section Chief:** Finance?

**Finance Section Chief:** Yes, I can support the plan. However (*look at Operations representative*), we have not gotten anyone from Operations coming by reporting time to us yet. Can you mention this requirement during the Ops Briefing? (*Operations will acknowledge this request.*) Also, we are working on a Land Use Agreement for the area for the ICP and evacuee shelter. (*Look at the Operations representative.*) Once you determine where the helibase will be, could you let me know so that we can negotiate an agreement for that location? (*Operations will acknowledge this request.*) Thank you.

**Planning Section Chief:** Very good. Incident Commander, are we cleared to go with this?

**Incident Commander:** I think that this plan will work; however, we don't have much of a plan if we don't get confirmation on those additional resources soon. (*Look at the Operations Section Chief.*) We will need to have an alternative plan available if we don't

have a confirmed fill on those engine orders by 2130. (*Give the Operations Section Chief a chance to respond to your comment.*)

**Operations Section Chief:** We have a Contingency Plan in the works. (*Look at the Planning Section Chief.*) I would like to have the plan by 1830 for my review and signature.

**Planning Section Chief:** Okay, thank you for your participation. Our Operational Briefing will be right outside at 1900.

---

# Unit 8: Site Safety and Control Plan

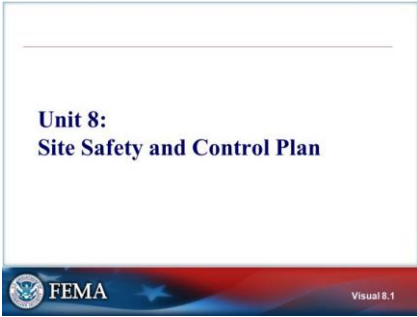
STUDENT MANUAL

---

---

---

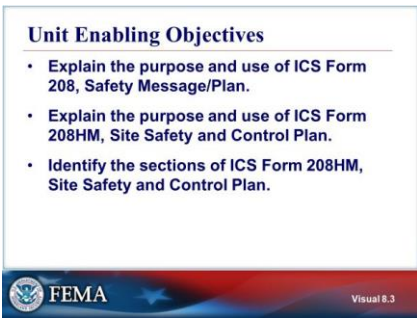
This page intentionally left blank.



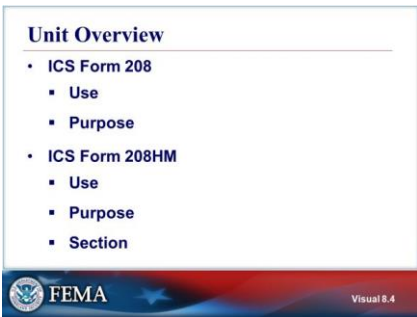
Visual 8.1



Visual 8.2



Visual 8.3



Visual 8.4

## UNIT 8: SITE SAFETY AND CONTROL PLAN

### UNIT TERMINAL OBJECTIVE

Create an ICS Form 208HM, Site Safety and Control Plan.

### UNIT ENABLING OBJECTIVES


- Explain the purpose and use of ICS Form 208, Safety Message/Plan.
- Explain the purpose and use of ICS Form 208HM, Site Safety and Control Plan.
- Identify the sections of ICS Form 208HM, Site Safety and Control Plan.

The Final Exam questions are based on the Unit Enabling Objectives.

### UNIT OVERVIEW

**Safety Message/Plan**


- The Safety Message/Plan (ICS Form 208) expands on the Safety Message and Site Safety Plan.
- The ICS 208 is an optional form that may be included and completed by the Safety Officer for the Incident Action Plan (IAP).



Visual 8.5

**Site Safety and Control Plan**


- Checklist for the Hazardous Materials Group Supervisor.
- Enhances standard operating procedures (SOPs) and safeguards personnel.
- Provides information needed to define risks.



Visual 8.6

**Purpose**

- Federal and State laws
- Enhance safety of the Hazardous Materials Group's operations



Visual 8.7

## SAFETY MESSAGE/PLAN

The ICS Form 208, if developed, will be reproduced with the IAP and given to all recipients as part of the IAP. All completed original forms must be given to the Documentation Unit.

## SITE SAFETY AND CONTROL PLAN

ICS Form 208 – Safety Message/ Plan is an *optional* form that may be completed by the Safety Officer to expand on the Safety Message and Site Safety Plan. OSHA *requires* a written Site Safety and Control Plan as a part of the Incident Action Plan for all incidents involving hazardous materials.

The ICS Form 208 HM is a non-standard ICS Form (not included in the FEMA ICS Forms Booklet) that can be used to meet the requirement for a Site Safety and Control Plan.

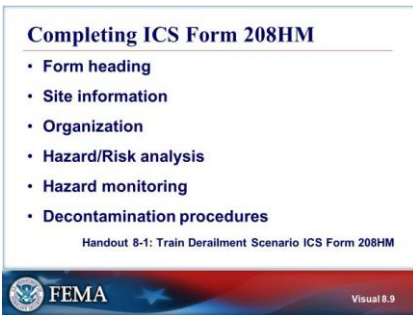
## PURPOSE

The ICS Form 208HM helps the Safety Officer quickly grasp what hazards and risks exist so that he or she can help the HAZMAT Group adjust their procedures to be as safe as possible during a hazardous task.

It is a good idea to assign an Assistant Safety Officer for HAZMAT incidents to handle the form and keep an eye on this type of top-priority operation.



Visual 8.8



Visual 8.9

## RESPONSIBILITY

The Safety Officer should be prepared to fill out the form if there is no Hazardous Materials Group Supervisor upon entry into a location with HAZMAT. There may not yet be a Supervisor during the initial operating periods.

Even when there is a Hazardous Materials Group Supervisor to fill out and use the form, the Safety Officer must ensure that this is done properly. The Safety Officer may want to assign, or may be assigned as, a qualified Assistant Safety Officer for the Hazardous Materials Group so that one person is dedicated to ensuring that these operations are safe.

## COMPLETING ICS FORM 208HM

Refer to Handout 8-1: Train Derailment Scenario ICS Form 208HM and a blank ICS Form 208HM.

**Form Heading** - Enter the incident name and number, date and time, and operational period.

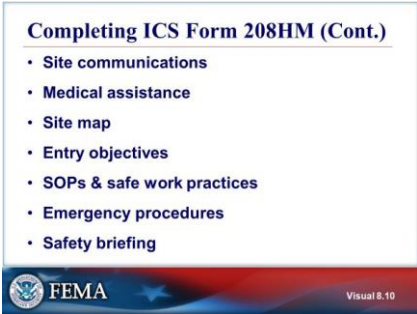
**Site Information** - Use address and GPS location.

**Organization** - Enter the names of personnel in ICS positions. Enter names and level of PPE for all personnel on the Entry Team, as well as the Decontamination Team.

**Hazard/Risk Analysis** - Enter names of and pertinent information on known chemical products, chemical properties, and definitions. This will help the HAZMAT Team and identify what level of PPE is necessary.

**Hazard Monitoring** - List what instruments are being used.

**Decontamination Procedures** - Check "No" if modifications will be made to the standard decontamination process. This should be indicated for every identified chemical AND those that can't be identified.



Visual 8.10

## COMPLETING ICS FORM 208HM (CONT.)

**Site Communications** - List radio communications frequencies.

**Medical Assistance** - Take readings/vital signs for the HAZMAT Team before entry to establish a baseline and afterwards to determine exposure.

For treatment and transport, have a procedure in place and an ambulance ready. Responders need to know that the risks are being addressed.

**Site Map** - Simply insert a map of the area. The boxes on the form are triggers to ensure that something is not left out.

**Entry Objectives** - Document the goals and what will happen inside.

**SOPs and Safe Work Practices** - HAZMAT events are rarely fast moving, so the process can be slowed down to ensure that everyone is safe. The form exists to make sure that operations are slowed down and safe work practices are followed even when it does not appear that there is time.

**Emergency Procedures** - Identify means of alerting, rescue, and evacuation of hazard site. It ensures expedient rescue if conditions change or an emergency occurs.

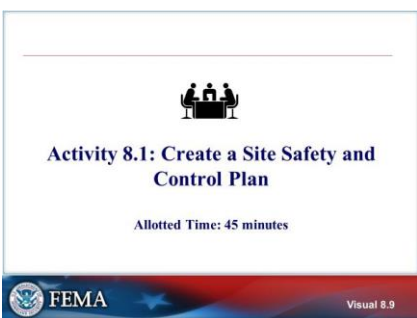
**Safety Briefing** - The Assistant Safety Officer has to sign the form and enter the time of the completion of the briefing. The HAZMAT Group Supervisor and Incident Commander must sign the form as well.

### ACTIVITY 8.1: CREATE A SITE SAFETY AND CONTROL PLAN

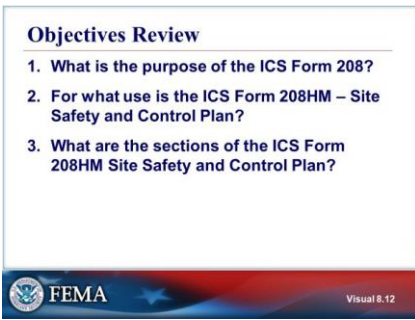
#### Introduce

The instructor will explain Activity 8.1.

You will have 45 minutes to complete this activity.



Visual 8.11



Visual 8.12

## OBJECTIVES REVIEW

### Unit Enabling Objectives

- Explain the purpose and use of ICS Form 208, Safety Message/Plan.
- Explain the purpose and use of ICS Form 208HM, Site Safety and Control Plan.
- Identify the sections of ICS Form 208HM, Site Safety and Control Plan.

This page intentionally left blank.

# Supplemental Materials

This page intentionally left blank.

## **Handout 8-1: Train Derailment Scenario ICS Form 208HM**

Refer to EL\_954\_HO\_8-1\_ICs\_Form\_208HM\_1\_of\_2.pdf

Refer to EL\_954\_HO\_8-1\_ICs\_Form\_208HM\_2\_of\_2.pdf

This page intentionally left blank.

## Activity 8.1: Create a Site Safety and Control Plan

# Activity 8.1: Create a Site Safety and Control Plan Overview Unit 8

### Purpose

The purpose of this activity is to provide students with an opportunity to practice planning to keep hazardous materials operations as safe as possible by outlining the information that must be identified before a Hazardous Materials Team enters the hazard area.

### Objectives

Students will fill out ICS Form 208 HM, Site Safety and Control Plan.

### Activity Structure

This activity will last approximately 45 minutes, including individual work and class review of the sample answers. The students will individually fill out ICS Form 208 HM, Site Safety and Control Plan, using the information provided and the Train Derailment Scenario. Rather than discussing the results in small groups or presenting the results to the class, the Instructor will review a completed ICS Form 208 HM and allow the students to compare their results.

### Rules, Roles, and Responsibilities

The following are the specific activities and instructions for your participation in the activity:

1. Review the information provided in this activity and the Train Derailment Scenario.
2. Individually, fill out ICS Form 208 HM, Site Safety and Control Plan. Refer to EL\_954\_HO\_8-1\_ICCS\_Form\_208HM\_2\_of\_2.pdf.
3. Compare your results to the sample form provided in the handout and reviewed by the Instructor.

The Instructor moderates discussions, answers questions, and provides additional information as required.

## Activity 8.1 Schedule

Activity Introduction and Overview	2 minutes	Classroom
Individual Work	30 minutes	Individual
Debrief and Review	15 minutes	Classroom

This page intentionally left blank.

---

# Unit 9: Incident Safety Plan

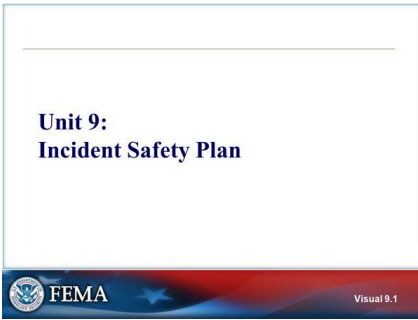
STUDENT MANUAL

---

---

---

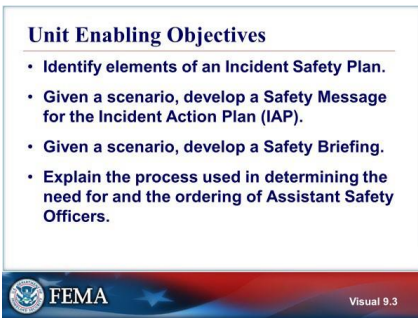
This page intentionally left blank.



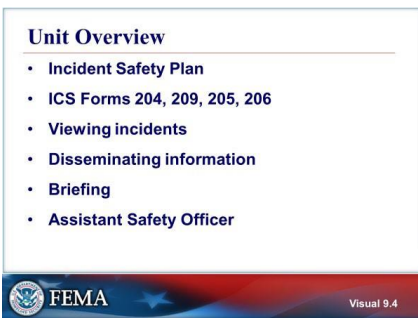
Visual 9.1



Visual 9.2



Visual 9.3



Visual 9.4

## UNIT 9: INCIDENT SAFETY PLAN

### UNIT TERMINAL OBJECTIVE

Apply multiple methods of communicating safety risks and mitigations through the Incident Safety Plan, Assistant Safety Officers, Safety Messages, and Safety Briefings.

### UNIT ENABLING OBJECTIVES

- Identify elements of an Incident Safety Plan.
- Given a scenario, develop a Safety Message for the Incident Action Plan (IAP).
- Given a scenario, develop and present a Safety Briefing.
- Explain the process used in determining the need for and the ordering of Assistant Safety Officers.


**Remind** students the Final Exam questions are based on the Unit Enabling Objectives.

### UNIT OVERVIEW

This unit outlines the purpose of the Incident Safety Plan and applies the safety perspective to all of the documents that are produced during an incident.

**Incident Safety Plan**

- The Incident Safety Plan aims to create a safe working environment through Safety Messages and a safety attitude at an incident.
- It is not necessarily a written, formal document.





Visual 9.5

**INCIDENT SAFETY PLAN**

The Incident Safety Plan includes any location where and any method by which safety information is displayed. This requires a different understanding of the word “plan.” It includes all documents and actions at an incident viewed from a safety perspective, not a written form. It is not a physical plan, but rather the job of the Safety Officer.

**ICS Form 204 – Assignment List**

Visual 9.6

**ICS FORM 204 ASSIGNMENT LIST**

The ICS Form 204, Assignment List informs Division and Group supervisors of incident assignments.

Section 7, Special Instructions, is where the Safety Officer includes special safety-related instructions to each Unit. This will expand on the hazards and mitigations specific to each Unit that were developed on ICS Form 215A, Incident Action Plan Safety Analysis.

**Chemical/Fire Behavior Forecast**




Visual 9.7


**CHEMICAL/FIRE BEHAVIOR FORECAST**

A Chemical/Fire Behavior Forecast, Weather Forecast, or any other appropriate incident forecast will always have a safety section. This is where the Safety Officer can instruct personnel about what to watch out for and how to stay safe.

**Safety Message**

- Safety Officer’s messages to all incident personnel.
- A primary responsibility of the Safety Officer
- Commonly documented using ICS Form 208, Safety Message/Plan

See Handout 9-1

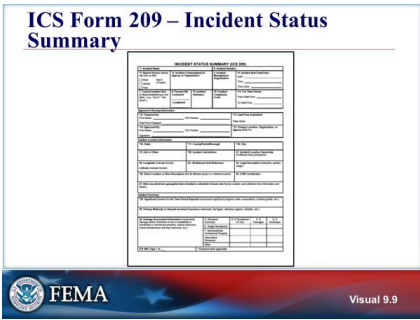


Visual 9.8

**SAFETY MESSAGE**

Safety Messages are the Safety Officer’s messages to all incident personnel. Writing a Safety Message/Plan is the Safety Officer’s primary responsibility.

One method of documenting a safety message can be using an ICS Form 208, Safety Message/Plan.

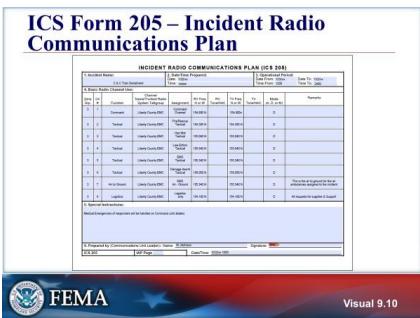


Visual 9.9

### ICS FORM 209 INCIDENT STATUS SUMMARY

The Situation Unit Leader or the Planning Section Chief is normally responsible for preparing the ICS Form 209, but several fields on the form contain safety related data and will require input from the Safety Officer.

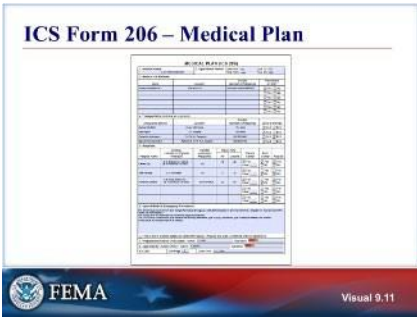
- Block 27 references geospatial data which may include forecasts, hazard plumes and evacuation zones.
- Block 28 contains summary of incident progress which may include road closures, people evacuated, size of a chemical spill.
- Block 29 is a summary of Primary Hazards involved in the incident.
- Block 33, Life, Safety and Health Status/ Threat Remarks
- Block 34 Life, Safety, and Health Threat Management
- Block 35 Weather Concerns
- Block 36 Projected Incident Activity, Potential Movement, Escalation or Spread
- Block 38 Current Incident Threat Summary and Risk Information



Visual 9.10

### ICS FORM 205 INCIDENT RADIO COMMUNICATIONS PLAN

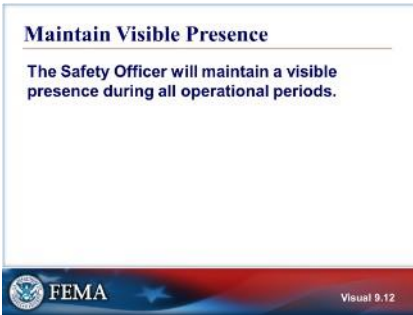
Coordinate with the Communications Unit Leader to establish a specific talk group for contacting the Safety Officer and ensure that this is noted on the ICS Form 205.



Visual 9.11

### ICS FORM 206 MEDICAL PLAN

The Safety Officer reviews and approves the ICS Form 206 Medical Plan. It is important to note that on the ICS Form 206, in the Special Medical Emergency Procedures section (block 6), that instructions should state that all incident/event related injuries should be reported to immediate supervisors to initiate proper notification procedures, including contacting the Safety Officer, Claims and Compensation, Incident Command, etc.



Visual 9.12

## **MAINTAIN VISIBLE PRESENCE**

### **Wear Proper Personal Protective Equipment**

Set an example of safe practices by wearing proper PPE. Personnel will follow the lead of the Safety Officer because he or she is the expert. If personnel see the Safety Officer being careful, they will know that they should be careful as well.

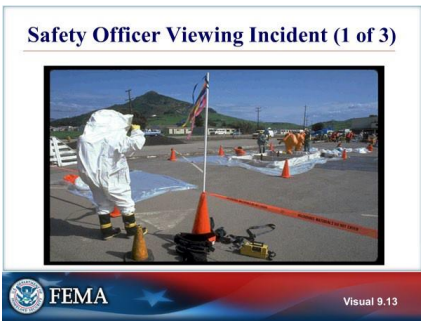
### **Maintain Personal Contact**

Maintaining a personal presence in the field provides the Safety Officer the opportunity to build positive working relationships with field supervisors and assigned resources.

Seeing the Safety Officer present can make personnel act in a safer manner, just like people drive slower when a police officer is watching. But the Safety Officer wants to remain friendly and approachable so that personnel bring their concerns to him or her and let the Safety Officer know when there are safety issues that should be addressed.

### **Respond to Requests**

Personnel should understand that it is OK to refuse an assignment if there is a safety concern. If personnel are not comfortable with their task, the Safety Officer needs to reevaluate their assessment. If the assessment is confirmed, the Safety Officer can take measures to explain the safety measures that are in place in order to reinforce that appropriate safety measures have been provided. It is also possible that a reevaluation will confirm that the personnel are correct in their safety concerns. In this case, the Safety Officer should stop the operation until better safety measures can be implemented.



