

## CENTRAL CITY HAZMAT SCENARIO

### Unit 4: Implementing an Operational Planning Process

#### Objective:

To select tactics and conduct safety analysis for the next Operational Period resulting in the completion of ICS Forms 215 and 215A. Students may use the tactics meeting agenda as a template when conducting their group discussions.

#### Instructions:

Working in your groups, complete the following activity:

1. Review the following in your handouts:
  - Scenario Update
  - Operations Section Organizational Chart for the next Operational Period
  - Updated Incident Objectives for next Operational Period
  - Technical Specialist Report
  - Updated Incident Maps
  - Resources List
  - Partially completed ICS Form 215
  - Blank ICS Form 215A
2. Complete the ICS Form 215 using the available information.

Point out that the Operational Planning Worksheet (ICS Form 215) has the information needed to complete tactical direction for the incident. Four Divisions have been established and additional law enforcement resources identified.
3. Based on the tactics selected on the ICS Form 215, complete the Safety Analysis (ICS Form 215A).
4. Be prepared to present in 60 minutes.

#### Your Notes:

**Scenario Update:**

It is now 1200. Your Incident Management Team (IMT) has formally assumed command of the Central City incident. In the 2 hours since your identification of issues and setting of initial objectives, the Hazardous Materials Team's technical report was submitted, the tactical recommendation was accepted, and (with your concurrence) two additional objectives have been implemented:

1. Keep runoff from entering Roaring River. Measures should be in place no later than 1200. (This has been completed: A containment system has been set up to limit pollution and capture runoff on Roaring River.)
2. Expand the evacuation zone to 2.5 miles downwind (east) of the incident, to be completed no later than 1500.

Note: These objectives have been developed and staffed and have either been completed or are currently being implemented. Both will be complete before the next operational period begins. The rescue/evacuation of the businesses, residences, and Old Soldier's Home have been completed.

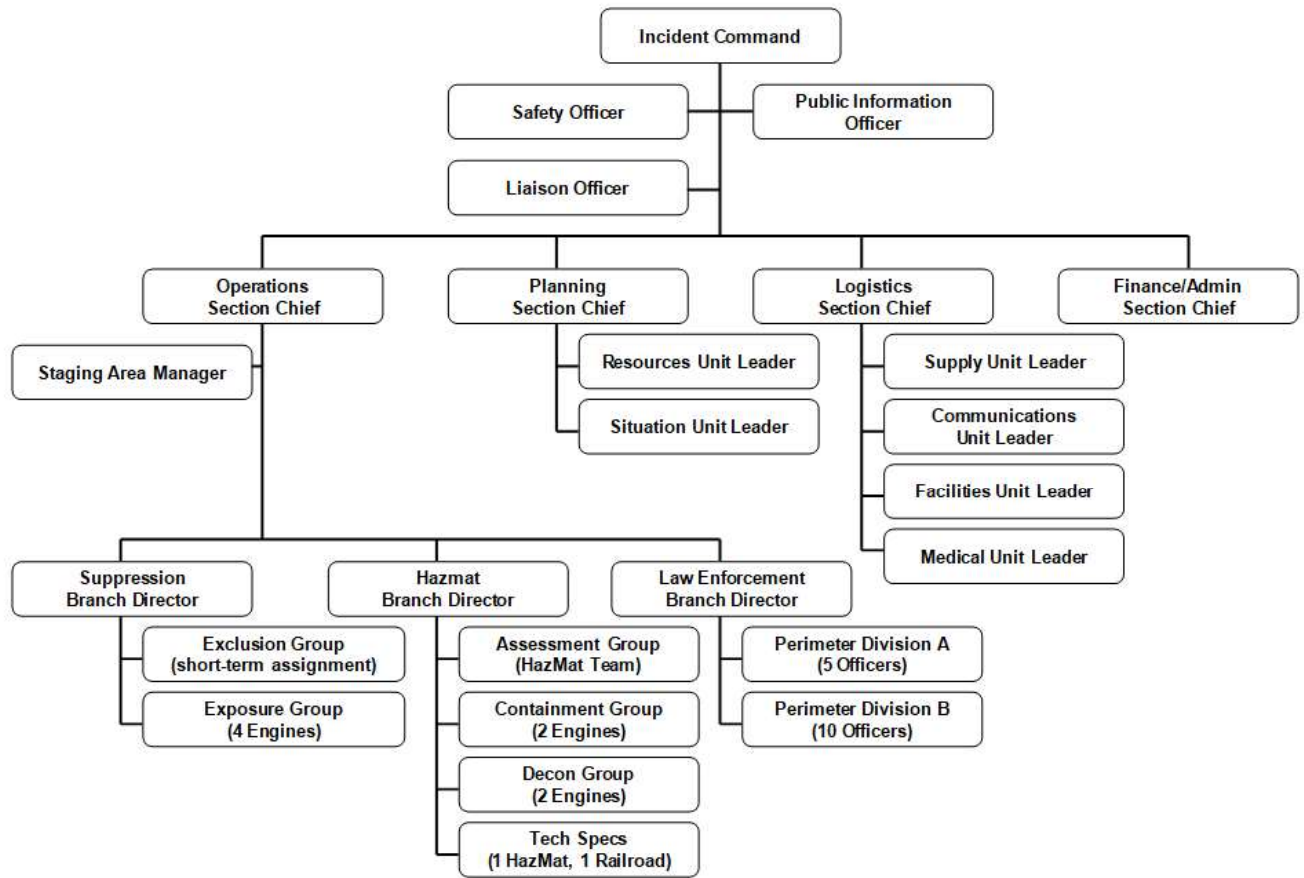
Your team has decided to have a new operational period begin at 1800 August 4 and end at 0600 August 5.

