UNIT 6. ICS/EOC INTERFACE ACTIVITY 2

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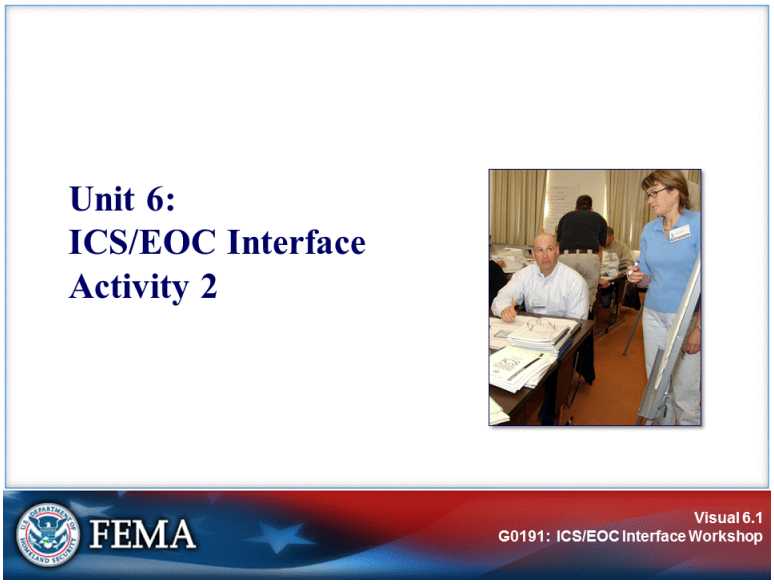
INTRODUCTION

Visual 6.1

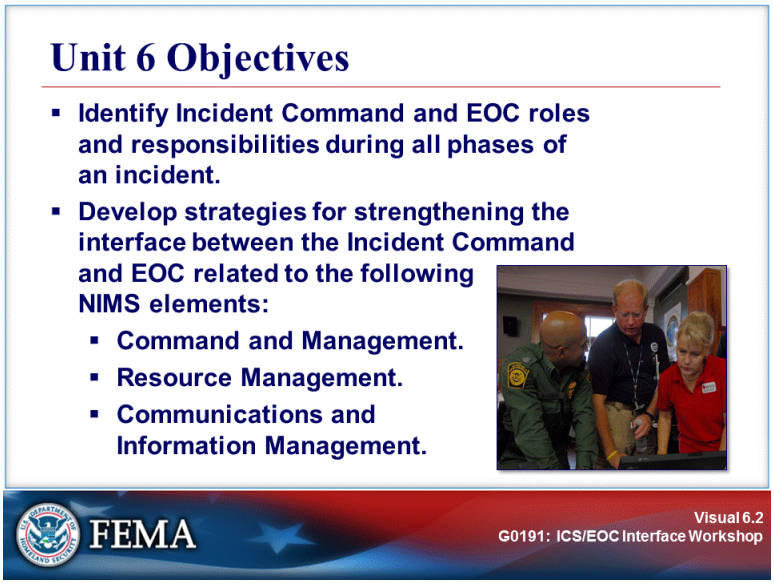


Key Points

This unit provides an opportunity to apply ICS/EOC interface concepts to a series of scenarios and identify strategies for strengthening the interface between the on-scene ICS organization and the EOC.