Visual 9.13

### SAFETY OFFICER VIEWING INCIDENT (1 OF 3)

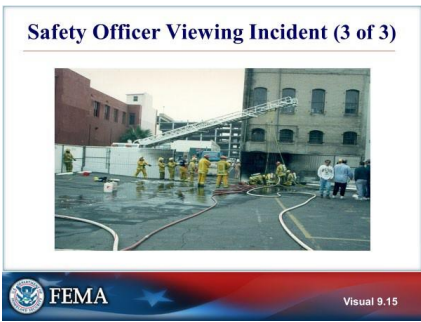
Viewing can be accomplished by on-site direct observation, or through photographs or video if on-site observation is not possible (for example due to danger of exposure to a hazard).



Visual 9.14

### SAFETY OFFICER VIEWING INCIDENT (2 OF 3)

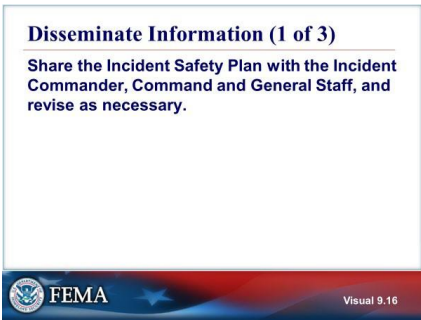
DO YOU SEE ANY SAFETY ISSUES IN THIS IMAGE?



Visual 9.15

### SAFETY OFFICER VIEWING INCIDENT (3 OF 3)

Do you see any safety issues in this picture?




Visual 9.16

### DISSEMINATE INFORMATION (1 OF 3)

Gathering information, observing the incident, and filling out forms does no good if you do not share it!

Be a salesperson for safety.

**Disseminate Information (2 of 3)**  
 Ensure that all cooperating and assisting agencies are included in safety planning.



FEMA Visual 9.17

Visual 9.17

**Disseminate Information (3 of 3)**  
 Identify hazards/risks to the public and coordinate with incident staff to ensure appropriate actions are taken.

FEMA Visual 9.18

Visual 9.18

**Incident Bulletin Board**

- Coordinate with Logistics Section Chief, Camp Manager, and Public Information Officer.
- Post information in all areas of Incident Command Post.



FEMA Visual 9.19

Visual 9.19

**DISSEMINATE INFORMATION (2 OF 3)**

Include all cooperating agencies so that everyone can ask questions, be on the same page, feel included, share information, and avoid rumors and misunderstandings.

**DISSEMINATE INFORMATION (3 OF 3)**

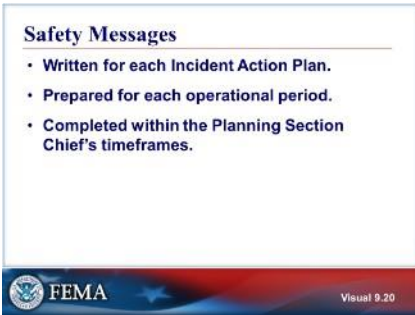
Work with the Liaison Officer or Public Information Officer to communicate hazards and risks to the public and to ensure that appropriate actions are taken. This might require a separate Safety Briefing for the public or the use of websites, social media, or mass notification systems to communicate important information.

**INCIDENT BULLETIN BOARD**

The bulletin board allows:

- The Safety Officer to see what other Safety Officers saw while he or she was off duty.
- Personnel who missed the Safety Officer’s Briefing to catch up.
- Personnel working at different sites to see the Safety Officer’s messages and keep safety in mind.
- The public to get information.

The Safety Officer must maintain the visibility of safety, even if he or she is not on duty.



Visual 9.20

## SAFETY MESSAGES

The ICS Form 208 Safety Message/Plan can be included as an attachment to each Incident Action Plan. To accomplish this, the form must be completed within the Planning Section Chief's timeframes.

A Safety Message is the Safety Officer's written announcement to all incident personnel about the safety issues for that operational period (for example, major hazards, recurring problems, mitigations underway).

A general message is a good opportunity to remind everyone to be their own Safety Officer and to report pertinent information to you.

There are other places where specific information is communicated, such as at briefings and on specific sections of forms (for example, the Special Instructions box on ICS Form 204, Assignment List).



Visual 9.21

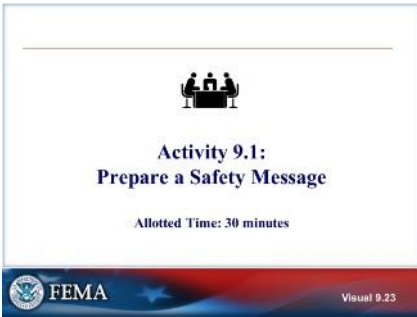
## SAFETY MESSAGES (CONT.)



Visual 9.22

## HANDOUT 9-1: SAMPLE SAFETY MESSAGE

Refer to Handout 9-1: Sample Safety Message.

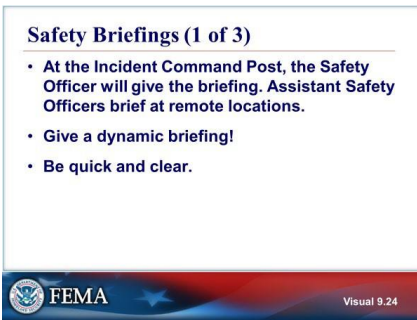


Visual 9.23

**ACTIVITY 9.1: PREPARE A SAFETY MESSAGE**

The instructor will explain Activity 9.1.

You will have 30 minutes to complete this activity.

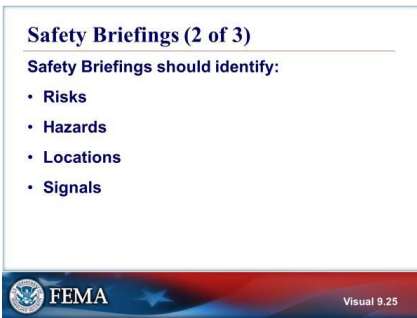


Visual 9.24

**SAFETY BRIEFINGS (1 OF 3)**

Safety Briefings are your chance to share information with personnel who are doing the work. The Safety Officer will follow the operations information, so he or she is warning everyone about the hazards, risks, and mitigations that they may see.

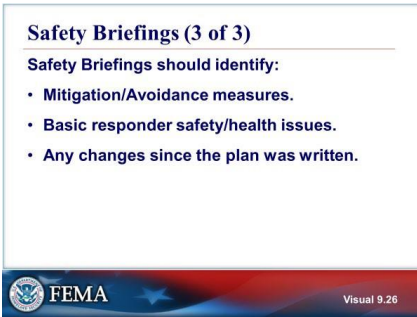
Keep in mind the 3 B's: Be Seen, Be Brief, Be Gone.



Visual 9.25

**SAFETY BRIEFINGS (2 OF 3)**

**THE SAFETY BRIEFING SHOULD CONTAIN AWARENESS-LEVEL INFORMATION**



Visual 9.26

## **SAFETY BRIEFINGS (3 OF 3)**

### **Mitigation/Avoidance Measures**

Be specific about what to mitigate and what to avoid, as well as how to do so.

### **Basic Responder Safety/Health Issues**

This includes items such as fatigue, weather, tripping hazards, and common injuries at the incident—general information that applies to all personnel. This is a good time to clear up rumors about diseases (for example, food poisoning) so that personnel are not distracted by the rumors.

This is an opportunity for the Safety Officer to present a unified health message in partnership with the Medical Unit Leader to address any responders' health and safety concerns.

### **Any Changes Since the Plan Was Written**

The plan was created in the previous operational period, so things might have changed. Call out those affected and tell them to pay attention.

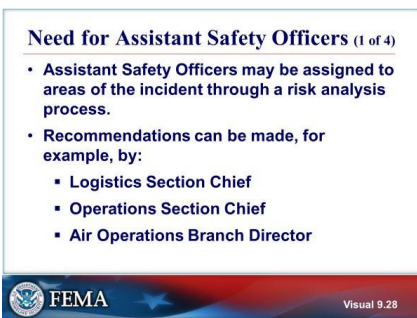


Visual 9.27

## **ACTIVITY 9.2: PREPARE AND PRESENT A SAFETY BRIEFING**

The instructor will explain Activity 9.2.

You will have 30 minutes to complete this activity.



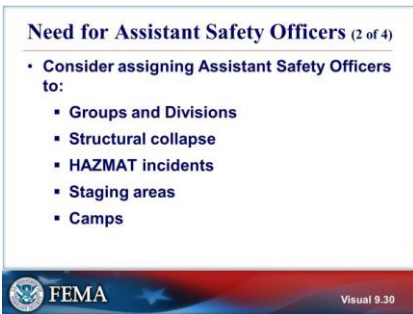
Visual 9.28

## **NEED FOR ASSISTANT SAFETY OFFICERS (1 OF 4)**

The Operations and Logistics Sections may recommend when you will need Assistant Safety Officers because they may know that an incident is about to get more complex or that you will need more safety supervision of a particular operation or location.



Visual 9.29



Visual 9.30

## HIGH-RISK OPERATION

High-risk operations are a good example of where you want to ensure that you have an Assistant Safety Officer always present.

This image is an example of decontamination. It is always a high-risk operation because even if you deal with it properly, you are still dealing with unknowns.

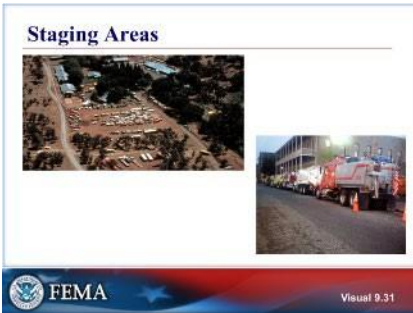
## NEED FOR ASSISTANT SAFETY OFFICERS (2 OF 4)

It is appropriate and beneficial to have Assistant Safety Officers at special high-risk locations and at any incident location you will not be able to visit frequently.

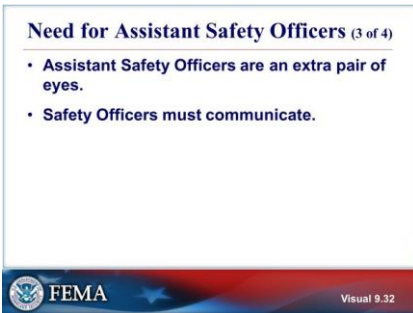
Assistant Safety Officers should be ordered early if a situation appears to be expanding beyond the ability of a single person. Don't wait until you are overwhelmed to ask for help – try to anticipate rather than react.

Assistant Safety Officers should be assigned based on their skill set, experience, and demeanor.

Assistant Safety Officers assigned to Hazardous Materials incident areas should be qualified at the Hazardous Materials Technician level; Assistant Safety Officers assigned to USAR incidents should be qualified at the Technician level for the discipline which they are assigned-structural collapse, trench rescue, confined space, high angle rescue, vehicle and machinery and water rescue.



Visual 9.31



Visual 9.32

## STAGING AREAS

There are a lot of activities and a lot of moving vehicles. There are several incident command elements involved in the staging area. Operations runs the Staging Area, Logistics develops traffic plans and security would direct traffic.

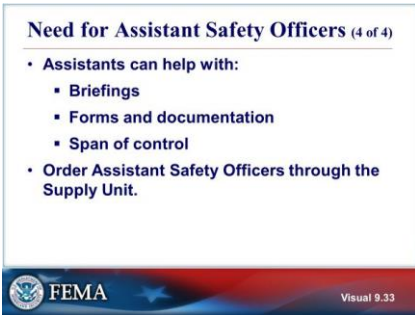
The role of the Safety Officer here is to ensure a Traffic Plan is in place that addresses vehicle and personnel movement. This is a part of the overall Safety Officer responsibility for the safety of all personnel at staging and other off-site locations.

Night operations might require scene lighting, and considerations might be given to weather-related hazards-heat, cold, rain, lightning, etc.

## NEED FOR ASSISTANT SAFETY OFFICERS (3 OF 4)

Assistant Safety Officers can alert you with regard to the issues that they see because the Safety Officer cannot be everywhere at the incident site. They are available to watch out for personnel safety and cooperate with personnel to ensure safe operations.

Communication is absolutely essential among Assistant Safety Officers, between Assistants and the lead Safety Officer, and between the Safety Team and the rest of the incident personnel.



Visual 9.33

## NEED FOR ASSISTANT SAFETY OFFICERS (4 OF 4)

Assistant Safety Officers can help with:

- Briefings: At remote locations (camp, helibase), the main briefing site or tactical site, when conducting an investigation, and so forth.
- Forms and documentation
- Span of control
  - Manageable Span of Control is one of the 14 NIMS Management Characteristics. The optimal span of control is one supervisor to five subordinates; however, effective incident management frequently necessitates ratios significantly different from this. The 1:5 ratio is a guideline, and incident personnel use their best judgment to determine the actual distribution of subordinates to supervisors for a given incident.
  - When managing complex incidents, the Safety Officer may easily exceed a manageable span of control when there are a large number of Assistant Safety Officers.
  - Remember the ICS approach is to address span of control issues by appointing additional subordinate supervisors to share the management load and decrease the span of control. It may be necessary to have Assistant Safety Officers supervise other Assistants and control the flow of information within the Safety Unit.

Request for Assistant Safety Officers are approved by the IC/ UC. They are ordered by placing a request through the Supply Unit Leader.

The Safety Officer will base the request on his or her anticipated future needs as a result of either the recommendations of the Operations Section, a hazard analysis process, or identified current needs.

You may by-name request personnel who you know, have worked with before, and trust. However, all incident resource orders must go through the incident ordering process.

**Objectives Review**

1. What are the elements of the Incident Safety Plan?
2. What are the characteristics of an effective Safety Message?
3. What are the characteristics of an effective Safety Briefing?
4. When do you need an Assistant Safety Officer and how do you order Assistant Safety Officers?

FEMA Visual 9.34

Visual 9.34

## OBJECTIVES REVIEW

### Unit Enabling Objectives

- Identify elements of an Incident Safety Plan.
- Given a scenario, develop a Safety Message for the Incident Action Plan (IAP).
- Given a scenario, develop and present a Safety Briefing.
- Explain the process used in determining the need for and the ordering of Assistant Safety Officers.

# Supplemental Materials

This page intentionally left blank.

## Handout 9-1: Sample Safety Message

### Hurricane Katrina – Region 6

### Operational Period:

**Starting: 26 Oct 05 0700**

**Ending: 27 Oct 05 0700**

### Major Hazards and Risks:

- Structural Instability
- Electrical Hazards
- Thermal Stresses
- Security

- Biological Hazards
- Hazardous Materials
- Fire/Explosions
- Wild Animals/Infectious Insects
- Stress/Fatigue
- Slips, Trips, and Falls

**PPE:** Personal protective equipment continues to be our first line of defense against injury or potential exposures. Level D is the minimum level of PPE for any field assignment. Level D is defined as: durable clothing (long pants), steel-toed boots, safety glasses with side protection, goggles and aprons if needed for splash protection, hard hat if impact or overhead hazards are present, ear plugs for equipment or other loud noises, N-95 respirators for dust or odor, and gloves (leather, nitrile, etc.) as needed for the task. The ICS Form 204 lists additional PPE requirements (Level C and B) specific to each operational assignment. If you have questions about the selection or use of PPE specified for any operation, please ask your Supervisor and Safety Officer.

**Firearms:** It appears that homeowners have been placing firearms out for collection with their household hazardous waste materials. Please note that EPA EMPLOYEES OR CONTRACTORS ARE NOT ALLOWED TO TOUCH OR HANDLE FIREARMS. If firearms are discovered, they must be reported to the onsite EPA Supervisor immediately. The EPA Supervisor is then required to contact the local Parish Sheriff’s Department and stay with the firearm, without touching it, until a representative from the Sheriff’s Office arrives.

**West Nile Virus:** WNV is an illness transmitted to humans primarily by mosquitoes. In most cases, people infected either show no symptoms or have very mild flu-like symptoms. Mild cases normally last only a few days and do not cause any long-term effects. However, severe cases may result in encephalitis, an inflammation of the membrane around the brain, usually lasting several weeks and may cause permanent neurological effects. The typical time from infection to the onset of signs and symptoms is 3 to 14 days.

**Symptoms:** Headache, high fever, stiffness in the neck, disorientation (in very severe cases, coma), tremors and convulsions, and muscle weakness.

**Precautions:** Cover as much of your skin as possible by wearing shirts with long sleeves, long pants, and socks. Use lightweight clothing to minimize the potential for heat-induced illnesses. Avoid using perfumes or colognes as they attract mosquitoes. Choose a repellent that provides protection for the amount of time that you will be out (the higher the percentage of DEET, the longer the protection time).

Skip Weisberg  
EPA Safety Officer  
214-329-8320

Anita Boseman, OSC  
Assistant Safety Officer  
312-802-0749

Dennis Matlock, OSC  
Assistant Safety Officer  
304-280-7500

Glenn Miller  
LDEQ – Safety Officer  
225-281-7735

Jason Spillman / Tony Zimmer  
Assistant Safety Officers  
609-865-1638 / 513-675-4746

Rob Schrader / Patrick McGovern  
USCG Assistant Safety Officers  
609-618-7209 / 609-352-9955

Glen Lapsley, OSC  
CISM  
215-514-9793

Jan Shubert  
CISM  
202-253-4177

This page intentionally left blank.

## Activity 9.1: Prepare a Safety Message

### Activity 9.1: Prepare a Safety Message Overview Unit 9

#### Purpose

The purpose of this activity is to provide students with an opportunity to create a Safety Message.

#### Objectives

Students will develop a general Safety Message (using an ICS Form 208) for addition to the Train Derailment Scenario Incident Action Plan.

#### Activity Structure

This activity will last approximately 30 minutes, including individual work and small group discussion. Using an ICS Form 208, the students will individually develop a Safety Message using the Train Derailment Scenario presented in previous activities. Then, each group will discuss and critique the work of the other members of the group.

#### Rules, Roles, and Responsibilities

The following are the specific activities and instructions for your participation in the activity:

1. Review the Train Derailment Scenario presented in previous activities.
2. Individually, design a Safety Message (using an ICS Form 208) for addition to the Incident Action Plan.
3. Within your small group, review the work of each group member and offer constructive criticism or comments.

The Instructor moderates discussions, answers questions, and provides additional information as required.

### Activity 9.1 Schedule

Activity	Duration	Participation Type
Activity Introduction and Overview	2 minutes	Classroom
Individual Work	15 minutes	Small groups
Debrief and Review	15 minutes	Classroom

This page intentionally left blank.

## Activity 9.2: Prepare and Present a Safety Briefing

### Activity 9.2: Prepare and Present a Safety Briefing Overview - Unit 9

#### Purpose

The purpose of this activity is to provide students with an opportunity to deliver a Safety Briefing.

#### Objectives

Students will develop and deliver a Safety Briefing for the Train Derailment Scenario Incident Action Plan.

#### Activity Structure

This activity will last approximately 30 minutes, including individual work and small group discussion. The participants will individually develop a Safety Briefing using the Train Derailment Scenario presented in previous activities. Then, Students will present their briefings to the members of their small groups.

#### Rules, Roles, and Responsibilities

The following are the specific activities and instructions for your participation in the activity:

1. Review the Train Derailment Scenario presented in previous activities.
2. Individually, develop a Safety Briefing for this operational period.
3. Deliver your Safety Briefing to your small group.

The Instructor moderates discussions, answers questions, and provides additional information as required.

### Activity 9.2 Schedule

Activity	Duration	Participation Type
Activity Introduction and Overview	2 minutes	Classroom
Individual Work	10 minutes	Small groups
Debrief and Review	20 minutes	Classroom

This page intentionally left blank.

## **Handout 9-2: Train Derailment Scenario Safety Message**

Refer to EL\_954\_HO\_9-2\_ICS\_Form\_208\_1\_of\_2.pdf

Refer to EL\_954\_HO\_9-2\_ICS\_Form\_208\_2\_of\_2.pdf

This page intentionally left blank.