In his final closeout with your team, Initial Incident Commander Ralph Wilkins points out that at 1800 all evacuations should be complete, and the tactical complexity of the incident will be reduced to maintaining the perimeter, containment of runoff, and monitoring the burnoff. To this point, exposure to the burnoff has not been a problem, but as the burnoff escalates, ABC Realty may be at risk. Because there is no immediate need for a medical response, the Incident Commander has put the EMS resources in Staging. Wilkins and your Incident Commander and Operations Section Chief have drafted some incident objectives for the next operational period, held a brief strategy meeting, and scratched out a possible organization structure.

The following updated incident objectives are provided by the Incident Commander:

1. Ensure safety of responders by all personnel operating within the exclusion zone and plume by wearing positive-pressure, Self-Contained Breathing Apparatus (SCBA) and full turn-outs for the duration of the incident.
2. Maintain evacuation perimeters. No unauthorized access without prior notification of and permission from the Incident Commander.
3. Use barrier tape to mark the exclusion zone (inner perimeter) by 1900.
4. Maintain current hazmat containment until cleanup has been completed.
5. Provide exposure protection by 1900.
6. Maintain capability for medical response until cleanup has been completed.

**Current Organizational Chart:**



**Your Notes:**

## INCIDENT OBJECTIVES (ICS FORM 202)

### Updated Incident Objectives for Next Operational Period:

Refer to ICS\_300\_AAM\_CCHS\_ICCS\_Form\_202.pdf

### ICS Form 202 Incident Objectives

**Purpose.** The Incident Objectives (ICS Form 202) describes the basic incident strategy, incident objectives, command emphasis/priorities, and safety considerations for use during the next operational period.

**Preparation.** The ICS Form 202 is completed by the Planning Section following each Command and General Staff meeting conducted to prepare the Incident Action Plan (IAP). In case of a Unified Command, one Incident Commander (IC) may approve the ICS Form 202. If additional IC signatures are used, attach a blank page.

**Distribution.** The ICS Form 202 may be reproduced with the IAP and may be part of the IAP and given to all supervisory personnel at the Section, Branch, Division/Group, and Unit levels. All completed original forms must be given to the Documentation Unit.

### Notes:

- The ICS Form 202 is part of the IAP and can be used as the opening or cover page.
- If additional pages are needed, use a blank ICS Form 202 and repaginate as needed.

### Technical Specialist Report: 8-4: 1000 hours

#### Hazard Analysis:

- Tanker 5 contains molten sulfur.
- Tanker 6 contains white phosphorus.
- Tanker 7 contains tallow.
- Other cars are empty or not involved.

When burned in dry air, phosphorus generates phosphoric anhydride (phosphoric acid) as a by-product of combustion. In addition to being corrosive to skin and tissue, exposure to phosphoric anhydride may cause severe gastrointestinal irritation, nausea, vomiting, and breathing difficulties.