INTRODUCTION

Visual 6.2

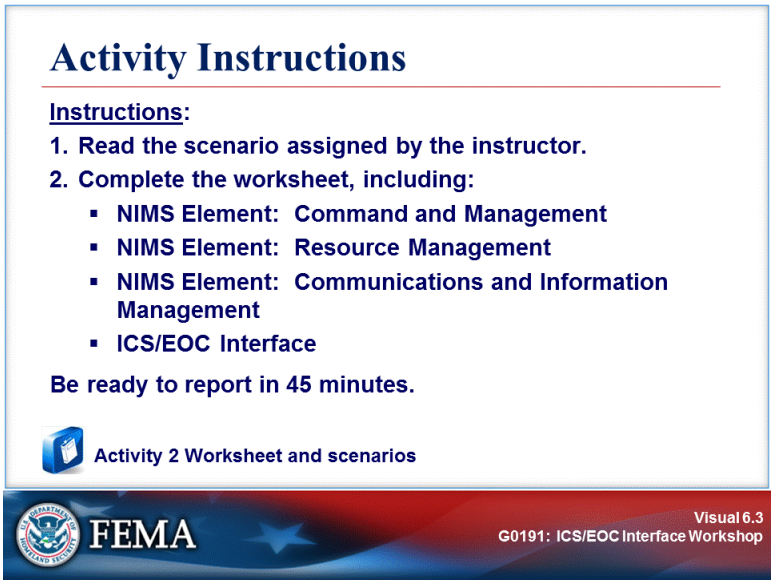


Key Points

The unit objectives are listed on the visual.

ACTIVITY INSTRUCTIONS

Visual 6.3



Key Points

Instructions: Working in groups, read the assigned scenario and complete the activity worksheet located on the following page. Select a spokesperson and be ready to report out in 45 minutes.

Unit 6. ICS/EOC Interface Activity 2

Activity 2 Worksheet

Instructions: Read the scenario assigned by the instructor. Then answer the following questions.

NIMS Element: Command and Management

1. Who will assume the initial Incident Command responsibilities?

2. Describe how responsibility or "command" might be transferred and to which agency or function the responsibility would be transferred.

3. What are the primary Incident Command goals/priorities?

4. Which agencies or functions should be represented in the EOC? What State or Federal representatives may be included?

5. What are the EOC's goals/policy issues?

Activity 2 Worksheet (Continued)

NIMS Element: Command and Management (Continued)

6. How will the Incident Command and EOC functions expand during the initial phase-up operations? How will this expansion be accomplished?

7. During the phase-down of incident operations, how will the roles and responsibilities of the Incident Command and EOC organizations change?

8. What is the role of the Public Information Officer (PIO) at the scene? What can the Joint Information Center (JIC) do to support the on-scene PIO?

NIMS Element: Resource Management

9. What are the potential resource needs and issues?

10. How should the EOC make decisions about resource allocation?

11. What steps does the Incident Command need to take to ensure accountability and safety of assigned resources?

Activity 2 Worksheet (Continued)

NIMS Element: Communications and Information Management

12. How is communication conducted among the various incidents and the EOC? Who talks to whom? What types of communication devices are used (cell phones, radios, etc.)?

13. What steps can the Incident Command and EOC take to ensure that there is a common operating picture?

14. What information analysis and planning support can the EOC offer to the Incident Command?

ICS/EOC Interface

15. What specific actions can be taken to strengthen the interface between the on-scene Incident Command and EOC?

Scenario 1 HURRICANE

SITUATION:

For the last 3 days, the National Weather Service's National Hurricane Center (NHC) has been monitoring Hurricane Luke. NHC posted a hurricane watch at 6:00 p.m. yesterday. At 6:00 a.m. this morning, NHC issued a hurricane warning for a 300-mile stretch of the coast. Luke is considered a very dangerous hurricane, with 140-mph winds, and is forecast to cross the coast at high tide, causing a storm surge of 8 to 12 feet above normal tide levels. Resort areas with large tourist populations are particularly vulnerable. Access roads are narrow and only 3 to 6 feet above mean sea level.

On its present course, the hurricane is expected to make landfall tomorrow at approximately 4:00 a.m. Flooding from rising tides and the onset of high winds could affect roads and bridges by this evening.

Your jurisdiction is within the warning area. Elected officials and agency heads have been notified. News media have also been broadcasting the warning. The local emergency manager met with all appropriate emergency service personnel at 7:30 a.m.

ASSUMED CONDITIONS:

[NOTE: This activity is designed without regard for the size of the community.]