---

# Unit 10: Coordination with the Logistics Section

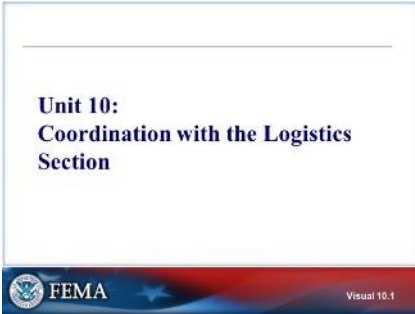
STUDENT MANUAL

---

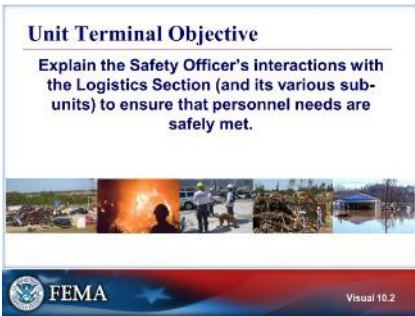
---

---

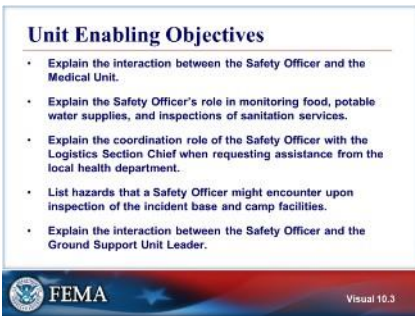
This page intentionally left blank.



Visual 10.1



Visual 10.2



Visual 10.3

## UNIT 10: COORDINATION WITH THE LOGISTICS SECTION

### UNIT TERMINAL OBJECTIVE

Explain the Safety Officer's interactions with the Logistics Section (and its various sub-units) to ensure that personnel needs are safely met.

### UNIT ENABLING OBJECTIVES

- Explain the interaction between the Safety Officer and the Medical Unit.
- Explain the Safety Officer's role in monitoring food, potable water supplies, and inspections of sanitation services.
- Explain the coordination role of the Safety Officer with the Logistics Section Chief when requesting assistance from the local health department.
- List hazards that a Safety Officer might encounter upon inspection of the incident base and camp facilities.
- Explain the interaction between the Safety Officer and the Ground Support Unit Leader.

The Final Exam questions are based on the Unit Enabling Objectives.

**Unit Overview**

Safety Officer interacts with:



- Medical Unit
- Local health inspector
- Ground Support Unit



Visual 10.4

**Medical Unit Interaction (1 of 3)**


The Safety Officer is required to approve ICS Form 206 Medical Plan.

Visual 10.5

**Medical Unit Interaction (2 of 3)**


- If the Medical Plan has been completed, it is the Safety Officer's responsibility to approve the plan for each operational period.
- The Safety Officer reviews the daily log of the Medical Unit.



Visual 10.6

**Medical Unit Interaction (3 of 3)**

It is the Safety Officer's responsibility to ensure that reportable injuries/illnesses of personnel are treated and documentation is complete.



Visual 10.7

**UNIT OVERVIEW**

The Safety Officer interacts with Logistics Section Unit Leaders, local health inspectors, and other health and safety agencies and organizations to identify and correct health and safety issues.

**MEDICAL UNIT INTERACTION (1 OF 3)**

The Safety Officer should ensure that in the instructions in the Special Emergency Medical Procedures section (block 6) of the form, clearly state that all incident/event related injuries or illnesses should immediately reported to the responder's immediate supervisor to initiate the notification process. The notification process should include the Safety Officer, Incident Commander, and Claims and Compensation Unit in the Finance/Admin Section.

**MEDICAL UNIT INTERACTION (2 OF 3)**

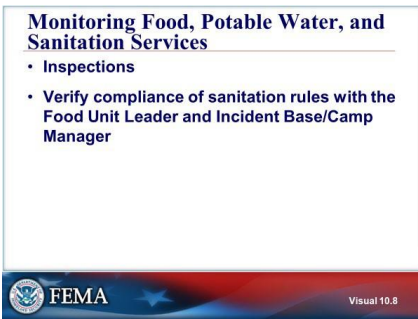
The Safety Officer plays a key role in developing the Medical Plan, to include ensuring that procedures for particularly hazardous operations are in place.

Maintaining a safety presence in the Medical area to get an idea about the types of injuries and illnesses are coming in is a method to find out what is happening at the incident site.

Checking the daily log for the Medical Unit also allows the Safety Officer to identify trends.

**MEDICAL UNIT INTERACTION (3 OF 3)**

The Safety Officer is involved in the documentation of any injury or accident, including the initial report, mitigation efforts, and any compensation claims that may follow. The Safety Officer should be immediately alerted when accidents requiring medical attention occur. Staying in contact with the Medical Unit will ensure that he or she does not miss anything.



Visual 10.8



Visual 10.9



Visual 10.10

## MONITORING FOOD, POTABLE WATER, AND SANITATION SERVICES

Inspections are very important. These issues should be monitored on a daily basis with the Food Unit Leader and Incident Base/Camp Manager. The Safety Officer is responsible for verifying compliance with sanitation regulations.

## SANITATION RULES

Hand wash stations should be placed in such a way that personnel will wash their hands then go directly into the food serving line.

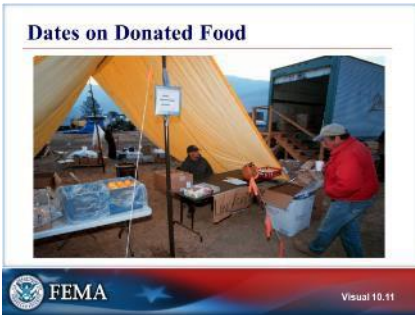
You may need to bring in a sanitation station for hand washing to large incidents where the infrastructure is impacted or rural incidents.

Through the use of Assistant Safety Officers, message boards, safety briefings, and safety messages, the importance of proper sanitation, hand washing techniques, and food safety practices can be emphasized throughout an incident or event.

## SERVING TABLES

Some major issues with regard to serving tables include:

- Sneeze guards.
- People reaching across food and dirt dropping off of their arms/shirts.
- When stressed to provide meals on short notice and with little preparation, caterers may bring out old or substandard food or cut corners with regard to cleanliness.



Visual 10.11

## DATES ON DONATED FOOD

Food needs to be marked, dated, and properly stored.

Take precautions with food that is donated. During a disaster, you should definitely expect that people will donate food to rescue workers; however, this is a safety issue. Look out for:

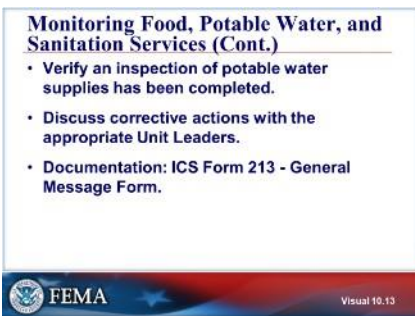
- Perishables, especially mayonnaise on sandwiches, and other things that could have gone bad if power was lost.
- Meat that is discolored.
- Cooking temperatures need to be adequate to ensure food safety.
- Prepackaged, store-bought foods are probably fine.



Visual 10.12

## INSPECT FOOD SERVICES

**WHAT ARE SOME ISSUES THAT COULD EXIST EVEN IN A FACILITY AS CLEAN AS THE ONE SHOWN IN THESE PHOTOGRAPHS?**

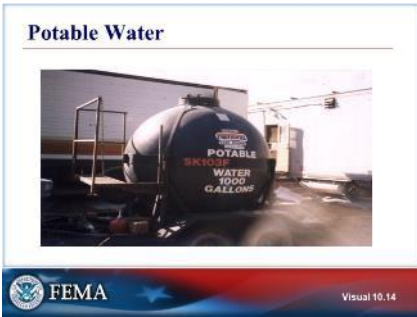


Visual 10.13

## MONITORING FOOD, POTABLE WATER, AND SANITATION SERVICES (CONT.)

Facilities should be inspected and the Facilities Unit should be able to provide the Safety Officer with a report.

If a problem is identified, the Safety Officer should make sure that it is being corrected and note it on ICS Form 214, Activity Log. If there is a problem, use ICS Form 213, General Message, to inform the Unit Leader about the problem that was discovered and the corrective action that should be taken.



Visual 10.14

## POTABLE WATER

The Safety Officer must ensure that the container being used is certified to hold potable water. The water must be tested; you may need help from the local health department or water supply company to ensure that the water is safe to drink.



Visual 10.15

## GRAY WATER STORAGE

“Gray water” is water that comes through a sink drain; “black water” comes from toilets. Gray water can be disposed of, but black water needs to go to a sanitation/filtration plant.

For gray water, storage is less of an issue than where it is being dumped. That depends on local regulations, so make sure that regulations are being followed. Improper dumping is a public safety hazard.

Note in this picture that there are propane tanks attached to this trailer. That is normal practice with a shower heating system, for example. However, it is a major risk when the tanks are being refilled with propane.




Visual 10.16

## INSPECT SANITATION SERVICES

It is important to locate sanitation facilities away from food service areas because of contamination issues, the smell, and bugs. If the pumps drip, that is a sanitation issue.

**Interaction with Local Health Department (1 of 3)**

- Coordinate with Logistics Section Chief about timing.
- Inspect camp facilities, food, and sanitation services.
- Verify there are Inspectors to review the food and sanitation services at the incident.



Visual 10.17

**INTERACTION WITH LOCAL HEALTH DEPARTMENT (1 OF 3)**


Coordinate with the Logistics Section Chief about timing with regard to inspecting camp facilities, and food and sanitation services.

Verify that there are inspectors to review the food and sanitation services at the incident.

Contact the host Agency Representative for assistance with area procedures, protocol, phone numbers, and contact persons.

**Interaction with Local Health Department (2 of 3)**

- Contact the host Agency Representative for assistance with area procedures, protocol, phone numbers, and contact persons.
- Coordinate a time for the inspection(s) with appropriate Unit Leaders.
- All deficiencies or suggestions should be implemented by the appropriate Unit Leaders.



Visual 10.18


**INTERACTION WITH LOCAL HEALTH DEPARTMENT (2 OF 3)**

It is important to coordinate a time that works for both the Logistics Section Unit Leaders and the Health Inspector. You don't want to have to do an inspection during a shift change when the Logistics Section is busy.

All deficiencies or suggestions should be implemented by the appropriate Unit Leaders. Health Inspectors have a lot of power to shut down an operation, so take the actions that they suggest and keep them involved.

**Interaction with Local Health Department (3 of 3)**

- In many areas, local jurisdictions will make unannounced camp and facility inspections.




Visual 10.19

**INTERACTION WITH LOCAL HEALTH DEPARTMENT (3 OF 3)**

Do your best to accommodate even unannounced inspections, although you should keep in mind the other responsibilities of the Logistics Section.

**Inspect Incident Facilities**

- Conduct a general inspection of the incident base and camp facilities.
- Identify and review all unsafe conditions with the appropriate Unit Leader.




Visual 10.20

**INSPECT INCIDENT FACILITIES**

Areas that should be inspected along with food service, restroom, and waste water recovery areas include supply receiving and distribution areas, ground support operations and inspection, maintenance and refueling areas, and communications areas. Each of these areas pose a variety of hazards that need to be identified and mitigated.

**Hazards and Corrective Actions:  
Identify Appropriate Unit Leader**

- Electrical hazards (including power tools)
- Staging area
- Tripping hazards
- Sleeping location
- Incident Base/Camp
- Traffic
- Fueling area
- Trash
- Tool-sharpening areas
- Proper disposal of batteries
- Snags, widow-makers, other tree-related hazards





Visual 10.21

**HAZARDS AND CORRECTIVE ACTIONS: IDENTIFY APPROPRIATE UNIT LEADER**

Which Unit Leader would you talk to with regard to corrective action for the hazards listed on the visual?

**Incident Base or Camp**

Visual 10.22

**INCIDENT BASE OR CAMP**

You can see in these pictures how parking and sleeping areas are separated, and how different areas are marked off. If they are not, the Incident Base or Camp Manager needs to fix this.

**Ground Support Unit Interaction (1 of 3)**

Inspect:

- Crews and equipment
- Repair/Maintenance areas
- Parking areas
- Fueling areas



Visual 10.23

**GROUND SUPPORT UNIT INTERACTION (1 OF 3)**

It is critical to develop a safety partnership with the Ground Support Unit Leader. Ground Support personnel drive more miles per day than any other group of drivers moving incident personnel and hazards materials. As you will see in the following visuals the Ground Support Unit Leader is a vital member of the incident safety team.



Visual 10.24

## VEHICLE INSPECTION

Vehicle inspections are a concern both early and late in an incident.

### Early in an Incident

Vehicles driven by personnel frequently are not inspected because of a lack of time. It is important to inspect both vehicles and equipment of personnel to ensure safe operations. All contracted equipment should also be inspected before it is used, especially heavy equipment.

### Late in an Incident

Make sure that vehicles are road worthy at the end of the incident because you are responsible for the safety of resources at the incident site until they get home.

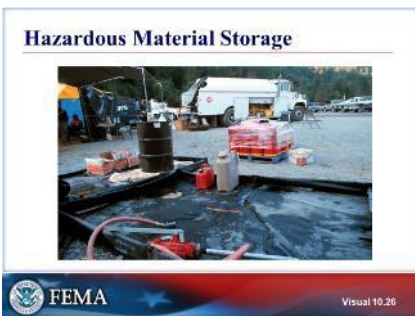
Although not the purpose of these safety inspections, they may also find contraband on the way in and prevent the loss of property on the way out.



Visual 10.25

## FUELING AREA

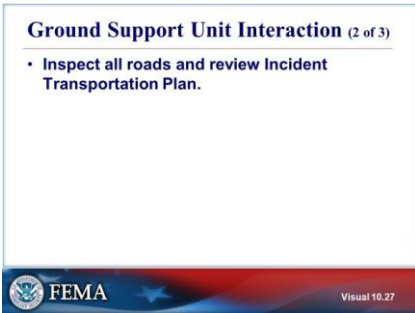
As the Safety Officer, make sure that the fueling area is blocked off from any other activity. Use barricades and warning signs, and make sure that spill clean-up kits and fire extinguishers are nearby. Containment berms should also be installed to contain large scale fuel spills. The Ground Support Unit is in charge of setting this up.



Visual 10.26

## HAZARDOUS MATERIAL STORAGE

In addition to fuel, you will have items such as flares, oil, grease, and hydraulic fluids, all of which are under control of the Ground Support Unit. The Supply Unit may also have fuel stored in their work area that you will need to monitor. You need to make sure that they are stored safely and according to regulations.



Visual 10.27

## GROUND SUPPORT UNIT INTERACTION (2 OF 3)

### Conduct road inspections

Make sure that someone is inspecting all of the roads for possible snags, dust, unstable bridges, and so forth. Ask the locals or personnel who return from driving on nearby roads about issues encountered. Transportation is a major safety issue that the Safety Officer will have to address because of exposure to a high percentage of incident personnel.

### Review the Incident Transportation Plan

The Ground Support Unit may need to plan for radios or controllers for one-way roads or bridges or may need to run lead vehicles down dangerous roads (e.g., if there is a danger of flooding, snags, or landslides).

In case the Safety Officer should ensure that traffic controllers are wearing the proper PPE, that these checkpoints are well-lit and have the proper safety measures in place, to include barricades, signage, message boards, and emergency vehicles with lighting.



Visual 10.28

### DUST CONTROL

Dust control is not just an issue for roads because of visibility for drivers, but kicking up dust in a camp is an issue for personnel who breathe it in or get it on their food and ingest it.

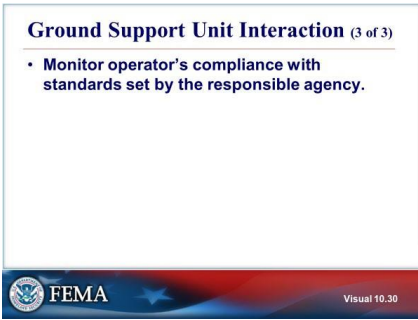
Dust control is important during a city incident as well, especially one on a construction site, for both personnel and public health and safety.



Visual 10.29

### ROAD MAINTENANCE

As the Safety Officer, you may have to make a determination that a road is too unsafe to be used until it is fixed, even if it is fixed by incident crews rather than the department of transportation or local public works, or you may decide to make a road one-way and put up barriers and use traffic controllers.



Visual 10.30

**GROUND SUPPORT UNIT INTERACTION (3 OF 3)**

Safety controls and regulations such as time limits on drivers' hours of operation are still in effect, even during an emergency.



Visual 10.31

**MOTOR VEHICLE AND OPERATOR DUTY HOURS**

Adherence to regulations governing operator duty hours means following work and rest guidelines, as well as avoiding unsafe times for operating certain equipment (especially aircraft).

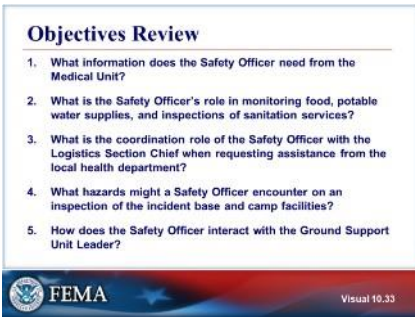


Visual 10.32

**ACTIVITY 10.1: COORDINATE WITH THE LOGISTICS SECTION**

The instructor will explain Activity 10.1.

You will have 45 minutes to complete this activity.



Visual 10.33

## OBJECTIVES REVIEW

### Unit Enabling Objectives

- Explain the interaction between the Safety Officer and the Medical Unit.
- Explain the Safety Officer's role in monitoring food, potable water supplies, and inspections of sanitation services.
- Explain the coordination role of the Safety Officer with the Logistics Section Chief when requesting assistance from the local health department.
- List hazards that a Safety Officer might encounter upon inspection of the incident base and camp facilities.
- Explain the interaction between the Safety Officer and the Ground Support Unit Leader.

This page intentionally left blank.

## **Supplemental Materials**

This page intentionally left blank.

## Activity 10.1: Coordinate with the Logistics Section

# Activity 10.1: Coordinate with the Logistics Section Overview – Unit 10

### Purpose

The purpose of this activity is to provide students with an opportunity to list potential hazards that may be found at an incident base or camp and to identify the appropriate Unit Leader who would take corrective action.

### Objectives

Students will:

- List potential hazards that may be found at an incident base or camp.
- Identify the appropriate Unit Leader who would take corrective action.
- Fill out ICS Form 214, Activity Log to record the safety issue.
- ICS Form 213, General Message, for reporting one hazard.

### Activity Structure

This activity will last approximately 45 minutes, including small group discussion and presentation of group findings. The students will gather in small groups to brainstorm hazards that may be found at an incident base or camp and determine the appropriate Unit Leader within the Logistics Branch who would be responsible for taking corrective action. In addition, each student will individually complete the ICS Form 214, Activity Log to record the issue and an ICS Form 213, General Message to inform a Unit Leader about one of the potential hazards that they anticipate. Each group will present their findings to the rest of the class.

### Rules, Roles, and Responsibilities

The following are the specific activities and instructions for your participation in the activity:

1. Within your small group, select a group spokesperson.
2. Brainstorm hazards that may be found at an incident base or camp.
3. Determine which Unit Leader within the Logistics Section would be responsible for taking corrective action.
4. Individually, fill out an ICS Form 214, Activity Log to record the safety issue. Refer to EL\_954\_ACT\_10.1\_ICs\_Form\_214.pdf.
5. Then, again individually, fill out ICS Form 213, General Message, for one of the hazards. Refer to EL\_954\_ACT\_10.1\_ICs\_Form\_213.pdf.
6. Present your results to the rest of the class.

The Instructor moderates discussions, answers questions, and provides additional information as required.

## Activity 10.1 Schedule

Activity	Duration	Participation Type
Activity Introduction and Overview	2 minutes	Classroom
Discuss and Document	20 minutes	Small groups
Debrief and Review	25 minutes	Classroom

---

# Unit 11: Operations and General Health and Welfare

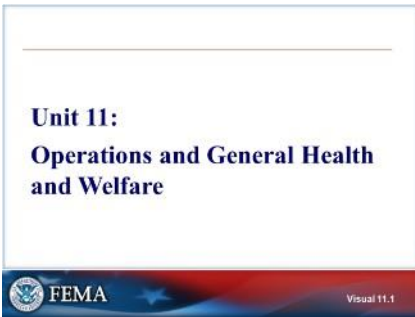
STUDENT MANUAL

---

---

---

This page intentionally left blank.