Because the phosphorus car and the molten sulfur car are both breached, the resultant combined products of combustion are also of concern. These include phosphorus pentasulfide, which is readily converted in the presence of moisture to hydrogen sulfide

gas and phosphoric acid. Hydrogen sulfide is a rapid systemic poison that induces respiratory paralysis with consequent asphyxia at high concentrations. Serious health effects such as central nervous system distress, pulmonary edema, and gastrointestinal disturbances may be observed at lower concentrations. Samples indicate that the two products have combined.

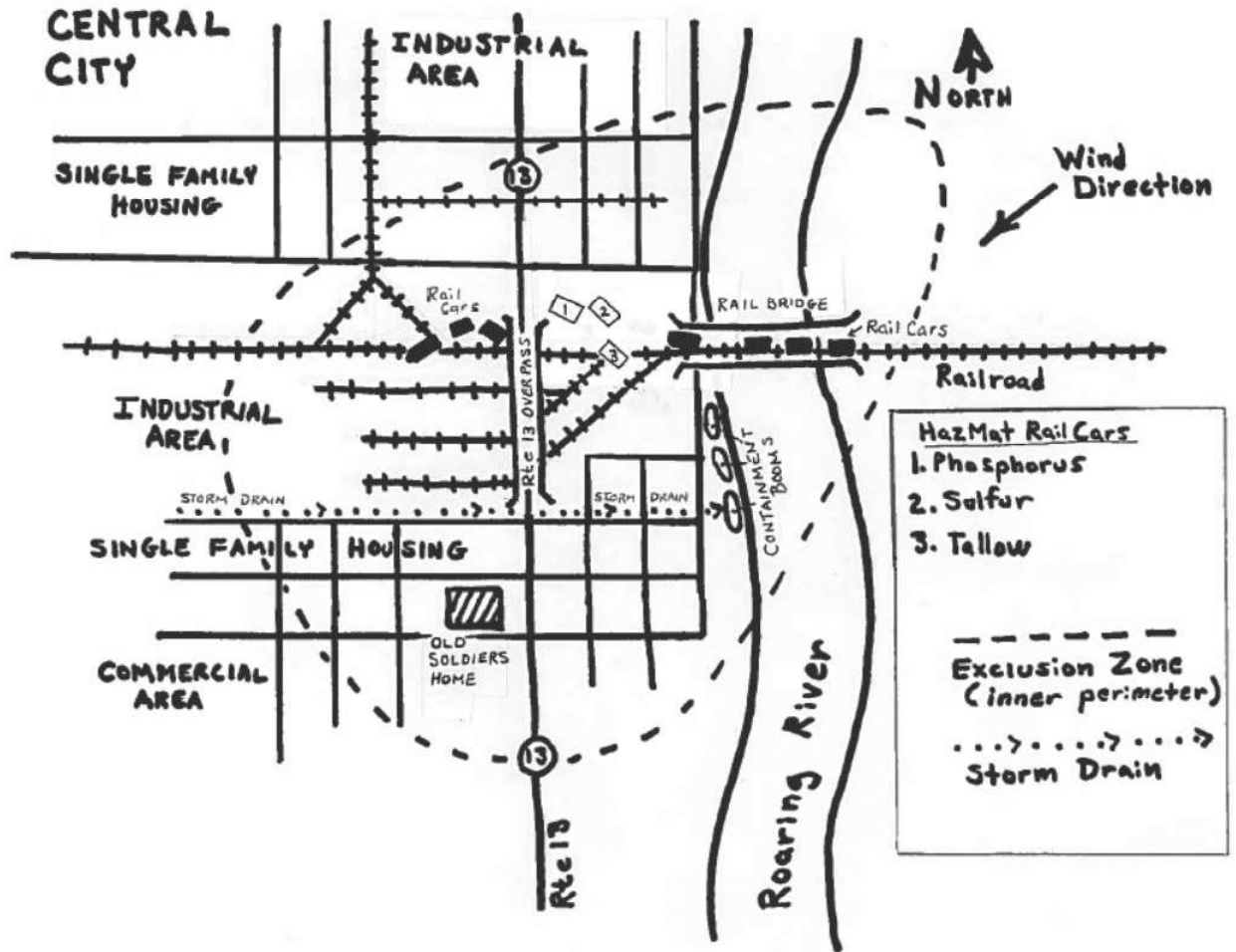
In addition to the hazards presented by the sulfur and phosphorus, the tallow also presents an environmental problem. Tallow coats the gills of fish. Tallow has entered Wilson Creek, and dead fish are already present.