The activity assumes decision-making at an EOC or similar facility, in addition to those decisions made on the scene. The following events have been identified as critical to this scenario:

- Evacuation of low-lying areas, camping areas, and trailer parks.
- School officials advising of early dismissal or cancellation.
- Major traffic congestion along main highways and bridges.
- Nearest shelters filling rapidly.
- Utilities threatened and/or disrupted.
- A bridge on one of the evacuation routes under repair and one lane blocked.
- Trees downed, power poles snapped, and other debris scattered so that roads are blocked and damaged.
- Casualties at a damaged shelter, requiring an EMS and fire response.
- Fire, explosion, and hazardous materials incidents in a port and a refinery.
- Flooding at municipal water treatment plant causing contamination of water.
- Flooding of some of the access roads, and one small bridge washed out.
- Several Incident Command Posts having been set up.

Scenario 2 SLOW-BUILDING RIVER FLOOD

SITUATION:

Spring thaws have brought the river to near flood levels. Additionally, ice flows are beginning to choke narrow bends in the river and create ice and debris dams at bridge abutments. The ground remains frozen, causing peak water runoff. The National Weather Service (NWS) forecasts up to 3 days of spring rains.

The first day of incessant rain guarantees some flooding in low-lying agricultural and recreation areas. The NWS issues a flood forecast and the River Forecast Center has issued flood and flash flood watches. All emergency services personnel go on standby alert and the EOC maintains a 24-hour communications watch.

By the end of the second day, upstream communities are experiencing severe flooding and the river has not yet crested. Severe flooding is expected to affect this community during the night of the second day. Mutual-aid agreements are reaffirmed with neighboring communities that are out of the floodplain.

By 6:00 p.m., the public is advised of imminent severe flooding. Probable flood zones are broadcast by radio and television. Citizens in these areas are advised about procedures for preparing for flooding. The EOC activates a highway traffic control plan to expedite evacuation of flooded areas.

An upstream community reports that a major ice dam has broken through an old bridge. It will cause rapid increases in flooding downstream. By 10:30 p.m., emergency personnel who are helping evacuate citizens report that floodwater has already encroached on a major evacuation route. The flood is more than 3 hours ahead of schedule.

The rains continue and by 12:00 midnight, it becomes obvious that the flood will not crest for at least another 18 hours. Further, due to the break in the ice dam, citizens were unable to complete adequate preparations. LP gas tanks from a bulk storage business have floated off their standards and are bobbing through the floodwaters into the commercial area of town.

EOC officials anticipate floodwaters so high that one hospital and one temporary shelter must now be evacuated. Some of the hospital patients must be transported to a facility in a neighboring community. Municipal power supplies must be turned off in 33 percent of the community. The community's water supply is contaminated and residents well outside the floodplain are required to use emergency water supplies.

Scenario 2 SLOW-BUILDING RIVER FLOOD (Continued)

ASSUMED CONDITIONS:

[NOTE: This activity is designed without regard for the size of the community.]

The activity assumes decision-making at an EOC or similar facility, in addition to those decisions made on the scene. The following events have been identified as critical to this scenario:

- Local interpretation of NWS forecast information
- Coordination with waste utility
- Communication and coordination with the National Guard
- Evacuation decision-making
- Public information
- Flood crest forecasting for the vicinity
- Evacuation route monitoring
- Search and rescue resource deployment
- Coordination with utility companies
- Identification of victims, survivors, and/or relocatees
- Debris clearance resource allocation
- Outside assistance decisions and request procedures

Scenario 3 AIR CRASH

SITUATION:

A Boeing 737 that has experienced inexplicable in-flight engine problems will need to make an emergency landing at a large airport. Though plans have been made to land at a city 200 miles to the north, the latest communication with the pilot is that the plane has lost engine power and is losing altitude too quickly to reach the planned airport. Though your city airport is actually too small to handle the aircraft, the only hope of saving any of the 135 passengers and crew is to attempt a landing.