Visual 11.1

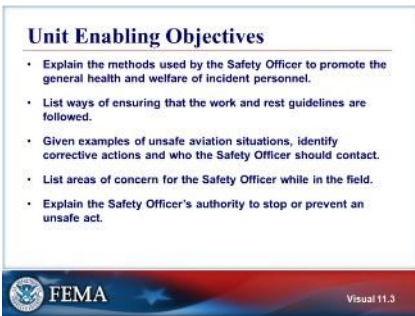
## UNIT 11: OPERATIONS AND GENERAL HEALTH AND WELFARE



Visual 11.2

### UNIT TERMINAL OBJECTIVE

Identify common unsafe actions, operations, situations, and safety risks during an incident.



Visual 11.3

### UNIT ENABLING OBJECTIVES


- Explain the methods used by the Safety Officer to promote the general health and welfare of incident personnel.
- List ways of ensuring that the work and rest guidelines are followed.
- Given examples of unsafe aviation situations, identify corrective actions and who the Safety Officer should contact.
- List areas of concern for the Safety Officer while in the field.
- Explain the Safety Officer's authority to stop or prevent an unsafe act.

The Final Exam questions are based on the Unit Enabling Objectives.

**Unit Overview**

**Monitoring:**

- Personal Protective Equipment (PPE)
- Work and rest guidelines
- Air Operations
- Equipment and personnel safety
- Tools
- Atmospheric and environmental sampling




Visual 11.4

**Monitor Food, Water, Medical, and Rest Needs**

**Safety Officer - ensure personnel needs met by:**

- Listening to incident personnel.
- Reviewing time reports and timesheets.
- Partnering with Command and General Staff.
- Coordinating with Facilities for adequate rest areas.



Visual 11.5

## UNIT OVERVIEW

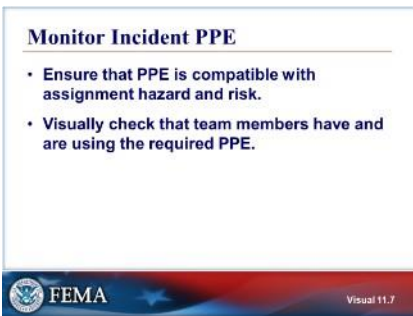
### MONITOR FOOD, WATER, MEDICAL, AND REST NEEDS

The Safety Officer should ensure that all personnel needs (food, water, shelter, rest, etc.) are being met. The methods for doing this are the same as the methods for gathering information about the incident at your initial deployment:

- Listen to incident personnel.
- Review time reports and timesheets through coordination with the Time Unit in Finance and Admin Section. It is important to establish a team safety partnership with the Finance Section so they will monitor responder work hours and report any extended shifts to you.
- To help ensure work rest guidelines are being followed, the Safety Officer should establish this same type of partnership with other command and general staff supervisors who are responsible for approving time documents. Building these bridges during the initial response will foster a positive safety atmosphere throughout the remainder of the incident.
  - Crews will push themselves if they aren't stopped, or they may be pushed because a life is at stake.
  - If they have been working 20-hour days, they are a safety hazard and need to be ordered to rest.
- The Safety Officer should coordinate with the Facilities Unit to ensure that adequate rest areas are established and maintained throughout the incident.



Visual 11.6



Visual 11.7

## INCLEMENT WEATHER

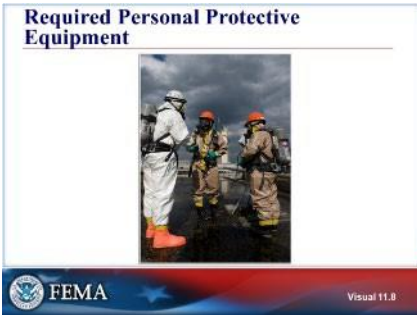
There are many places in the country where you can go from a warm, sunny day to a snowstorm the next day. The Safety Officer needs to make sure that incident personnel have and are using appropriate clothing and facilities for the weather.

## MONITOR INCIDENT PPE

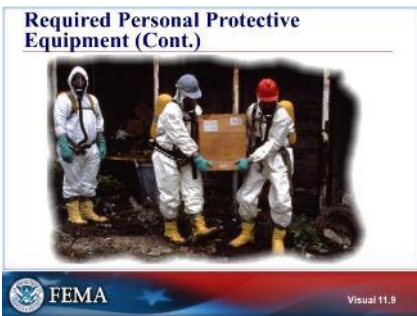
The Safety Officer must ensure that the level of Personal Protective Equipment (PPE) is compatible with the assignment. This is achieved by consulting with the Operations Section and relevant experts. The Safety Officer should also ensure that PPE is in good working order. This means that it must be inspected. The more hazardous the situation, the more thorough the testing needs to be.

It is critical the Safety Officer make the time needed go into field and observe that the safety practices are being implemented. During these visits the Safety Officer should visually check team members for appropriate use of PPE. If the Safety Officer sees a problem:

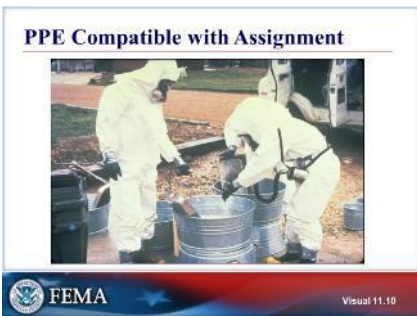
- In a situation that is not life-threatening, the Safety Officer should go to the Supervisor and explain what is wrong and how to take corrective action.
- The Safety Officer should not go directly to the crews because this would undermine their leader
- In a situation that is life-threatening, the Safety Officer should directly intervene (more on interventions later in this unit).
- When personnel are doing things correctly, the Safety Officer should let them know and encourage them to continue being safe.



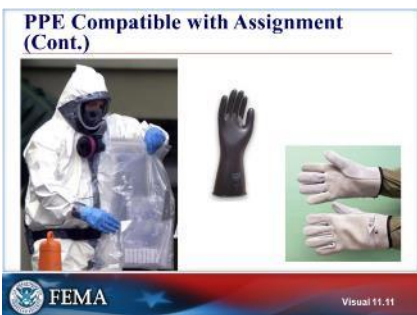
Visual 11.8



Visual 11.9



Visual 11.10



Visual 11.11

## REQUIRED PERSONAL PROTECTIVE EQUIPMENT

The required PPE depends on the jurisdiction or agency regulations, as well as the situation. The role of the Safety Officer is to make sure that all crews have been provided the required PPE to safely complete their assignment.

The Safety Officer informs personnel about the PPE that they need on ICS Form 204, Assignment List, and at specific briefings as Division Supervisors and Team Leaders brief their teams.

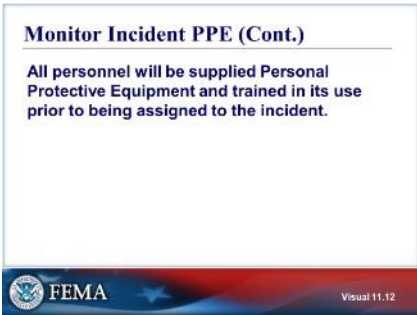
## REQUIRED PERSONAL PROTECTIVE EQUIPMENT (CONT.)

## PPE COMPATIBLE WITH ASSIGNMENT

## PPE COMPATIBLE WITH ASSIGNMENT (CONT.)

In a wide disaster area or a major incident, there may be many types of hazards. This will require several types of PPE to be available for personnel.

With regard PPE such as gloves, there are a number of different types, and personnel must wear the right type. An Assistant Safety Officer who is monitoring certain types of activities should carry an extra pair of the correct type of gloves or goggles.

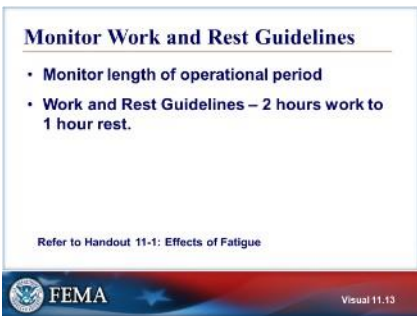


Visual 11.12

**MONITOR INCIDENT PPE (CONT.)**

The Safety Officer is responsible for all personnel at an incident site, including non-tactical personnel. Ensure that the media, property owners, local or agency officials, and others who visit the incident are supplied with the appropriate PPE and trained in its use.

Other types of PPE include hi-visibility clothing and vests, hearing protection, eye protection, knee and elbow pads, coveralls, safety footwear and respiratory protection.



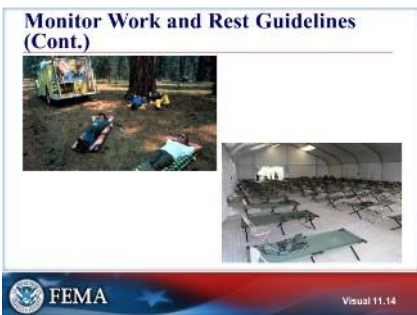
Visual 11.13

**MONITOR WORK AND REST GUIDELINES**

At any incident site, the Safety Officer needs to be aware of how much time people are getting to rest. Driving home after working all night is extremely dangerous. Asking or requiring personnel to sleep before leaving the incident site can prevent accidents.

Work and Rest Guidelines are 2 hours of work to 1 hour of rest. Decision makers and workers suffer from fatigue issues and do not perform optimally without rest.

Refer to Handout 11-1: Effects of Fatigue. Review the book excerpts included in the handout.

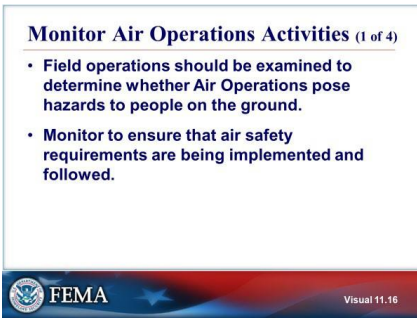


Visual 11.14

**MONITOR WORK AND REST GUIDELINES (CONT.)**



Visual 11.15



Visual 11.16



Visual 11.17



Visual 11.18

## AVIATION MISHAPS

### MONITOR AIR OPERATIONS ACTIVITIES (1 OF 4)

The incident command is responsible for supporting aviation resources, even if they are based miles away. If aviation resources are in transit or have checked in, the Safety Officer is responsible for their safety until they return home.


### RETARDANT DROP

### COORDINATE WITH GROUND PERSONNEL

Air to ground is one of the four radio networks at an incident site (along with support, command, and tactical networks). The channel needs to be kept clear and used frequently.



**Monitor Air Operations Activities (2 of 4)**

- Document all identified hazards or unsafe conditions.
- Review compliance with agency flight duty policy/duty limitations with appropriate Manager.



Visual 11.19


**Ensure Compliance with Agency Flight Duty Policies**

Visual 11.20

**Monitor Air Operations Activities (3 of 4)**

- Review aircraft incident/accident reports.
- Provide assistance to Air Operations Branch Director (AOBD) in dealing with preventative measures to ensure risks have been minimized or eliminated.



Visual 11.21

**MONITOR AIR OPERATIONS ACTIVITIES (2 OF 4)**

Coordinate with an Assistant Safety Officer or put the information in a Safety Message to warn them about the hazards. Examples include wires, power lines, cell towers, trees, smoke, or ground activities.

FAA regulations for pilot rest are 1:2 rather than 2:1. They also have an 8-hour maximum, and if they are on for 4 days, they must have 2 days off. There are also regulations about load/weight restrictions, especially for helicopters.


**ENSURE COMPLIANCE WITH AGENCY FLIGHT DUTY POLICIES**

**MONITOR AIR OPERATIONS ACTIVITIES (3 OF 4)**

Because precision is needed, Air Operations will review their policies and plans either every 24 hours or every operational period. Like dealing with other Units and Branches with a serious safety component, review the documentation produced by the Air Operations Branch to ensure that all accidents are reported and any trends are addressed.

Provide assistance to the Air Operations Branch Director (AOBD) in dealing with preventive measures to ensure that risks have been minimized or eliminated, and hazards have been corrected.

**Monitor Air Operations Activities (4 of 4)**  
 Include Air Operations in your normal Safety Officer activities.



FEMA Visual 11.22

Visual 11.22


**Monitor Equipment and Personnel Safety**  
 The Safety Officer must be aware of personnel working near equipment:

- Freelance Operators
- Proper Licenses
- Equipment Inspections
- Placard/markings as a control

FEMA Visual 11.23

Visual 11.23

**Equipment and Personnel Working Closely (1 of 3)**



FEMA Visual 11.24

Visual 11.24

**MONITOR AIR OPERATIONS ACTIVITIES (4 OF 4)**

Include Air Operations in your normal Safety Officer activities.

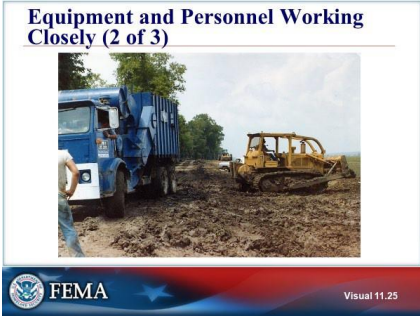
**MONITOR EQUIPMENT AND PERSONNEL SAFETY**

The Safety Officer should pay special attention to freelance operators or equipment operators who are not used to working around people. These individuals need to be watched more closely.

Ensure that equipment operators are properly licensed for the equipment that they are operating and that equipment is inspected daily and documented on daily use checklists as required by OSHA and other policy.

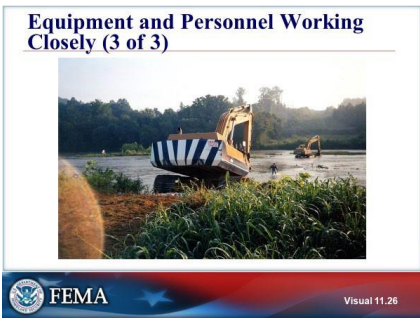
In a community disaster, people will show up and try to go to work. One way to avoid uninspected or unauthorized vehicles from being used at the incident site is to use placards or markings on all approved equipment.

**EQUIPMENT AND PERSONNEL WORKING CLOSELY (1 OF 3)**



Visual 11.25

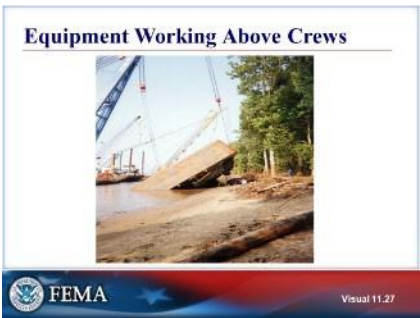
**EQUIPMENT AND PERSONNEL WORKING CLOSELY (2 OF 3)**



Visual 11.26

**EQUIPMENT AND PERSONNEL WORKING CLOSELY (3 OF 3)**

Anyone working around equipment should be issued the proper PPE-hi visibility vests, head, hearing, and foot protection.



Visual 11.27

**EQUIPMENT WORKING ABOVE CREWS**

Operators must be aware of the location of nearby crew members when they are operating equipment, especially with regard to lifting heavy loads.

Crane operators require special training and certifications, pre-lift procedures and inspections are required, as are inspections of all lifting hardware, slings, cables, and other equipment.

Safety zones should be established around areas where overhead operations are being performed.



Visual 11.28

**EQUIPMENT NOT SUITED FOR TASK**



Visual 11.29

## MONITOR COMMUNICATIONS

The five kinds of communications channels are:

- Command: Command and General Staff, Branch Directors, and Division Supervisors
- Tactical: Particular worksite to accomplish work
- Support: For the Logistics, Planning, and Finance Sections
- Air to ground: For tactical communications with Air Operations
- Air to air

Communication is essential for command and control so that Units can receive information updates (for example, changes in the weather, tactical adjustments, safety mitigations) and personnel can exchange information while they are working an operation.

Tactical channels need to be clear of other traffic and interoperable with all crews. All personnel need to have functioning equipment.

The Safety Officer also needs to ensure that all Units stay on their assigned channels so that they can receive information on tactical or safety adjustments.

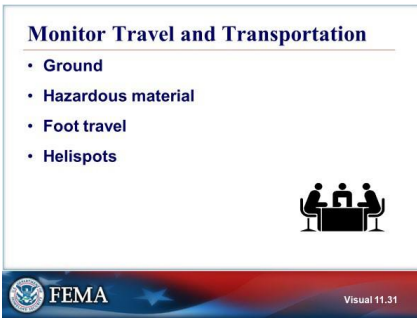
The use of cell phones by incident responders has become common place. A safety concern with cell use for tactical discussions is that important information is not being transmitted via radio. This means that all assigned incident personnel may not hear of a possible developing safety issue such as a change in the weather, rising water levels blocking roadways etc. A second safety concern with cell phones is that they may not be reliable in some areas with poor cell coverage. Finally, incident personnel may use cell phones to call home or view media when they should be resting or working. All of these items are potential safety issues.



Visual 11.30

**HUMAN REPEATER**

The use of a human repeater is a safety issue because it slows down communications, may require monitoring additional channels, and increases the likelihood that messages will be interpreted incorrectly.



Visual 11.31

**MONITOR TRAVEL AND TRANSPORTATION**

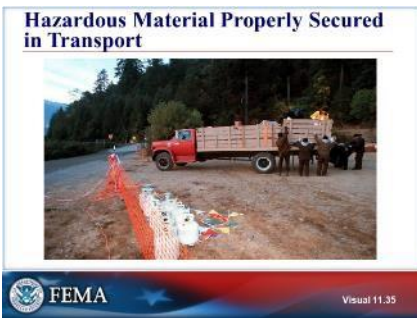
The instructor will explain this 10-minute activity.



Visual 11.32

**APPROPRIATE EQUIPMENT TO MEET THE NEED**

Helicopters have load limits and higher elevations change those limits. There are regulations for carrying loads over major highways or residential areas, so using a helicopter can create safety issues and may not be the best mode of transport to use.



Visual 11.33

**HAZARDOUS MATERIAL PROPERLY SECURED IN TRANSPORT**

The propane tanks shown in the picture need to be stabilized, secured, and ventilated. A propane tank that tips over can become a flame thrower. The use of propane tanks in enclosed spaces also presents a carbon monoxide risk.



Visual 11.34



Visual 11.35



Visual 11.36

## MONITOR HAND TOOLS

Hand tools refer to conventional tools like shovels, saws, or axes. Hand tools may be necessary during a rural incident or in some urban settings where power tools cannot be used.

Dull or chipped blades and broken or splintered handles are a risk because they slip or break easily, and the user will get tired because they are forced to work too hard. Make sure that crews use the right tools for the job and keep them in good condition.

## MONITOR HAND TOOLS (CONT.)

## MONITOR POWER TOOLS

Power tools have some of the same safety issues as hand tools, as well as other issues:

- Ensure that power tools are in good operating condition.
- Ensure that personnel are trained to use the particular power tools.
- Different brands present certain safety issues with regard to training and the use of spare parts.

Addressing this level of detail is likely to be the responsibility of an Assistant Safety Officer, but it is what the Safety Officer should look for when observing operations at an incident site.



**Monitor Gas-Powered Hand Tools**

- Hot mufflers/spark arresters
- Spark arrester not working
- Fuel flammable and explosive
- Fuel spills
- Mixed fuel (label containers)



Visual 11.37


**Monitor Gas-Powered Hand Tools (Cont.)**

Visual 11.38

**Monitor Urban Interface**

What are the major hazards of working in an urban area?



Visual 11.39

**MONITOR GAS-POWERED HAND TOOLS**

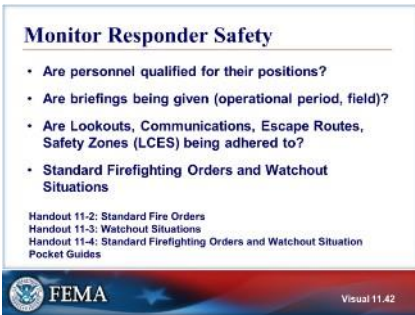
Gas-powered tools can cause fires or burn the operator. Operators must be trained and the equipment must be in good shape.

**MONITOR GAS-POWERED HAND TOOLS (CONT.)**

**MONITOR URBAN INTERFACE**

In the context of a fire or flood, a non-defensible structure refers to a building that can't be saved; in a HAZMAT context, it refers to a building that will be within the release cloud no matter what you do.