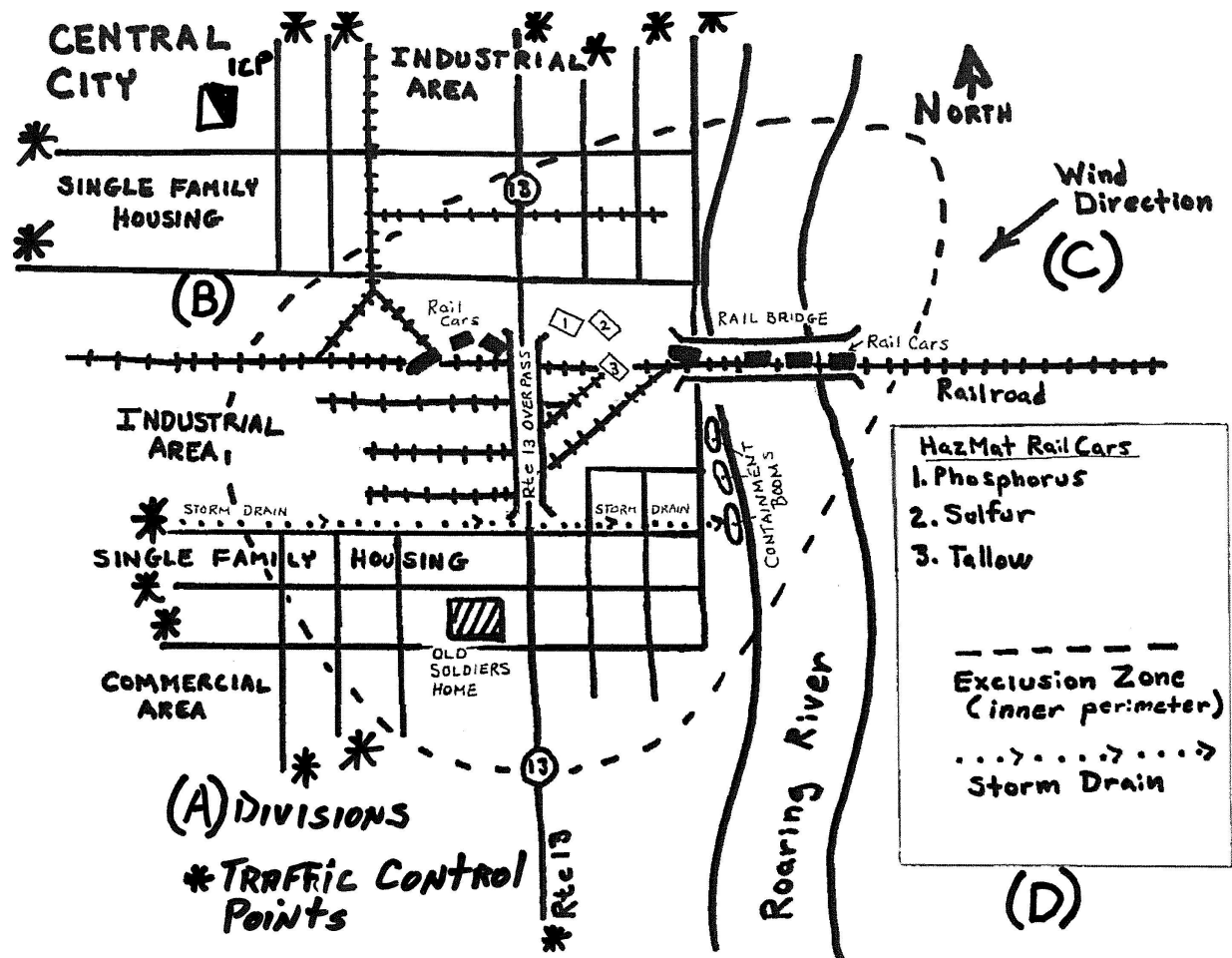
**Weather:** No significant change in the next 24 to 36 hours.