Conditions at the airport are clear, but the surrounding area is very dry due to a sustained rainless period. A hot, dry wind is also a factor.

The main runway is in a relatively unpopulated suburban area. However, the likelihood of the pilot being able to control the plane and stay within the assigned glide path is slim. The plane's approach passes over populated suburban housing developments.

The airport tower control alerts its own Crash/Fire Rescue (CFR) units and requests that local emergency services provide backup assistance with fire, police, medical, health and welfare, and search and rescue capabilities.

Garbled radio communication from the airliner alerts tower control that an engine has dropped off the aircraft. Hydraulic control has been lost. The pilot finally radios that he will attempt a soft impact landing but the aircraft breaks apart on impact. Debris and bodies are scattered the length of the runway, with the tail section near the point of touchdown. There is visible smoke. The aircraft's nose section skids to a stop beyond the end of the runway. Some passengers are seen escaping from the fuselage via slides. CFR units proceed to the main crash site. Traffic on the highway within sight of the crash becomes congested as drivers slow and some stop and leave their vehicles to run to the crash site. A number of traffic accidents are being reported.

CONDITIONS:

The weather is mild. The local temperature is 68 degrees. There is a wind from the south at 10 mph.

PROBLEM:

Seventy-five passengers require immediate hospitalization and 16 slightly injured passengers will need guidance and transportation to the terminal. The remainder of the passengers and the entire crew perished on impact or during the resulting fire.

POTENTIAL HAZARDS:

- Explosion and fire
- Traffic
- Injury to well-meaning citizen-volunteers

Scenario 3 AIR CRASH (Continued)

ASSUMED CONDITIONS:

[NOTE: This activity is designed without regard for size of community.]

The activity assumes decision-making at an EOC or similar facility, in addition to those decisions made on the scene. The following events have been identified as critical to this scenario:

- Fire crash and rescue
- Victim identification
- Mortuary services
- Debris clearance
- Public information
- Outside assistance decisions and request procedures

Scenario 4A TRAIN DERAILMENT

SITUATION:

Moments ago, a freight train derailed. Some cars are still in the adjacent county. The incident is located in an industrial area. Three tank cars are on their sides, one of which is leaking liquid into a water-filled drainage ditch on the south side of the tracks. The car is placarded with a DOT placard that reads: 1064 (see guide 117, DOT Emergency Response Guidebook 2012, included with this activity). The wind is steady from the northwest at 2 mph.

There is no visible fire. However, the fire department is on the scene. There are no known injuries. County law enforcement deputies and State police units are arriving on the scene. In addition, a large crowd of spectators has begun to gather. The media has picked up the story and is beginning to broadcast sketchy details.

The Emergency Management Center also contains a number of city offices and is normally not a 24-hour operation. This dual-use facility can be converted into a functioning EOC. Past exercises indicated that approximately 2 hours are needed to activate fully. Radio and telephone communications with other city departments are immediately available. Relations with the county EOC, which is a 24-hour, centralized dispatch operation, are excellent.

ASSUMED CONDITIONS:

[NOTE: This activity is designed without regard for size of community.]

This activity assumes decision-making at an EOC or similar facility, in addition to those decisions made on the scene. The following events have been identified as critical to this scenario:

- Local interpretation of NWS forecast information
- Coordination with waste facility
- Evacuation decision-making
- Evacuation route monitoring
- Shelter availability
- Communication with the response resources
- Outside assistance decisions and request procedures

Scenario 4A TRAIN DERAILMENT (Continued)