Focus more attention on buildings/people that can be saved. During pre-planning, such structures can be identified in advance.



Visual 11.40

## MONITOR RESPONDER SAFETY

The qualifications of personnel are often determined by the sending agency. The Safety Officer can pre-plan to ensure that there are enough qualified personnel on call for a task.

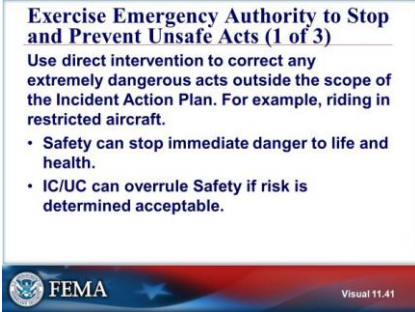
During the initial phase of an incident unqualified personnel may have been assigned. Unqualified personnel should be replaced as soon as possible due to safety and liability concerns. The Safety Officer must ensure that qualified personnel are doing the work, not just that they are available to do it.

Briefings are always required for all Supervisors and all operational periods. The Safety Officer must make sure that everyone gets those briefings, even if he or she has to do multiple or radio briefings to reach everyone.

The Safety Officer must ensure that lookouts, communications, escape routes, and safety zones (LCES) are being adhered to.

Refer to the following handouts:

- Handout 11-2: Standard Firefighting Orders: These are rules of engagement for wildland personnel that were developed because of injuries that had occurred, but they can also apply to incidents outside of wildland areas.
- Handout 11-3: Watch Out Situations: These are situations of concern with problems that should be addressed.
- Handout 11-4: Standard Firefighting Orders and Watch Out Situations Pocket Guides



Visual 11.41

## **EXERCISE EMERGENCY AUTHORITY TO STOP AND PREVENT UNSAFE ACTS (1 OF 3)**

When a dangerous action is being taken, such as not following the mitigations in the Incident Safety Analysis (ICS Form 215A), the Safety Officer can stop them with the full authority of the Incident Commander.


The Safety Officer can stop anything that is immediately dangerous to life and health, especially when the action is outside the scope of the IAP. For example, restricted aircraft have limitations on who can board, as well as how many people can board at the same time.

However, if the Incident Commander/Unified Command determines that the risk is acceptable given the situation, and personnel volunteer to take the risk, the Incident Commander can in turn overrule the Safety Officer.

**Monitor Dangerous Operations and Immediate Threats**  
Stop operations that are immediate threats to health and safety.

Procedure:

1. Document the Incident.
2. Contact the Division Supervisor.
3. Inform the Incident Commander.



Visual 11.42

## MONITOR DANGEROUS OPERATIONS AND IMMEDIATE THREATS

Although the Safety Officer can stop operations that are an immediate threat to health and safety, he or she cannot stop every action that is a risk. Response operations are inherently dangerous. If mitigations are being followed according to the plan, the operation should continue under observation.

Anything not immediately threatening to life and health should be stopped through regular channels by approaching the Supervisor of the personnel:

### Procedure to Stop Dangerous Operations

1. Document The Incident

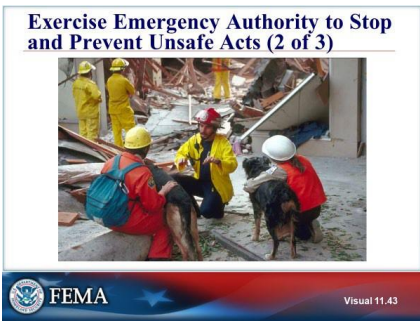
It is essential for the Safety Officer to write everything down, keeping thorough documentation so that any questions that arise can be answered and can be reported at a later briefing. He or she won't be at fault for ensuring safety. Whenever the Safety Officer stops operations, he or she should document it in the Activity Log.

2. Contact the Division Supervisor

At a minimum, the Division Supervisor needs to be notified because there was a safety issue or correction under their jurisdiction. It is their responsibility and they need to be able to oversee the correction. In addition, the Safety Officer is not their boss and he or she needs to work with the Division Supervisor.

3. Inform the Incident Commander

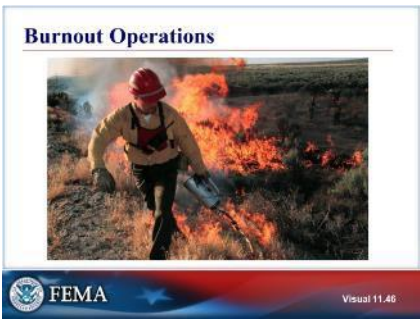
The Incident Commander also must be informed because it happened under his or her jurisdiction as well, and because he or she may feel that the risks are worth taking. If this was a pre-determined calculation, then the Safety Officer needs to work on communication procedures with the Incident Commander to ensure that the Safety Officer is notified of dangerous operations in advance, whenever possible.



Visual 11.43

**EXERCISE EMERGENCY AUTHORITY TO STOP AND PREVENT UNSAFE ACTS (2 OF 3)**

This image of an Urban Search and Rescue operation could be after a tornado or a flood; it looks like a structural collapse.



Visual 11.44

**BURNOUT OPERATIONS**

If the wind changes while this team member is working, it will be a very dangerous situation. Unless this is a considered action with no alternative possible, it should not occur.



Visual 11.45

**URBAN SEARCH AND RESCUE**

Visual shows Santa Cruz, CA, after an earthquake, but it could be anywhere after a tornado or an earthquake. General safety issues include watching for looters and keeping the owners safe if they try to return.


At this incident, the IMT had to resist political pressure to find a missing girl because they determined that working at night was too unsafe.

**Exercise Emergency Authority to Stop and Prevent Unsafe Acts (3 of 3)**

The normal procedure is to work with the appropriate Unit Leader or Supervisor.

The Safety Officer should:

- NOT always directly intervene.
- Use the chain of command.
- Inform IC of all issues/problems.
- Document all actions.



Visual 11.46

## EXERCISE EMERGENCY AUTHORITY TO STOP AND PREVENT UNSAFE ACTS (3 OF 3)


The Safety Officer should not (and often cannot) directly intervene every time there is an unsafe situation. Normal procedure is to work through chain of command with the appropriate supervisor. If a food preparation worker needs gloves, the Safety Officer should go to their Unit Leader or Supervisor and work with them to take corrective action.

The Safety Officer still needs to inform the Incident Commander about anything that he or she corrects outside of the normal plan. The Incident Commander needs to know about all problems.

The Safety Officer still needs to document his or her actions. The Safety Officer can identify these issues at future briefings so personnel can note.

**Objectives Review**

1. What methods can the Safety Officer use to promote the general health and welfare of incident personnel?
2. How can the Safety Officer ensure that the work/rest guidelines are followed?
3. What corrective actions would the Safety Officer take and who would he/she contact when unsafe aviation situations have been identified?
4. What are some areas of concern for the Safety Officer in the field?
5. What is the Safety Officer's authority to stop or prevent an unsafe act?



Visual 11.47

## OBJECTIVES REVIEW

### Unit Enabling Objectives

- Explain the methods used by the Safety Officer to promote the general health and welfare of incident personnel.
- List ways of ensuring that the work and rest guidelines are followed.
- Given examples of unsafe aviation situations, identify corrective actions and who the Safety Officer should contact.
- List areas of concern for the Safety Officer while in the field.
- Explain the Safety Officer's authority to stop or prevent an unsafe act.

# Supplemental Materials

This page intentionally left blank.

## Handout 11-1: Effects of Fatigue

### Excerpts From *Fatigue: Sleep Management During Disasters* by Robert J. Koester

“Changes in mental alertness can play an important role in any incident. Surprisingly, the rhythm in alertness is not directly linked to the sleep/wake cycle. In sleep-deprived rescuers, the alertness rhythm becomes more pronounced. The minimum occurs around 0800, which is when the greatest number of sleep-related accidents occur. After 0800, alertness increases until 1600–1800, with a sharp drop after 2200. While activity that requires only a burst of concentration is relatively immune from circadian rhythms, vigilance types of tasks (long delays or driving) are significantly affected.”

---

“However, researchers prefer a test known as the Mean Sleep Latency Test (MSLT). This test measures how long it takes the subject to fall asleep in a 7-minute time period. The quicker they fall asleep, the sleepier the subject. This test is usually used in a laboratory setting that is quiet, has the patient lying down, and the subject is monitored to determine the precise moment they fall asleep. Subjects are often told whether to try to sleep or to resist falling asleep. Tired subjects, even when attempting to resist sleep, usually fall asleep during the 7-minute time span. ... The MSLT test is not ideal, since it only measures sleepiness at that particular point in time; however, it offers a potential tool for a Safety Officer. Departing members are simply asked to lie down for 7 minutes prior to departure. If the searcher falls asleep, they are left sleeping for 30 minutes or longer. If they get up after the 7 minutes, they are free to leave.”

---

“A strong relationship between sleepiness and accidents has always existed. Several major industrial accidents have occurred because of shift workers at the circadian minimum late at night. Three Mile Island (0400), Chernobyl (0135), Challenger (0800 with mission control up all night) are noted examples. The graph for tired driving accidents is identical to the circadian rhythm for mental alertness. Most sleep-related accidents occur at 0800 and the safest time to drive is between 1600 and 1800. It is estimated that between 2.5% and 16% of motor vehicle accidents are sleep related. This would account for 1,255 to 6,000 fatalities; 45,000 to 220,400 injuries; and 1.75 to 11 billion dollars a year.”

---

“Searchers familiar with lost civil airplane crashes recognize pilots who fly into bad weather. A common cause of poor judgment is a strong desire to reach the final destination. Pushing safety limits to reach home also occurs among searchers. After 16 hours awake (the end of a typical day), loss of reaction time in a simulator is the same as someone who is at 0.05% blood alcohol content. In many regards, driving home fatigued should be viewed the same as driving home drunk. To avoid the problem, the most important mitigation step is to figure in sleep time as part of on-scene time.”

### Notes on Naps:

- Naps may be the most effective method to increase performance during continuous operations and can be used before a period of expected sleep deprivation.
- The highly restorative power of a 2-hour nap is clearly proven. The longer the nap, the greater its effectiveness.
- However, naps have a side effect known as sleep inertia or sleep drunkenness. For a short period of time (usually just a couple of minutes), the napper awakens in a state of confusion and performance is worse than no nap at all. Sleep inertia is best corrected by simply walking around for 5–10 minutes after taking a nap.

Accurately judging the sleepiness of a responder is impossible, but several questions can provide revealing information for the Safety Officer, or subtly encourage the responder to nap before driving.

#### **Safety Officer Sleep-Related Questions**

- How many hours has it been since you last slept?
- How long did you sleep?
- How long is your drive home?
- Is anyone going to be with you?
- How are you feeling now?
- Do you promise to pull over and take a nap if you become sleepy?

Reproduced with permission from the author and publisher. For publication information or reproduction permissions, contact DBS Productions at [www.dbs-sar.com](http://www.dbs-sar.com) or 434-293-5502.

## Handout 11-2: Standard Firefighting Orders

1. Keep informed regarding weather conditions and forecasts at the site of the fire.
2. Know what your fire is doing at all times.
3. Base all actions on the current and expected behavior of the fire.
4. Identify escape routes and safety zones and make them known.
5. Post lookouts when there is possible danger.
6. Be alert. Keep calm. Think clearly. Act decisively.
7. Maintain prompt communications with your forces, your Supervisor, and adjoining forces.
8. Give clear instructions and ensure that they are understood.
9. Maintain control of your forces at all times.
10. Fight fire aggressively, having provided for safety first.

This page intentionally left blank.

## Handout 11-3: Watch Out Situations

1. Fire not scouted and sized up.
2. In country not seen in daylight.
3. Safety zones and escape routes not identified.
4. Unfamiliar with weather and local factors influencing fire behavior.
5. Uninformed regarding strategy, tactics, and hazards.
6. Instructions and assignments not clear.
7. No communications link with crew members or Supervisor.
8. Constructing line without safe anchor point.
9. Building fire line downhill with fire below.
10. Attempting frontal assault on fire.
11. Unburned fuel between you and fire.
12. Cannot see main fire, not in contact with someone who can.
13. On a hillside where rolling material can ignite fuel below.
14. Weather becoming hotter and drier.
15. Wind increases and/or changes direction.
16. Getting frequent spot fires across line.
17. Terrain and fuels make escape to safety zones difficult.
18. Taking nap near fire line.

This page intentionally left blank.

## Handout 11-4: Standard Firefighting Orders and Watch Out Situations Pocket Guides

### Standard Firefighting Orders

---

1. Keep informed regarding fire weather conditions and forecasts at the site of the fire.
2. Know what your fire is doing at all times.
3. Base all actions on the current and expected behavior of the fire.
4. Identify escape routes and safety zones, and make them known.
5. Post lookouts when there is possible danger.
6. Be alert. Keep calm. Think clearly. Act decisively.
7. Maintain prompt communications with your forces, your Supervisor, and adjoining forces.
8. Give clear instructions and ensure that they are understood.
9. Maintain control of your forces at all times.
10. Fight fire aggressively, having provided for safety first.

### Standard Firefighting Orders

---

1. Keep informed regarding fire weather conditions and forecasts at the site of the fire.
2. Know what your fire is doing at all times.
3. Base all actions on the current and expected behavior of the fire.
4. Identify escape routes and safety zones, and make them known.
5. Post lookouts when there is possible danger.
6. Be alert. Keep calm. Think clearly. Act decisively.
7. Maintain prompt communications with your forces, your Supervisor, and adjoining forces.
8. Give clear instructions and ensure that they are understood.
9. Maintain control of your forces at all times.
10. Fight fire aggressively, having provided for safety first.

### Standard Firefighting Orders

---

1. Keep informed regarding fire weather conditions and forecasts at the site of the fire.
2. Know what your fire is doing at all times.
3. Base all actions on the current and expected behavior of the fire.
4. Identify escape routes and safety zones, and make them known.
5. Post lookouts when there is possible danger.
6. Be alert. Keep calm. Think clearly. Act decisively.
7. Maintain prompt communications with your forces, your Supervisor, and adjoining forces.
8. Give clear instructions and ensure that they are understood.
9. Maintain control of your forces at all times.
10. Fight fire aggressively, having provided for safety first.

### Standard Firefighting Orders

---

1. Keep informed regarding fire weather conditions and forecasts at the site of the fire.
2. Know what your fire is doing at all times.
3. Base all actions on the current and expected behavior of the fire.
4. Identify escape routes and safety zones, and make them known.
5. Post lookouts when there is possible danger.
6. Be alert. Keep calm. Think clearly. Act decisively.
7. Maintain prompt communications with your forces, your Supervisor, and adjoining forces.
8. Give clear instructions and ensure that they are understood.
9. Maintain control of your forces at all times.
10. Fight fire aggressively, having provided for safety first.

## Watchout Situations

1. Fire not scouted and sized up.
2. In country not seen in daylight.
3. Safety zones and escape routes not identified.
4. Unfamiliar with weather and local factors influencing fire behavior.
5. Uninformed regarding strategy, tactics, and hazards.
6. Instructions and assignments not clear.
7. No communications link with crew members or Supervisor.
8. Constructing line without safe anchor point.
9. Building fire line downhill with fire below.
10. Attempting frontal assault on fire.
11. Unburned fuel between you and fire.
12. Cannot see main fire, not in contact with someone who can.
13. On a hillside where rolling material can ignite fuel below.
14. Weather becoming hotter and drier.
15. Wind increases and/or changes direction.
16. Getting frequent spot fires across line.
17. Terrain and fuels make escape to safety zones difficult.
18. Taking nap near fire line.

## Watchout Situations

1. Fire not scouted and sized up.
2. In country not seen in daylight.
3. Safety zones and escape routes not identified.
4. Unfamiliar with weather and local factors influencing fire behavior.
5. Uninformed regarding strategy, tactics, and hazards.
6. Instructions and assignments not clear.
7. No communications link with crew members or Supervisor.
8. Constructing line without safe anchor point.
9. Building fire line downhill with fire below.
10. Attempting frontal assault on fire.
11. Unburned fuel between you and fire.
12. Cannot see main fire, not in contact with someone who can.
13. On a hillside where rolling material can ignite fuel below.
14. Weather becoming hotter and drier.
15. Wind increases and/or changes direction.
16. Getting frequent spot fires across line.
17. Terrain and fuels make escape to safety zones difficult.
18. Taking nap near fire line.

## Watchout Situations

1. Fire not scouted and sized up.
2. In country not seen in daylight.
3. Safety zones and escape routes not identified.
4. Unfamiliar with weather and local factors influencing fire behavior.
5. Uninformed regarding strategy, tactics, and hazards.
6. Instructions and assignments not clear.
7. No communications link with crew members or Supervisor.
8. Constructing line without safe anchor point.
9. Building fire line downhill with fire below.
10. Attempting frontal assault on fire.
11. Unburned fuel between you and fire.
12. Cannot see main fire, not in contact with someone who can.
13. On a hillside where rolling material can ignite fuel below.
14. Weather becoming hotter and drier.
15. Wind increases and/or changes direction.
16. Getting frequent spot fires across line.
17. Terrain and fuels make escape to safety zones difficult.
18. Taking nap near fire line.

## Watchout Situations

1. Fire not scouted and sized up.
2. In country not seen in daylight.
3. Safety zones and escape routes not identified.
4. Unfamiliar with weather and local factors influencing fire behavior.
5. Uninformed regarding strategy, tactics, and hazards.
6. Instructions and assignments not clear.
7. No communications link with crew members or Supervisor.
8. Constructing line without safe anchor point.
9. Building fire line downhill with fire below.
10. Attempting frontal assault on fire.
11. Unburned fuel between you and fire.
12. Cannot see main fire, not in contact with someone who can.
13. On a hillside where rolling material can ignite fuel below.
14. Weather becoming hotter and drier.
15. Wind increases and/or changes direction.
16. Getting frequent spot fires across line.
17. Terrain and fuels make escape to safety zones difficult.
18. Taking nap near fire line.

---

# Unit 12: Special Situations

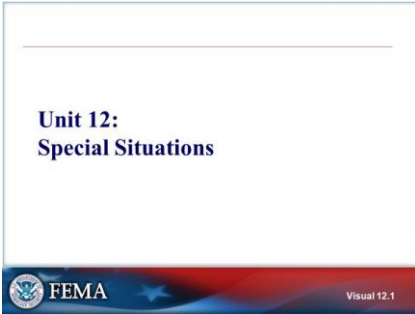
STUDENT MANUAL

---

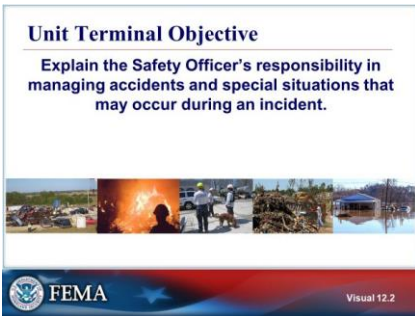
---

---

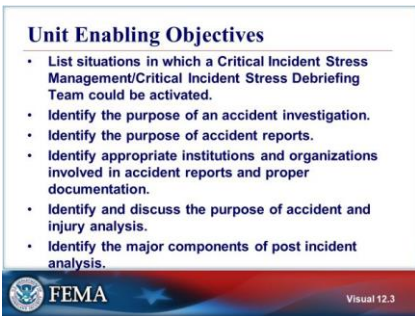
This page intentionally left blank.



Visual 12.1



Visual 12.2



Visual 12.3

## UNIT 12: SPECIAL SITUATIONS

### UNIT TERMINAL OBJECTIVE


Explain the Safety Officer's responsibility in managing accidents and special situations that may occur during an incident.

### UNIT ENABLING OBJECTIVES

- List situations in which a Critical Incident Stress Management/Critical Incident Stress Debriefing (CISM/CISD) Team could be activated.
- Identify the purpose of an accident investigation.
- Identify the purpose of accident reports.
- Identify appropriate institutions and organizations involved in accident reports and proper documentation.
- Identify and discuss the purpose of accident and injury analysis.
- Identify the major components of the post incident analysis.