### Technical Specialist Report (Continued)

Strategic/Tactical Option	Analysis
1. Patch phosphorus tanker.	<b>Not recommended.</b> Tear is too extensive, success uncertain, and hazards to responders too great.
2. Foam phosphorus tanker.	<b>Not recommended.</b> Adequate amounts of foam will take 48-72 hours to arrive.
3. Bury tanker in wet sand or dirt.	<b>Not recommended.</b> Car cannot be moved safely without potential of catastrophic breach and release. Car is pre-1970 construction and predates additional safety regulations imposed at that time.
4. Continue current strategy.	<b>Not recommended.</b> Water supply is not adequate to provide enough water to control fire and does nothing to promote resolution of the incident. In addition, more water will continue to erode the bridge abutment, and increase the contamination in Wilson Creek. Fog stream causes caustic by-products to form, endangering responders and the environment.
5. Conduct controlled burn-off until amount of phosphorus has been reduced to the point where car can be moved safely.	<p><b>Recommended.</b> Rate of burn will depend on surface area exposed to oxygen. At current rate of burn, estimated time to burn off remaining phosphorus is 36-48 hours. Projected weather conditions, negative health effects are possible up to 2 miles downwind. Population in impact area: 3,000.</p> <p><b>Special considerations:</b> City Hall, Police Department, and Fire Station 1/Administration buildings are within the 2-mile zone. Central City General Hospital is .25 miles outside the 2-mile zone. Custer Circle Assisted Living Center is within the 2-mile zone. All facilities have the ability to shelter in place.</p>

Updated Incident Maps:





**Resources List:****Jurisdiction's Emergency Resource Inventory:**

<b>Resource</b>	<b>Kind</b>	<b>Number &amp; Type</b>
Central City Police	Patrol Car	4 marked units: M-1, M-2, M-3, and M-4 2 unmarked units: M-5 and M-6
Wilsonville Police	Patrol Car	4 marked units: P-1, P-2, P-3, and P-4
Liberty County Sheriff	Patrol Car	6 marked units: O-1, O-2, O-3, O-4, O-5, and O-6
State Police	Patrol Car	1 marked unit: SP-1 1 unmarked unit: SP-2
Central City Fire/Rescue	Engine Company Truck Company Rescue Company Heavy Rescue	3 companies: CCE-1, CCE-6, CCE 7, and CCE-8 Air 6
Other Local Fire	Engine Company Truck Company Rescue Company	5 companies: OF-1, OF-2, OF-3, OF-4, and OF-5 3 companies: OTR-1, OTR-2, and OTR-3 1 company: OHR-1
Central City EMS	BLS ALS Medevac Off-Duty Personnel (full-time and volunteer)	2 units: A 6, A 8 2 units: M1, M7 Lifelight 324CC Helicopter 33
Central City Public Works	Front-End Loaders Dump Trucks	3 4
Other Local EMS	BLS ALS	5 units: OBLS-1, OBLS-2, OBLS-3, OBLS-4, and OBLS-5 2 units: OALS-1 and OALS-2
Other Local Resources	Central City/Liberty County Regional Hazmat Team School Buses Electrical Utility Company Gas Company	1 12 2 4
Available through mutual aid with adjacent counties	Engine Company Truck Company Patrol Car County Dump Truck	6 4 12 5



and their communities	Front-End Loader	2
	Bulldozer	2
	Crime Scene Investigation	1 unit
	County and State Engineer	3

**Additional Available Resources:**

**National Guard:**

- 80 personnel
- 5 five-ton trucks
- 1 engineer unit with 8 personnel
- 2 heavy front-end loaders
- 1 bulldozer

**Air Operations:**

- 2 helicopters and support assets capable of basic medical transport
- 3 State Police helicopters, MEDEVAC equipped

**State Police:**

- 15 marked units
- Hazardous Materials Response Team

**Incident Communications:**

Central City and Liberty County have a shared 800-mHz radio system. Talk Groups include:

- Fire: Talk Groups 1, 2, 3
- Law Enforcement: Talk Groups 4, 5, 6
- EMS: Talk Groups 7, 8
- Regional Mutual Aid: Talk Groups 9, 10
- State Mutual Aid: Talk Group 11

The railroad company does not share a radio frequency or talk group with any of the above.

Central City General Hospital is 10 minutes flight time, 45 minutes driving time away from the incident. Operations have kept 1 ALS and 3 BLS ambulances in Staging.

## **OPERATIONAL PLANNING WORKSHEET (ICS FORM 215)**

### **Partially Completed ICS Form 215:**

Refer to ICS\_300\_AAM\_CCHS\_IC\_S\_Form\_215.pdf

### **Blank ICS Form 215A:**

Refer to ICS\_300\_AAM\_CCHS\_IC\_S\_Form\_215A.pdf

### **Your Notes:**