ID No.	Guide No.	Name of Material
1035	**115**	Ethane
1035	**115**	Ethane, compressed
1036	**118**	Ethylamine
1037	**115**	Ethyl chloride
1038	**115**	Ethylene, refrigerated liquid(cryogenic liquid)
1039	**115**	Ethyl methyl ether
1039	**115**	Methyl ethyl ether
1040	**119P**	Ethylene oxide
1040	**119P**	Ethylene oxide with Nitrogen
1041	**115**	Carbon dioxide and Ethylene oxide mixture, with more than 9% but not more than 87% Ethylene oxide
1040	**119P**	Ethylene oxide with Nitrogen
1041	**115**	Carbon dioxide and Ethylene oxide mixture, with more than 9% but not more than 87% Ethylene oxide
1041	**115**	Carbon dioxide and Ethylene oxide mixtures, with more than 6% Ethylene oxide
1041	**115**	Ethylene oxide and Carbon dioxide mixture, with more than 9% but not more than 87% Ethylene oxide
1041	**115**	Ethylene oxide and Carbon dioxide mixtures, with more than 6% Ethylene oxide
1043	**125**	Fertilizer, ammoniating solution, with free Ammonia
1044	**126**	Fire extinguishers with compressed gas
1044	**126**	Fire extinguishers with liquefied gas
1045	**124**	Fluorine
1045	**124**	Fluorine, compressed
1046	**121**	Helium
1046	**121**	Helium, compressed
1048	**125**	Hydrogen bromide, anhydrous
1049	**115**	Hydrogen
1049	**115**	Hydrogen, compressed
1050	**125**	Hydrogen chloride, anhydrous
1051	**117**	AC
1051	**117**	Hydrocyanic acid, aqueous solutions, with more than 20% Hydrogen cyanide
1051	**117**	Hydrogen cyanide, anhydrous, stabilized
1051	**117**	Hydrogen cyanide, stabilized
1052	**125**	Hydrogen fluoride, anhydrous
1053	**117**	Hydrogen sulfide
1053	**117**	Hydrogen sulphide
1055	**115**	Isobutylene
1056	**121**	Krypton
1056	**121**	Krypton, compressed
1057	**115**	Lighter refills (cigarettes) (flammable gas)
1057	**115**	Lighters (cigarettes) (flammable gas)
1058	**120**	Liquefied gases, nonflammable, charged with Nitrogen, Carbon dioxide or Air
1060	**116P**	Methylacetylene and Propadiene mixture, stabilized
1060	**116P**	Propadiene and Methylacetylene mixture, stabilized
1061	**118**	Methylamine, anhydrous
1062	**123**	Methyl bromide
1063	**115**	Methyl chloride
1063	**115**	Refrigerant gas R-40
1064	**117**	Methyl mercaptan
1065	**121**	Neon
1065	**121**	Neon, compressed
1066	**121**	Nitrogen

Scenario 4A **TRAIN DERAILMENT (Continued)**

ERG2012 **GUIDE 117**

POTENTIAL HAZARDS

HEALTH

- **TOXIC; extremely hazardous.**
- May be fatal if inhaled or absorbed through skin.
- Initial odor may be irritating or foul and may deaden your sense of smell.
- Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite.
- Fire will produce irritating, corrosive and/or toxic gases.
- Runoff from fire control may cause pollution.

FIRE OR EXPLOSION

- These materials are extremely flammable.
- May form explosive mixtures with air.
- May be ignited by heat, sparks, or flames.
- Vapors from liquefied gas are initially heavier than air and spread along ground.
- Vapors may travel to source of ignition and flash back.
- Runoff may create fire or explosion hazard.
- Cylinders exposed to fire may vent and release toxic and flammable gas through pressure relief devices.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

PUBLIC SAFETY

- **Call Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; is not effective in spill situations where direct contact with the substance is possible.

EVACUATION

Spill
- See the Table of Initial Isolation and Protective Action Distances.

Fire
- If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions.

EMERGENCY RESPONSE

FIRE
- **DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.**

Small Fires
- Dry chemical, CO_2, water spray or regular foam.

Large Fires
- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.
- Damaged containers should be handled only by specialists.