**Unit Enabling Objectives (Cont.)**

- Identify the basic requirements of accident, injury, and damage investigation.
- Explain the six steps for a complete accident investigation.
- Explain the advantages of working as an investigative team.
- Given a scenario, summarize an investigation of an event resulting in injury and/or damage during incident operations.
- Identify situations that require Special Report.



Visual 12.4

**UNIT ENABLING OBJECTIVES**

- Identify the basic requirements of accident, injury, and damage investigation.
- Explain the six steps for a complete accident investigation.
- Explain the advantages of working as an investigative team.
- Given a scenario, summarize an investigation of an event resulting in injury and/or damage during incident operations.
- Identify situations that require Special Reports.

**Unit Overview**

- Critical incidents
- Accident Investigations and Reports
- Special Reports



Visual 12.5

**UNIT OVERVIEW**

This unit is about special situations, sometimes referred to as “incidents within an incident,” which include:

- Critical incidents
- Accident Investigations and Reports
- Special Reports

**Critical Incident**




Visual 12.6


**CRITICAL INCIDENT**

A critical incident is something that causes an extreme emotional response from incident personnel.

**Critical Incident (Cont.)**

**Definition:**

“A critical incident is any situation faced by emergency service personnel that caused them to experience unusually strong emotional reactions which have the potential to interfere with their ability to function either at the scene of the incident or after leaving the scene.”




Visual 12.7

**CRITICAL INCIDENT (CONT.)**

The definition on the visual comes from the National Wildfire Coordinating Group. Each State and the Federal Government has a definition and guidelines about critical incidents, interventions, and how much time can pass before a debriefing. The Safety officer must be familiar with the appropriate organizational, State and Federal guidelines

**Critical Incident Stress Management Process**

- A Critical Incident Stress Management/Critical Incident Stress Debriefing Team is ordered through the Supply Unit Leader with a resource order.
- Make certain that the Incident Commander, Public Information Officer, and Agency Administrator/ Executive are informed of the incident.



Visual 12.8

**Initiating an Accident Investigation**

Why do we need to investigate accidents?




Visual 12.9

**Legal Responsibility**

- Injury must be investigated and documented.
- Documentation needed for compensation and liability coverage.
- Finding cause can identify methods to prevent similar injuries and accidents.
- May determine future training needs.
- May identify equipment shortfalls.
- Provides information for other parties.



Visual 12.10

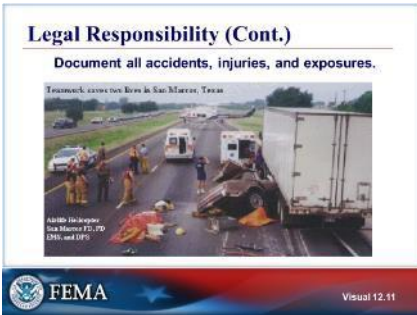
## CRITICAL INCIDENT STRESS MANAGEMENT PROCESS

Critical Incident Stress Management (CISM) is a method of helping first responders and others who have been involved with events that leave them emotionally and/or physically affected by those incidents. CISM is a process that enables peers to help their peers understand problems that might occur after an event. This process also helps people prepare to continue to perform their services or in some cases return to a normal lifestyle. (reference <https://icisf.org>).

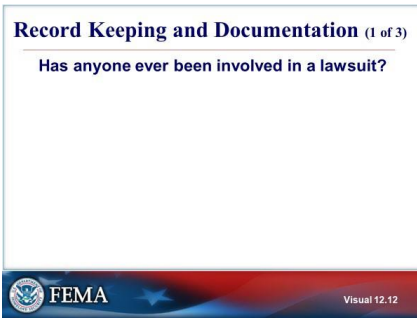
## INITIATING AN ACCIDENT INVESTIGATION

## LEGAL RESPONSIBILITY

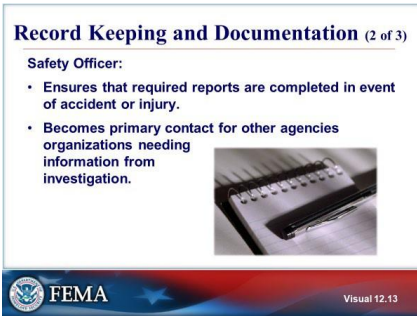
- Any injury must be investigated and documented.
- Without documentation future compensation and liability coverage may be lost.
- Finding cause, not fault, will identify future methods of preventing similar injuries and accidents.
- May determine future training needs.
- May identify equipment shortfalls.
- Provides information for other parties (employers, family, regulatory insurance, courts).



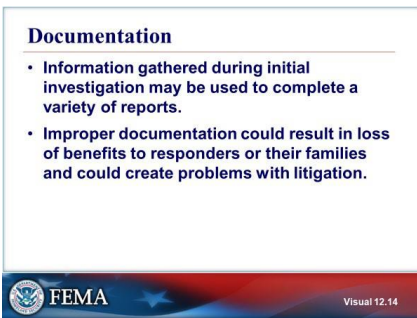
Visual 12.11



Visual 12.12



Visual 12.13



Visual 12.14

**LEGAL RESPONSIBILITY (CONT.)**

Your agency-assigned vehicle is involved in an accident during deployment.

- How many agencies are involved?
- How many investigations?
- Who will want the information?
- What are the ramifications?

**RECORD KEEPING AND DOCUMENTATION (1 OF 3)**

Have you been involved in a lawsuit?  
If so how did you reconstruct the incident's details?

**RECORD KEEPING AND DOCUMENTATION (2 OF 3)**

Safety Officer may not do the reports, but must ensure you get copies of official reports and ensure others do their required reports and submit copies.

**DOCUMENTATION**

Types of documentations:

- Medical reports - Medical Unit must fill out reports.
- Insurance claims - Federal, State and Local insurance claims may be made.
- Disability forms - Pension and disability board require reports to base decisions on.
- After action reports - Use initial reports to base future decisions.

**Institutions Requiring Documentation**


- Federal mandates (DOL)
- State requirements
- Department policy
- Municipality/AHJ
- Victim's employer
- Insurance Company
- Liability protection for agency



Visual 12.15

**Record Keeping and Documentation (3 of 3)**


- Accident reports will be reviewed by agency and by leadership to help identify trends or inadequate policy or procedures.
- These reports will help identify training needs or shortfalls.



Visual 12.16

**Public Safety Officers' Benefits Act**


- If a member dies in the line of duty, there are specific guidelines that must be followed to comply with the requirements of the Public Safety Officers' Benefits Act (PSOB) so that the public safety officers' family or dependents can receive the benefit.
- There will be a full investigation by various agencies. The initial documentation by the Safety Officer will be essential to the overall investigation.



Visual 12.17

**Hazardous Materials**

- Incidents where personnel are exposed to a hazardous material or bloodborne pathogen must be documented.
- Medical effects of HAZMAT exposure may not appear immediately but treatment might be needed on a long-term basis.
- Without documentation, claims for medical treatment could be denied.



Visual 12.18

## INSTITUTIONS REQUIRING DOCUMENTATION

The Role of the Incident Safety Officer is to be the primary investigator of any accident resulting in injury to a IMT responder.

Your reports will be used by:

- Federal
- State
- Sponsoring agency
- Victims' employer

## RECORD KEEPING AND DOCUMENTATION (3 OF 3)

Accident reports will be reviewed by agency and by leadership to help identify trends or inadequate policy or procedures.

These reports will help identify training needs or shortfalls.

## PUBLIC SAFETY OFFICERS' BENEFIT ACT


Compensation to families of deceased responders (fire and law enforcement, etc.) is dependent on the quality of your initial investigation.

## HAZARDOUS MATERIALS

Hazardous materials and bloodborne pathogen related incidents require documentation to support medical treatment claims.

**Cause of Accident**

The cause of an accident must be determined as soon as possible.



FEMA Visual 12.19

Visual 12.19

**Accident and Injury Analysis**

- Focus of investigation should be to find facts -- NOT place blame.
- Complete investigation aids in the after action reporting process.
- Future mitigation and training needs may be identified through investigation findings.

FEMA Visual 12.20

Visual 12.20


**Accident and Injury Analysis (Cont.)**

- Complete and thorough investigation should begin immediately.
  - Each agency should have accident investigation procedures in place
  - Identify roles and responsibilities for Chief Officers, Safety Officers, and line officers.

FEMA Visual 12.21

Visual 12.21

**Post Incident Analysis (PIA)**



FEMA Visual 12.22

Visual 12.22

**CAUSE OF ACCIDENT**

The cause of the accident must be determined as quickly as possible.

**ACCIDENT AND INJURY ANALYSIS**

Many investigators make the mistake of trying to place blame rather than find facts.

This mentality can lead to forming early opinions and then trying to justify that opinion which leads to a focused investigation. A focused investigation often overlooks important clues or evidence if it does not support the opinion.

The facts and evidence that the investigation discovers are what should establish cause. The report should lead each reader to the same conclusions and the same opinions.

**ACCIDENT AND INJURY ANALYSIS (CONT.)**

To ensure prompt investigation, IMTs should have procedures written in their operations manuals. It should outline who investigates and the reporting chain.


**POST INCIDENT ANALYSIS (PIA)**

Seattle had a small riot in 1999, but it was one that created huge issues for months and years after.

There was a post incident analysis done. It benefited other cities (such as Los Angeles, CA and Washington DC) when they were also faced with riot situations.

**PIA: Critique or Hot Wash**


- Evaluation / review of operations after a deployment.
  - Review mission from start to finish.
  - Should include all significant players.
  - Should include safety issues – positive and negative.
  - Safety Officer presents significant events from safety standpoint.
  - Results incorporated in agency After Action Report.



Visual 12.23

**PIA (Cont.)**

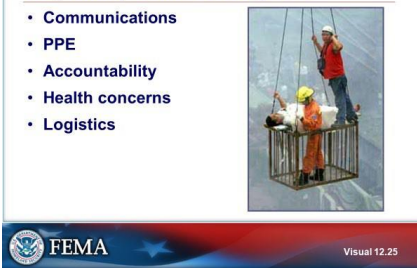
- Basic evaluation of circumstances and operations and their effect on safety of personnel at incident.
- Significant in event of fatality.
- Review personnel injuries or health exposures.
  - Not done to embarrass or point fingers.
  - Safety Officer must identify how organization can learn from incident.



Visual 12.24

**Key Safety Issues During PIA**

- Communications
- PPE
- Accountability
- Health concerns
- Logistics



Visual 12.25

**PIA: CRITIQUE OR HOT WASH**

While most critiques, Hot Wash meetings, and After Action Reviews focus on what went right and what went wrong, a Safety Officer should seek answers to how safe was the operation.

Were there near misses? Were you lucky? Did things go wrong that could have led to injury or worse?

**PIA (CONT.)**

PIA is a basic evaluation of circumstances and operations and their effect on safety of personnel at an incident. It is significant in event of fatality. PIA reviews personnel injuries or health exposures.

**KEY SAFETY ISSUES DURING PIA**

What about each is a safety concern?


- Communications
- PPE
- Accountability
- Health
- Logistics

**Develop the Corrective Action Plan**

Completed PIA identifies changes needed in operations or procedures for personnel safety/welfare.

- Revisions will be in SOPs policy or training education.
- Corrective Action Plan should detail how and when corrections will be made.


End result leads to a detailed work plan for solving or correcting identified shortfalls with timelines and responsible persons.



Visual 12.26

**Develop the Corrective Action Plan (Cont.)**


- Completed PIA should identify changes needed in operations or procedures for safety and welfare of personnel.
  - Revisions will be in SOPs policy or training education.
  - Corrective Action Plan should detail how and when corrections will be made.



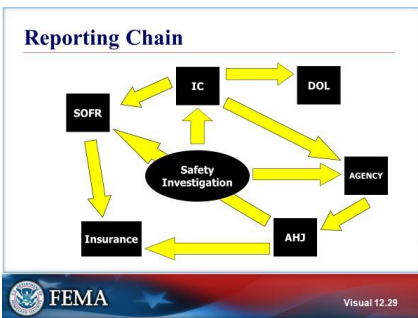
Visual 12.27

**Investigation Requirements (1 of 3)**

- Accident
- Injury
- Damage



Visual 12.28



Visual 12.29

## DEVELOP THE CORRECTIVE ACTION PLAN

Corrective Action Plan should include:

- What changes need to take place?
- Who is responsible for the changes?
- Who will it affect?
- When will changes be effective?
- How much will it cost?

The end result of an analysis should lead to a clear path forward with a detailed work plan for solving or correcting identified shortfalls with timelines and responsible persons.

## DEVELOP THE CORRECTIVE ACTION PLAN (CONT.)

- The completed PIA should identify changes needed in operations or procedures for safety and welfare of personnel.

## INVESTIGATION REQUIREMENTS (1 OF 3)

The next part of this unit will discuss investigation requirements.

## REPORTING CHAIN

The image depicts the complexity of the reporting chain for a safety investigation.

**Investigation Requirements (2 of 3)**

- Safety Officer notified of all accidents, regardless of severity.
- Each accident recorded and documented per agency mandates.
- Safety Officer conducts investigation and ensures all required reports are completed.



Visual 12.30

**Investigation Requirements (3 of 3)**

- Safety Officer will ensure accident is reported to IC.
  - Minor injuries and accidents reported on daily injury illness log.
  - Serious incidents reported promptly to AHJ.
  - Newsworthy incidents involving injury or death to responders must be reported immediately.
  - All injuries should be noted on Safety Officer's ICS Form 214.



Visual 12.31

**Notification of Family**

- IC will promptly notify injured member's family.
- If injury is serious or fatal, Critical Incident Stress measures considered.
- Serious injury or death activates Stafford Act disability or death benefits and Public Safety Officers Benefit Act.



Visual 12.32

**INVESTIGATION REQUIREMENTS (2 OF 3)**

Review the chain of events in an accident with serious injury.

**INVESTIGATION REQUIREMENTS (3 OF 3)**

Minor injuries that are not debilitating get documented on a daily injury log (using the ICS Form 214 Activity Log).

**NOTIFICATION OF FAMILY**


Procedures must be in place for rapid notification of the family of the injured IMT personnel.

Procedures must be in place for notifying all families of IMT personnel to avoid undue stress and anxiety until names are released on the media.

If the injury is of serious nature or involves multiple IMT personnel or death Critical Incident Stress measures should be considered and the Safety Officer may have a role to play in determining if and when it is appropriate.

**Steps to Complete an Accident Investigation**

- Step 1: Isolate/Secure the Incident Site
- Step 2: Photograph the Scene
- Step 3: Diagram the Scene
- Step 4: Collect Evidence
- Step 5: Interview Witnesses
- Step 6: Document Findings



Visual 12.33

**STEPS TO COMPLETE AN ACCIDENT INVESTIGATION**

To do a complete and thorough investigation without missing key components, a standard, routine step by step approach can be used.


A safety related accident investigation is different from a criminal investigation. Remember that Safety Officers are normally not Law Enforcement Officers – leave the collection of criminal evidence and interviewing of potential criminals to the professionals.

Request assistance from local or assigned law enforcement officer (LEO) to assist with motor vehicle accidents involving injuries or extensive damage to the vehicle. They are trained investigators and have the legal authority to question and site offenders. In addition, by law a sworn LEO may be required to complete an official accident report when the Incident may have occurred on a public roadway and may result in future legal proceedings.

The six steps of accident investigation should work for most any accident or injury investigation.

**Step 1: Isolate/Secure Incident Site**

- Secure accident site as quickly as possible to preserve evidence.
- Establish perimeter around entire accident site.
- Protect site from contamination and unauthorized entry.
  - Barrier tape
  - Guards an entry points
  - Barricades
  - Vehicles




Visual 12.34

**STEP 1: ISOLATE/SECURE INCIDENT SITE**



The first priority is always the injured, no matter what.

Dispatch medical personnel according to the Medical Plan (ICS Form 206) in the Incident Action Plan and implement the established process for incidents within an incident.

Covered by IMT incident within an Incident protocol.

**Step 1 (Cont.)**

- Prevent unnecessary personnel from entering site.
- Protect evidence from contamination from weather conditions without damaging, changing or contaminating evidence.

Visual 12.35

**STEP 1 (CONT.)**

Secure the scene.

Ensure that there are no more injuries.

Start the preliminary investigation.

Make any necessary notifications. Who else needs to know that there has been an accident.

**Step 2: Photograph the Site**

- Photos record scene for future reference and can record facts more accurately than word descriptions.
  - Evidence in legal proceedings.
  - Easily stored.
  - Assist with later recall by witnesses.
  - May identify key points initially overlooked.



Visual 12.36

**Step 2: Photograph the Site (Cont.)**


- First photo should show date, time, and identify location.
- Take photos prior to moving evidence.
- Photograph each step as evidence is discovered/moved.
- Take photos from a variety of positions and angles.
- Take close-up of tools, equipment, and damage.




Visual 12.37

**Step 3: Diagram the Scene**


- Rough sketch of accident site.
  - After taking photos/before moving anything.
- GPS locations for key pieces of evidence if possible.
- Used for After Action reports and post-incident accident analysis.



Visual 12.38

**Step 4: Collect Evidence**

- Collect everything relevant to incident
- Bag, label, date, and seal
- Maintain control of evidence.
  - Location and condition of evidence must be documented and maintained for maximum legal value.



Visual 12.39

**STEP 2: PHOTOGRAPH THE SITE**

The Safety Officer needs to document everything so that he or she can report what happened.

The Safety Officer should inform the Incident Commander, work with the Compensation and Claims Unit, and possibly deal with legal proceedings related to the accident.

The Safety Officer should have a camera so that he or she can start taking pictures. In addition, the Safety Officer should make sure no one disturbs the scene until the appropriate authorities arrive.

**STEP 2: PHOTOGRAPH THE SITE (CONT.)**

Law Enforcement Officers have training on how to take photos that will stand up in a court of law. Use them to assist with significant investigations.

**STEP 3: DIAGRAM THE SCENE**

Law Enforcement Officers and engineers can probably help with this.


**STEP 4: COLLECT EVIDENCE**

Explain:

- Collect everything relevant to incident
- Bag, label, date, and seal
- Maintain control of evidence.

**Step 5: Interview Witnesses**


- Names, addresses, and contact numbers for all witnesses and those injured
- Where they were at time of accident
- Interviews are fact-finding interviews.
- Accident investigation interviews should be limited to the following:
  - Individual actions prior to accident
  - Equipment performance
  - Training
  - Policy and procedure



Visual 12.40

**Step 5: Interview Witnesses (Cont.)**


- Circumstances and conditions preceding accident.
- Interview everyone involved.
- Prepare for interview:
  - Review facts.
  - Written or mental note of critical issues.



Visual 12.41

**Interview Guidelines**


- Introduction
- Establish rapport
  - Professional but friendly
  - Informal and easy
  - Comfortable, quiet setting
- Use tape recording to record your thoughts.
- Not recommended you take taped statements.
  - Unless properly trained to take statements, tapes will be of little value.
    - Must be properly labeled, permission to tape received, becomes evidence, must be transcribed.



Visual 12.42

**Interview Guidelines (Cont.)**

- Clarify answers through feedback and follow-up questions.
  - Issues that need answers
    - Determine experience and background of witness.
    - Determine what witness saw or heard.
    - Witness should describe his or her actions and what happened.
    - Ask if witness knows other possible witnesses.



Visual 12.43

**STEP 5: INTERVIEW WITNESSES**

Do not have individuals directly involved write reports! As they may not be in proper state of mind to write what happened and will be held to that account at later time.

**STEP 5: INTERVIEW WITNESSES (CONT.)**

Try to keep witnesses separate and avoid allowing them to compare notes before an interview.

**INTERVIEW GUIDELINES**

Get away from incident and/or accident to complete the interview.

Remove extra distractions and unnecessary personnel.


Remember that if, in the course of your interview you receive an indication of criminal activity, inform law enforcement personnel.

**INTERVIEW GUIDELINES (CONT.)**

In interviews you should clarify witness answers through feedback and follow-up questions.

**Step 6: Document Findings**


- All accidents, regardless of severity, require some degree of investigation.
- Safety Officer is responsible to initiate investigations for every injury, vehicle accident, and pathogen exposure to help identify appropriate prevention measures.



Visual 12.44

**Six Basic Questions**

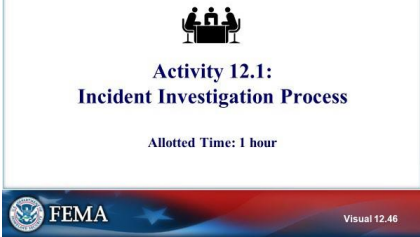
- Who?
- What?
- Where?
- When?
- Why?
- How?



Visual 12.45

**Activity 12.1:  
Incident Investigation Process**

Allotted Time: 1 hour



Visual 12.46

**DOCUMENT FINDINGS**

Ensure that accident investigation documentation for the local agency and Incident Closeout Package is complete, for example:

- Medical treatment
- Final investigation report from the responsible jurisdiction
- Compensation and claims

Full investigation documentation includes pictures, maps, interviews, and everything that is discovered during the investigation. The investigation could be a long-term event that lasts beyond the incident.

**SIX BASIC QUESTIONS**

- Who?
- What?
- Where?
- When?
- Why?
- How?


**ACTIVITY 12.1: INCIDENT INVESTIGATION PROCESS**

The instructor will explain Activity 12.1.

You will have approximately 1 hour for the activity.

**Advantages of Working with a Team**

- Interview with a partner.
  - One can focus on questions; the other on answers given.
  - Helps prevent becoming distracted.
  - Allows another interpretation of information.
  - Helps prevent tunnel vision.
  - Allows sharing of workload.
  - One can focus on scene; the other on interviews.



Visual 12.47

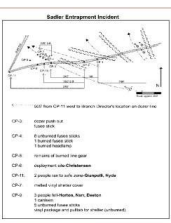

**ADVANTAGES OF WORKING WITH A TEAM**

In any serious injury while at the incident scene, the requesting and assigning of Assistant Safety Officers will be available and most likely will be involved in the investigation. Team up with them to be more efficient.

If there is a death involved there may be law enforcement involved. Cooperate with them. Death of an emergency responder in a terrorism event will be a homicide investigation.

**Special Reports**

A special report is any report of an "incident within an incident" beyond ICS Form 214 – Activity Log.

Visual 12.48

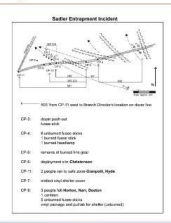

**SPECIAL REPORTS**

A Special Report is anything that requires documentation beyond ICS Form 214, Activity Log.

**Special Reports (Cont.)**

Special reports may be necessary because of the following situations:

- Accidents/injuries
- Public health concerns
- Biological hazards
- Contagious diseases

Visual 12.49


**SPECIAL REPORTS (CONT.)**

Special reports may be necessary because of the following situations:

- Accidents/injuries
- Public health concerns
- Biological hazards
- Contagious diseases

**Activity 12.2: Scenarios and Special Reports**

Allotted Time: 30 minutes



Visual 12.50


**ACTIVITY 12.2: SCENARIOS AND SPECIAL REPORTS**

The instructor will explain Activity 12.2.

You will have approximately 30 minutes for the activity.

**Objectives Review**


1. What are some situations in which a Critical Incident Stress Management/Critical Incident Stress Debriefing (CISM/CISD) Team could be activated?
2. What is the purpose of an accident investigation? Accident report?
3. What institutions/organizations become involved in accident reports and documentation?
4. What is the purpose of an accident and injury analysis?
5. What are the components of PIA?



Visual 12.51

**Objectives Review (Cont.)**

6. What are basic requires of accident, injury, and damage investigations?
7. What are the six steps to complete an investigation?
8. Why is working with an investigative team beneficial?
9. Can you summarize an investigation of an event resulting in injury and/or damage during incident operations?
10. What situations require Special Reports?



Visual 12.52

## OBJECTIVES REVIEW

### Unit Enabling Objectives

- List situations in which a Critical Incident Stress Management/Critical Incident Stress Debriefing Team could be activated.
- Identify the purpose of an accident investigation.
- Identify the purpose of accident reports.
- Identify appropriate institutions and organizations involved in accident reports and proper documentation.
- Identify and discuss the purpose of accident and injury analysis.
- Identify the major components of post incident analysis (PIA).

## OBJECTIVES REVIEW (CONT.)

### Unit Enabling Objectives

- Identify the basic requirements of accident, injury, and damage investigation.
- Explain the six steps for a complete accident investigation.
- Explain the advantages of working as an investigative team.
- Given a scenario, summarize an investigation of an event resulting in injury and/or damage during incident operations.
- Identify situations that require Special Reports.

This page intentionally left blank.

# Supplemental Materials

This page intentionally left blank.

## Activity 12.1: Incident Investigation Process

### INTRODUCTION

An incident is an unplanned or undesired event that adversely affects a company's work operations. Incidents include work-related injuries, occupational illnesses, property damage, spills, fires or near miss events that could have resulted in any of these.

All incidents should be investigated. An incident that results in a serious employee injury, considerable property damage, a major fire, or spill obviously warrants an extensive investigation. A minor incident or near incident also requires a thorough investigation and may reveal significant potential for a serious incident if the conditions are left uncorrected.

There are two major components that contribute to the cause of an incident. They are the "work element" and the "root cause".

- The "work element" is the condition or act that directly caused the incident. An example of a work element might be a small spill of oil on the floor that someone slipped on.
- The "root cause" is the system failure that allowed the work element to become deficient or to occur. For example, a root cause may be a lack of preventive maintenance that resulted in the fork truck leaking oil on the floor.

A thorough investigation will reveal the root cause of the incident. The purpose of an incident investigation is to determine the work element and root causes of incident, and to assist in providing the company with a solution to prevent recurrence.

Companies should have an incident investigation process to ensure that:

- All incidents (including near misses) are investigated
- Corrective actions are determined that identify the root cause
- Corrective actions are tracked until they are completed
- Trends are reviewed, gaps are identified, and improvement plans are developed to prevent future occurrences.

## INVESTIGATION PROCESS

Proper training and a clear understanding of roles and responsibilities is essential to the investigation process. All employees and people that will be involved in an incident investigation should be aware of what their role is in the process and how to perform their assigned responsibilities during an investigation process.

Employees:

- Report all work-related incidents in a timely manner
- Participate in the investigation process, as needed

Supervision/Management:

- If the incident was very recent, secure the scene of the incident to ensure the safety of any emergency responders and other employees, and to preserve any evidence that may contribute to the investigation
- Ensure the injured person is properly cared for
- Ensure management or other company personnel who require it are notified. OSHA or another government agency may also be required to be notified, depending on the type and/or severity of an incident. (For example, in OSHA 1904, recordkeeping requirements require that any fatality, or any hospitalization of 3 or more persons because of a work-related incident be reported to OSHA within 8 hours of the incident.)
- Ensure the investigation begins as soon as possible after the incident occurs
- Identify the potential sources of information, such as the injured person, witnesses and any physical evidence
- Gather the facts about the incident
- Ensure the investigation identifies the root cause
- Make and/or implement recommendations to control or eliminate the hazard
- Ensure all regulatory and company requirements are met (OSHA recordkeeping, notification, written reports, insurance claims, etc.)
- Perform any trend analyses of past incidents that may identify additional hazard prevention methods (i.e. training, maintenance, procedures, etc.)

The ultimate responsibility for an incident investigation rests with management. Supervisors must take charge of a thorough incident investigation. Depending upon the type and scope of an incident (i.e. major

spill or fire, or several employees injured in one incident), a team approach to the investigation of the incident may identify additional corrective actions that will help prevent similar incidents in the future.

Investigations must be constructive, credible and timely. Remember that the investigator is trying to figure out what happened and how to prevent similar situations, not trying to place blame on any individual or group. If the investigation is antagonistic and takes a “what did you do wrong?” approach, then the process becomes much more difficult, as employees do not want to be blamed or cooperate in a blame-giving situation. A more constructive approach is “what happened, and what can we do to prevent this from happening again?”

Timing of an incident investigation could be crucial to the outcome. If an employee reports an incident that happened three weeks ago, all an investigator has to go on is what can be remembered by the persons involved. People’s memories fade or evidence may be disturbed which could hamper the investigation process. With timely reporting, an investigation can take significantly less time to complete, and operations will be able to resume more quickly.

## **GATHER EVIDENCE**

One of the most critical and complex parts of the investigation is the gathering of evidence. There are some basic rules that may help the process.

Interviewing involved employees:

- Put the individual at ease – make sure they know the primary purpose of the interview is to prevent a recurrence of the incident and that it can only be done with their help. Avoid finger-pointing and applying blame. Treat people with tact and respect. Make them aware that they need to be thorough and truthful in their account of the incident and that you are not there to get anyone into trouble, only to find out what happened and why, so that it won’t happen again.
- Be aware that injured employees and witnesses to injuries may have some emotions involved that affect them. Especially if the incident was severe, there may be some trauma that occurs.
- Stress fact gathering. Let involved employees tell their story completely. Wait until they have finished their version of events before interrupting or clarifying what was said. Then go over what they stated with them, to assure that you have their account of the story accurately and that you understand what they meant, not just what they said. Do not make assumptions or state opinions during this process. If other people have said something different from what was

stated in this interview, ask leading questions to discover more information, but do not contradict what was stated in either interview.

- Conduct the interviews at the scene, if possible. This may help people to explain and may help the interviewer understand what happened. Make the interviews as private as possible, so that other employees cannot take any offense or contradict what is said. Witnesses may be interviewed at a later time, if privacy is at issue.
- Ask any necessary questions to determine what happened, what was done, and how it was done. Try to avoid asking WHY questions that may make people defensive.
- Close the interview on a positive note. Discuss the actions taken, or that will be taken if you know them. That will reaffirm the purpose of the interview. Make sure you thank the interviewee for their help in the investigation process.

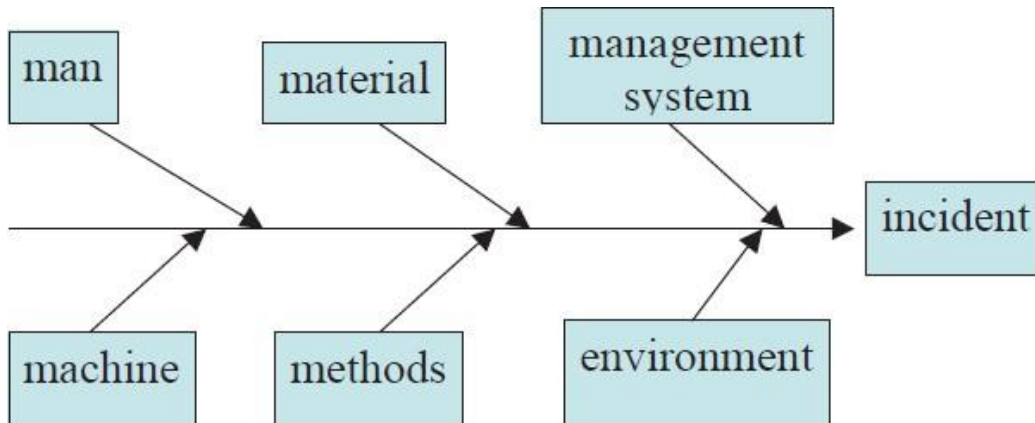
Use the right tools during the investigation process:

- Paper and pencil is the basic tool. Taking notes can jog a memory later on when you are writing any investigation or incident reports. Record times, places, names, distances, comments, conditions or anything else you may think will help.
- Take pictures, if possible. A picture is worth a thousand words. Take an overall picture first to keep an idea of where the incident took place. Then get any close up shots of spilled material, machinery or equipment that may have been involved. If needed, place a ruler or other object that is of a known size in the picture, so that you can more easily determine size or scale within the picture.
- Draw a sketch or diagram. This is useful especially when the incident is complex. Use the diagram to indicate where key objects or people were during the incident.

## **DETERMINE THE ROOT CAUSE**

Many times it is easy to determine what the work element is that directly caused the incident. It could have been a flying chip, a spill on the floor, or lifting a load that was too heavy. However, discovering the system failure that allowed the deficient work element to occur is sometimes more difficult. This system failure is also known as the root cause. To make it easier to determine, root causes (in general) can be placed into six different categories.

Basic elements of root cause:



Some examples of each of these root cause elements are as follows:

<b>Materials</b>	<b>Machine/Equipment</b>
<ul style="list-style-type: none"> <li>- Defective raw material(s)</li> <li>- Wrong type of material for job</li> <li>- Not enough raw material</li> </ul>	<ul style="list-style-type: none"> <li>- Incorrect selection of tool or equipment</li> <li>- Poor equipment maintenance or design</li> <li>- Poor equipment or tool placement</li> <li>- Defective equipment or tool</li> </ul>
<b>Environment</b>	<b>Man</b>
<ul style="list-style-type: none"> <li>- Orderly workplace</li> <li>- Job design or layout of work</li> <li>- Surfaces poorly maintained</li> <li>- Physical demands of the task</li> <li>- Other conditions (noise, lighting, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>- No or poor management involvement</li> <li>- Inattention to task</li> <li>- Task hazards not guarded properly</li> <li>- Other (horseplay, inattention, etc.)</li> <li>- Stress demands</li> </ul>
<b>Methods</b>	<b>Management System</b>
<ul style="list-style-type: none"> <li>- No or poor procedures</li> <li>- Practice does not mesh with written procedures</li> <li>- Poor communication</li> </ul>	<ul style="list-style-type: none"> <li>- Training or education lacking</li> <li>- Poor employee involvement</li> <li>- Poor recognition of hazard</li> <li>- Previously identified hazards were not eliminated</li> </ul>

## DOCUMENT THE FINDINGS

A well conducted investigation identifies the work element(s) that caused the incident and helps to eliminate the root cause(s). After the investigation is completed, the investigator then begins to document the incident and their findings. The incident documentation should contain specific elements.

- When the incident happened. Date and time may be crucial because of work load or shift change.
- Who or what was affected or hurt by the incident. If an employee was involved,
- or a piece of equipment damaged, be specific about which piece of equipment and the extent of damage or injury.
- Where it happened. Again, specific details may be critical to the investigation analysis or trends that may be present.
- What object, if any, caused the incident.
- What work element was deficient and most directly caused the incident. If there was a specific condition (i.e. lifting, twisting, spills, poor maintenance, falling object, defective equipment, lack of procedure, poor lighting, etc.).
- What system failure (or root cause), if any, was evident that needs to be corrected that will prevent a recurrence (i.e. lack of a maintenance schedule, lack of training, lack of procedures, etc.).

## FOLLOW UP AND ANALYZE

Once the documentation phase is complete, corrective actions should be implemented. Employees in the work area should be notified of any equipment, procedures or additional training that has resulted from the investigation process. These corrective actions should be followed up to assure they are effective, and that employees are following any new processes.

If more than one incident has occurred that may be related, management should review these incidents and look for similarities that may need to be addressed. Individual incidents and near misses may show one or two items that need addressing, however when taken all together, there may be a greater issue that can address the overall problem. Frequently the answer to individual incidents is as simple as wearing/using protective equipment/guards or proper lifting procedures. But sometimes a manager needs to take a step back and look at a group of incidents that may be less obviously related. A lifting/lowering training program, or hand protection awareness program, a written procedure for locking out all types of machinery prior to servicing, or a

preventive maintenance schedule for fork lift trucks, may address several needs at one time.

### INCIDENT INVESTIGATION EXERCISE

Work through this example scenario. It is designed to provide you with an understanding of the incident investigation process.



#### Scenario:

- Joe is operating a conveyor system upon which product is placed after packing and prepping for shipment. His job is to make sure the conveyor is operating and carries enough product so that fork truck drivers have a continual flow to fill trailers.
- He has a backup in the system and goes to investigate and finds some shrink wrap has wound around a gear on the conveyor. This

causes the pallet to be off center, and a jam occurs. He pushes the pallet of boxes to release the jam (while standing on the edge of the conveyor). The jam is released, and several pallets of product move and impact Joe. He subsequently falls off the conveyor.

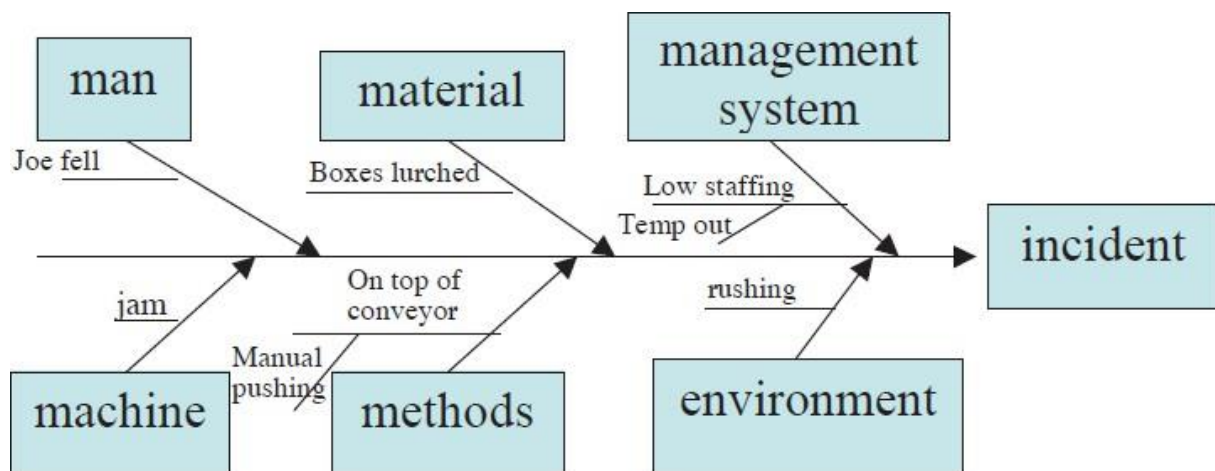
**Result:**

- Joe suffers a contusion on his left temple from an upright post, scrapes his left knee and wrenches his back. He is currently out of work.
- Time 3:00 PM (shift ends at 4:30 PM)
- Temporary employee that works with Joe was not in that day.

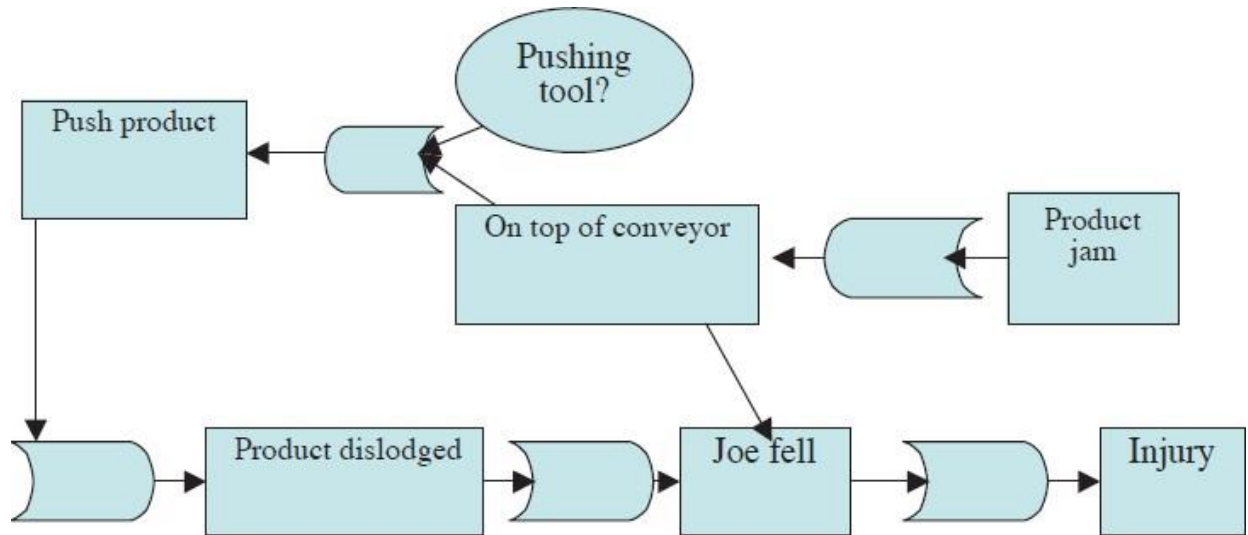
**Investigation:**

- There are three employees who work in the department and were present at the time of the incident:
  - 1: 'He was stressed because several trucks were waiting for product'
  - 2: 'Jams happen a lot there, something always catches, but maintenance cannot seem to find anything'
  - 3: 'I have seen Joe clear jams like that before'
- Joe's supervisor, the warehouse manager: 'Maintenance has made a tool to push jams out so that employees do not have to climb on the conveyor, apparently Joe did not use it.'

**Cause Determination:**



**Cause Determination (Fault Tree):**



**Final Analysis:**

- *Basic Causes:*
  - Improper Design, Maintenance, Enforcement of Tool Use, Lack of Help;
- *Indirect Causes (Intermediate Causes):*
  - Climbing on Conveyor; Rushing;
- *Direct Causes:*
  - Boxes Lurched;
- *Result*
  - Fell and was injured;

**Root Cause is Basic - Management or Design**

This page intentionally left blank.

## Activity 12.2: Scenarios and Special Reports

# Activity 12.2: Scenarios and Special Reports

## Unit 12 Overview

### Purpose

The purpose of this activity is to provide students with an opportunity to determine whether certain scenarios require the Safety Officer to create a Special Report.

### Objectives

Students will:

- Decide whether a given scenario requires a Special Report.

### Activity Structure

This activity will last approximately 30 minutes, including individual work and small group discussion. The students will consider the scenarios provided and individually determine whether each scenario would require a Special Report. Then, in small groups, the students will compare and discuss their responses and reach a consensus, which will then be presented to the rest of the class.

### Rules, Roles, and Responsibilities

The following are the specific activities and instructions for your participation in the activity:

1. Review the scenarios included in this activity.
2. Individually, determine whether each scenario requires a Special Report.
3. Within your small group, select a group spokesperson.
4. Discuss your responses to each scenario and reach a consensus.
5. Present your responses to the rest of the class.

The Facilitator moderates discussions, answers questions, and provides additional information as required.

## Activity 12.2 Schedule

Activity	Duration	Participation Type
Activity Introduction and Overview	2 minutes	Classroom
Individual Work	5 minutes	Individual
Discuss and Document	10 minutes	Small groups
Debrief and Review	15 minutes	Classroom

This page intentionally left blank.

## Activity 12.2 Scenario

Determine which of the following scenarios would require the Safety Officer to fill out a Special Report.

### Scenario 1

Three members of the IMT report to the Medical Unit after experiencing nausea and vomiting. Each had eaten lunch within the last 2 hours. Several other incident personnel have complained of stomach pains and indigestion over the last 24 hours.

### Scenario 2

A jeep carrying three incident personnel crashed into an embankment along the side of a road. The jeep was undamaged, and each of the passengers received only minor bruises and scratches. One of the passengers was the Operations Section Chief.

### Scenario 3

A supply truck hit a pothole while driving toward the incident base, popping a rear tire and dislodging some of the cargo. The truck was carrying drums of diesel fuel for incident vehicles, and one drum spilled out onto the road.

### Scenario 4

During a hazardous materials spill incident, a large quantity of bleach spilled into a river, threatening local water supplies and public water spaces. The Incident Commander informed the Agency Executive and the public that the spill would be contained within 3 days. However, progress has been slower than expected and the Operations Section Chief requested additional time at the Planning Meeting on Day 3.

This page intentionally left blank.

---

# Unit 13: Demobilization and Closeout

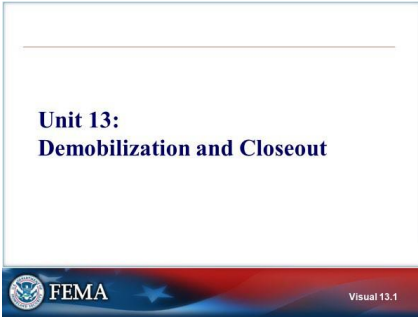
STUDENT MANUAL

---

---

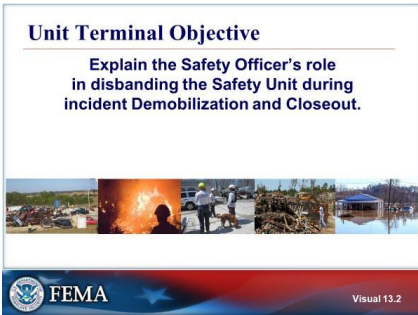
---

This page intentionally left blank.



Visual 13.1

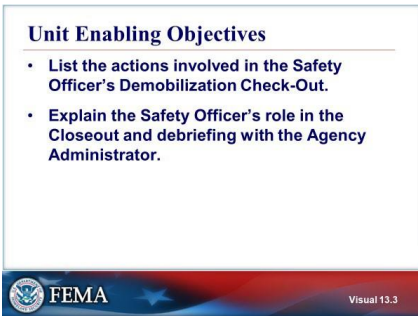
## UNIT 13: DEMOBILIZATION AND CLOSEOUT



Visual 13.2

### UNIT TERMINAL OBJECTIVE

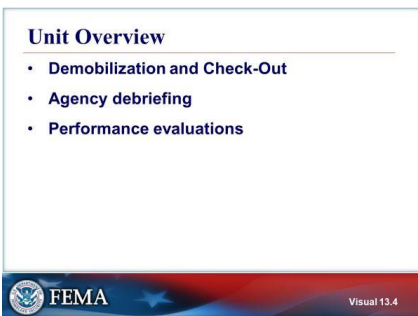
Explain the Safety Officer's role in disbanding the Safety Unit during incident Demobilization and Closeout.



Visual 13.3

### UNIT ENABLING OBJECTIVES

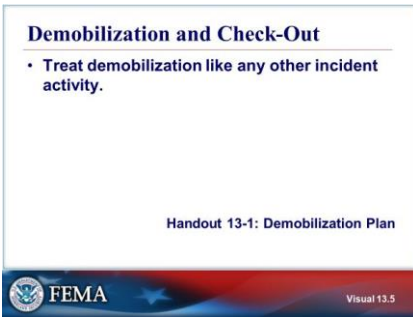
- List the actions involved in the Safety Officer's Demobilization Check-Out.
- Explain the Safety Officer's role in the Closeout and debriefing with the Agency Administrator.



Visual 13.4

### UNIT OVERVIEW

This unit explains what the Safety Officer needs to do during Demobilization, including Check-Out, agency debriefing, and performance evaluations. However, do not forget about the safety issues associated with the demobilization of other personnel!



Visual 13.5

## DEMOBILIZATION AND CHECK-OUT

The Safety Officer will ensure that all incident personnel are properly rested and that all incident vehicles have been inspected prior to demobilization. This involves coordination with Operations and Logistics.

The Safety Officer will ensure the safe demobilization of equipment, supplies, and facilities for the incident.

The Safety Officer will also receive demobilization instructions from his or her Supervisor. If you are an Assistant Safety Officer, this will be the Lead Safety Officer; if you are the Lead Safety Officer, this will be the Incident Commander/Unified Command.

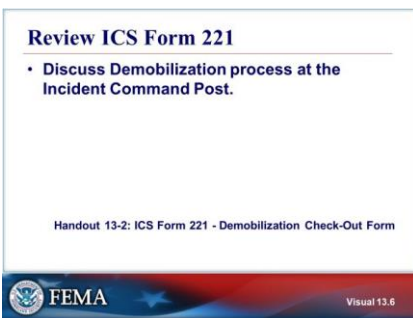
Complete and submit documentation. The Demobilization Unit works under the Planning Section. They will give you ICS Form 221, Demobilization Check-Out Form.

Include the equipment that you are returning to the incident site, check out from your lodging with the Facilities Unit, return your vehicle or have your personal vehicle checked by Ground Support, and clock out with the Time Unit (so you get paid). Then return the form to the Demobilization Unit.

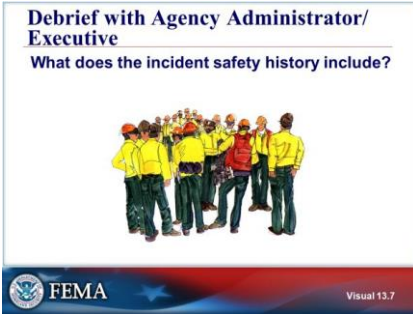
Refer to Handout 13-1: Demobilization Plan.

## REVIEW ICS FORM 221

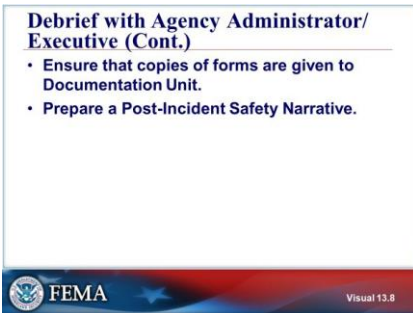
Refer to Handout 13-2: ICS Form 221, Demobilization Check-Out.



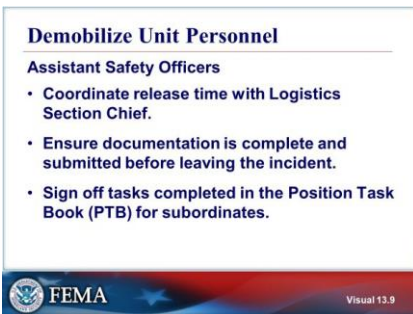
Visual 13.6



Visual 13.7



Visual 13.8



Visual 13.9

## DEBRIEF WITH AGENCY ADMINISTRATOR/EXECUTIVE

The debriefing with the Agency Administrator should contain a synopsis of all the things that the Safety Officer dealt with during the incident:

- Medical Unit: Injury report, injury and illness trends.
- Compensations/Claims: Administrator needs to know about potential payouts.
- Logistics: Significant issues that were dealt with, especially involving contractors.

## DEBRIEF WITH AGENCY ADMINISTRATOR/EXECUTIVE (CONT.)


Planning for demobilization starts as soon as resources arrive. The Safety Officer should save all of the Activity Logs, Safety Messages, and so forth; he or she should start outlining the Safety Narrative during the incident. Throughout the incident, the Safety Officer should be thinking about this broader picture.

## DEMOBILIZE UNIT PERSONNEL

Demobilization starts at mobilization, so Safety Officers should be thinking about these issues when the Assistant Safety Officers arrive. It is difficult to sign the PTB for your Assistants or trainees if you haven't been keeping track of what they were doing.

**Performance Evaluations (1 of 4)**

- As required by Incident Management Team or agency policy.
- Two special target groups:
  - Trainees
  - Exceptional performers (exceptionally good or exceptionally poor)



Visual 13.10

## PERFORMANCE EVALUATIONS (1 OF 4)

The Safety Officer might be doing performance evaluations if requested by the Incident Commander or the agency. He or she may also do performance evaluations if trainees are involved.


Exceptional performance refers to both good and bad performance. Teams will remember which of their staff gets these ratings, so they are important. The Safety Officer may want to recognize an individual or a group of responders who demonstrated safety practices that go above and beyond what is expected. This is a good thing to do but should be accomplished through coordination with their ICS supervisor.

Remember that it is difficult to fairly and accurately rate people who work for you unless you have been keeping track of what they have done throughout the incident. This is another place where thorough documentation using the ICS Form 214, Activity Log is very helpful.

**Performance Evaluations (2 of 4)**

Performance evaluations should:

- Emphasize results rather than processes.
- Be candid and objective.
- Concentrate on situations, not people.
- Emphasize the important issues.




Visual 13.11

## PERFORMANCE EVALUATIONS (2 OF 4)

Be specific and use examples. List things that someone did right as well as the things that they did wrong.

**Performance Evaluations (3 of 4)**

- Be based on objectives and direction.
- Be finalized in face-to-face exchange.
- Be documented and distributed as required by policy.



Visual 13.12

## PERFORMANCE EVALUATIONS (3 OF 4)


It is necessary to candidly tell people what they have done right and what they have done wrong. Offering specifics and solutions helps the exchange.

Documenting and distributing performance evaluations as required by policy means taking it to the Incident Training Specialist and making sure that it gets back to the person's home agency.

**Performance Evaluations (4 of 4)**

- Evaluate individuals as required by agency policy.
- Complete ICS Form 225 Incident Personnel Performance Rating or equivalent agency form.
- Discuss with the individual.


Handout 13-3: ICS Form 225 Incident Personnel Performance Rating



Visual 13.13

**Objectives Review**

1. What are three actions involved in the Safety Officer Demobilization Checkout?
2. What is the Safety Officer's role in the closeout with the Agency Administrator/Executive?





Visual 13.14

**Review Course Expectations**




Visual 13.15

**Final Exam**

Visual 13.16

**PERFORMANCE EVALUATIONS (4 OF 4)**

All incident responders should receive an Incident Personnel Performance Rating prior to demobilization from the incident.

Refer to Handout 13-3: ICS Form 225, Incident Personnel Performance Rating.

**OBJECTIVES REVIEW**

**Unit Enabling Objectives**

- List the actions involved in the Safety Officer's Demobilization Check-Out.
- Explain the Safety Officer's role in the Closeout and debriefing with the Agency Administrator.

**REVIEW COURSE EXPECTATIONS**

**FINAL EXAM**

**END OF COURSE**

This page intentionally left blank.

# Supplemental Materials

This page intentionally left blank.

## Handout 13-1: Demobilization Plan

### TRAIN INCIDENT DEMOBILIZATION PLAN

Reviewed by: \_\_\_\_\_ Planning Section Chief

Reviewed by: \_\_\_\_\_ Operations Section Chief

Reviewed by: \_\_\_\_\_ Finance Section Chief

Reviewed by: \_\_\_\_\_ Logistics Section Chief

Reviewed by: \_\_\_\_\_ Safety Officer

Reviewed by: \_\_\_\_\_ Liaison Officer

Reviewed by: \_\_\_\_\_ Information Officer

Reviewed by: \_\_\_\_\_ Planning Section Chief

Date Approved: \_\_\_\_\_

## DEMOBILIZATION PLAN

- I. **General Information:** This Demobilization Plan will be adjusted and implemented within the operational/planning cycle of the incident. Guidelines contained within this plan will be used by the Command and General Staff in their efforts to properly release personnel and equipment from the scene with the approval of the Incident Commander. Staffing standards, work hours, overtime, and other personnel matters will be noted within this plan.
  
- II. **Responsibilities:**
  - A. General
    1. All field-deployed personnel and equipment can only be demobilized with the approval of the Incident Commander. Demobilization of critical resources is mentioned later.
    2. No personnel or equipment will leave the incident until authorized to do so.
    3. Demobilization will be accomplished in a cost-effective manner.
    4. Safety of personnel is paramount during demobilization.
    5. All incident response personnel shall follow the guidelines put forth in this plan.
    6. All equipment checked out must be returned to the appropriate originator.
  
  - B. Emergency Operations Center Manager
    1. Facilitates demobilization through normal operating procedures and ensures that the demobilization priorities are consistent with the geographic area and national guidelines.
  
  - C. Incident Commander
    1. Follows normal procedures for developing and approving the Demobilization Plan and implementation procedures. May use the County/State's plan if it meets the needs or develop a new plan that addresses these issues.

**D. Planning Section Chief**

1. Ensures that demobilization information is disseminated in sufficient time to ensure the orderly downsizing or reorganization of incident resources.
2. Submits the proposed release of resources for the proper approvals. Ensures that the approved releases are received and complies with the Demobilization Check-Out Form (ICS Form 221).

**E. Operations Section Chief**

1. Identifies and reports surplus personnel and equipment to the Incident Commander.
2. Reports surplus personnel and equipment that are available for demobilization to the Planning Section Chief.

**F. Logistics Section Chief**

1. Coordinates all personnel and equipment transportation needs to final destinations.
2. Ensures that all communications, facilities, and ground equipment and other returnable items are checked in and verified.

**G. Finance/Administration Section Chief**

1. Ensures that all personnel time reports are up-to-date.
2. Ensures that all equipment time reports are completed.
3. Ensures that all known claims are recorded.

**III. Critical Resource and Release Priorities:****A. Critical Resources**

1. The County EOC will assist the Incident Commander in identifying critical resources.
2. The Incident Commander will determine the release priorities for any critical resources in the Incident Management Organization. Prior to scheduling the release of a critical resource, the Planning Section Chief will notify the EOC Manager.

**B. Non-Critical Resource Exchange**

1. All non-critical resources will be demobilized through normal procedures.

**C. Priority Release Guidelines****Personnel:**

1. Personnel who have worked continuously for 14 days (this time standard should not be flexible based on the national work and rest guidelines)
2. Out-of-county personnel
3. Assisting agency personnel (released in accordance with agreements or other arrangements made with their respective agency)
4. Local personnel

**Equipment:**

1. Equipment designated as a critical resource
2. Equipment staged for long periods of time that is no longer expected to be needed
3. Rented or leased equipment
4. Equipment vital to other regional operations

**IV. Personnel Demobilization Guidelines:****A. Personnel Demobilization**

1. Demobilization Check-Out Form (ICS Form 221): For each operational period where personnel demobilization is anticipated, the Demobilization Unit shall complete a Demobilization Check-Out Form. This form is attached to this plan.
2. Demobilization Check-Out Form (ICS Form 221): All personnel demobilizing permanently from the incident shall complete a Demobilization Check-Out Form. This form will facilitate the return of:
  - Non-expendable equipment
  - Communications gear
  - Vehicles

- Other equipment or administrative matters that need to be addressed before the release of the individual (e.g., removal of person from rosters, employee profile database)
3. Debrief: Each demobilized person will receive an operational and safety/medical debriefing to ensure that the job that he or she was performing is either complete or the person has been properly relieved by another worker who will address ongoing issues. The safety/medical debriefing allows the Incident Management Team to determine any unsafe conditions that were not previously reported and to ensure that the person is leaving the incident in a healthy state.
  4. Departure: For safety reasons, demobilized personnel should ensure that they are properly rested before beginning their travel to their normal workplace or home (especially if driving).
  5. Travel Restrictions: Travel shall be conducted in accordance with existing rules and guidelines as per individual travel authorizations.

## **V. Equipment Demobilization Guidelines:**

### **A. Equipment Demobilization**

1. Check-out: All equipment demobilizing permanently from the incident shall be noted on the Demobilization Check-Out Form (ICS Form 221).

## Personnel Check-Out Process Checklist

General Check-Out		
<b>Preparing for Departure</b>	<input type="checkbox"/>	<b>General.</b> All personnel demobilizing from the response shall ensure that they are cleared to leave with their immediate Supervisor. If onsite relief is necessary, time should be allowed for accomplishing that task.
	<input type="checkbox"/>	<b>ICS Form 211.</b> Personnel demobilizing under the IMT or Incident Command shall ensure that the Resources Unit is aware of their departure so that they can be signed out from the response via ICS Form 211.
Logistics		
	<input type="checkbox"/>	<b>Logistics.</b> The Logistics Section Chief will ensure that lodging and other support needs are in place for the demobilized personnel while they are returning to their quarters. This would include transportation and other applicable issues needed to support their departure.
<b>Equipment Return</b>	<input type="checkbox"/>	<b>Non-Expendable Equipment.</b> Non-expendable equipment shall be returned before departure. Personnel shall not be allowed to fully demobilize without returning non-expendable property.
<b>Transportation</b>	<input type="checkbox"/>	<b>Vehicles.</b> Vehicles shall be returned prior to departure. Personnel are responsible for the return of the vehicle assigned to them, clean and inspected.
Finance		
	<input type="checkbox"/>	<b>Timekeeping.</b> Personnel are responsible for ensuring that their time records are completed prior to departure from the incident.
Health and Safety / Medical Debrief / Critical Incident Stress Management (CISM) Debrief		
<b>Health and Safety</b>	<input type="checkbox"/>	<b>Health and Safety Debriefing.</b> Personnel shall receive a health and safety debriefing prior to departure to document any outstanding issues.
	<input type="checkbox"/>	<b>Medical Issues.</b> Personnel with outstanding medical issues shall have them addressed prior to departure.
	<input type="checkbox"/>	<b>Departure Rest.</b> All responders shall ensure that they receive the proper amount of rest before departing from the incident. This is especially important for those who will be driving.

## **Handout 13-2: ICS Form 221: Demobilization Check-Out Form**

Refer to EL\_954\_HO\_13-2\_ICs\_Form\_221.pdf

## **Handout 13-3: ICS Form 225: Incident Personnel Performance Rating**

Refer to EL\_954\_HO\_13-3\_ICs\_Form\_225.pdf

This page intentionally left blank.