Fire Involving Tanks
- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Do not direct water at source of leak or safety devices; icing may occur.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Do not direct water at spill or source of leak.
- If possible, turn leaking containers so that gas escapes rather than liquid.
- Prevent entry into waterways, sewers, basements or confined areas.
- Isolate area until gas has dispersed.
- Consider igniting spill or leak to eliminate toxic gas concerns.

FIRST AID

- Move victim to fresh air.
- Call 911 or emergency medical service.
- Give artificial respiration if victim is not breathing.
- **Do not use the mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- In case of contact with liquefied gas, thaw frosted parts with lukewarm water.
- In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.
- Keep victim warm and quiet.
- Keep victim under observation.
- Effects of contact or inhalation may be delayed.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Scenario 4B SCHOOL BUS ACCIDENT

SITUATION:

A school bus left the roadway, went into a ditch, and rolled over on its right side striking a culvert.

The bus had middle school children on board, some of whom are trapped and many of whom are injured.

ASSUMED CONDITIONS:

- Preliminary reports indicate the driver and two children are dead.
- Five to nine children are trapped.
- Fifteen to 20 children are injured.
- A number of resources have already been dispatched to a train derailment incident; however, since there are no known injuries, medical resources should be readily available.

Scenario 5 BOMBING

SITUATION:

At 10:00 a.m. on a Tuesday, a large explosive device detonates in a crowded downtown area. The device destroys part of a building and ignites several fires.

At 10:30 a.m., a second device creates an explosion at a major hospital.

At 11:00 a.m., two other devices detonate—one at the rail yard and one at the city water treatment plant.

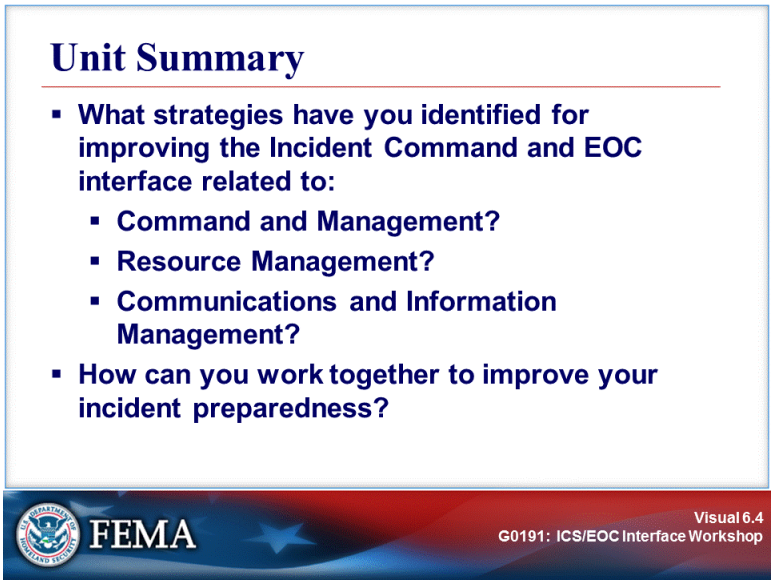
At 12:00 p.m., a militant group claims responsibility for the explosions and says there are other devices planted around the city. The group demands $50 million or they will detonate the remaining explosives.

ASSUMED CONDITIONS:

- The weather is warm at 71 degrees, with a wind from the north at 15 mph. However, thunderstorms are predicted for late in the afternoon with strong, gusting winds.
- There were at least 34 people injured in the downtown blast; however, injuries within the building are as yet unknown.
- The device at the hospital was apparently located in a trash barrel in the emergency waiting area. One person was killed; six others were injured. The blast also caused damage to the ambulance entryway.
- The device at the rail yard did not cause injuries, but did damage a railcar containing anhydrous ammonia, which is now leaking.
- The blast at the city water treatment plant has caused seepage of untreated water into a nearby river and has limited the capacity of the plant.

UNIT SUMMARY

Visual 6.4



Key Points

Do you have any questions or comments about the material covered in this unit?

Your Notes: