IS-810: ESF #10 – Oil and Hazardous Materials Response Instructor Guide

February 2009

Course Overview

Display Visual 1



Instructor Notes: Present the following key points.

Purpose: The purpose of this course is to familiarize participants with the function and composition of ESF #10 – Oil and Hazardous Materials Response.

Approximate Time: 1 hour

Content Outline: This module includes the following major topics:

- ESF Overview
- ESF #10 Purpose and Scope
- National Contingency Plan
- ESF #10 Coordinator and Primary Agencies
- ESF #10 Support Agencies
- ESF #10 Activities
- National Response System
- National Response System Components
- Summary

Materials:

- Instructor Guide
- Student Manual (including the ESF #10 Oil and Hazardous Materials Response Annex)

Topic Course Overview Display Objectives Visual 2 Describe the overall purpose and scope of ESF #10. Identify the supplemental assistance ESF #10 provides to State, tribal, and local governments. Identify typical activities accomplished by ESF #10 resources. Describe the types of partnerships formed between ESF #10 and other response agencies and organizations. ESF #10 – Oil and Hazardous Materials Response IS-810 – February 2009 Visual 2

Instructor Notes: Present the following key points.

FEMA

At the end of this course, participants will be able to:

- Describe the overall purpose and scope of ESF #10.
- Identify the supplemental assistance ESF #10 provides to State, tribal, and local governments.
- Identify typical activities accomplished by ESF #10 resources.
- Describe the types of partnerships formed between ESF #10 and other response agencies and organizations.

Course Overview

Display Visual 3



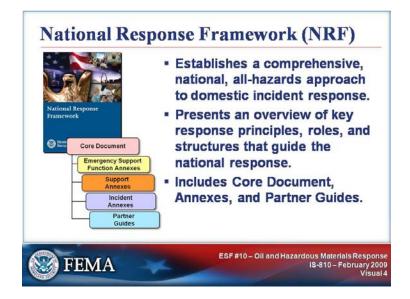
Instructor Notes: Present the following key points.

Welcome the participants and introduce yourself. Then ask the participants to introduce themselves to the members of their table groups. Ask for:

- Their names.
- Their roles in emergency management.
- What they hope to gain from this course.

ESF Overview

Display Visual 4



Instructor Notes: Present the following key points.

The National Response Framework (NRF):

- Is a guide to how the Nation conducts all-hazards response.
- Builds upon the National Incident Management System (NIMS) coordinating structures
 to align key roles and responsibilities across the Nation, linking all levels of government,
 nongovernmental organizations, and the private sector.

The NRF is comprised of:

- The Core Document, which describes the doctrine that guides our national response, roles and responsibilities, response actions, response organizations, and planning requirements to achieve an effective national response to any incident that occurs.
- Emergency Support Function Annexes, which identify Federal resources and capabilities that are most frequently needed in a national response (e.g., transportation, firefighting, mass care).
- Support Annexes, which describe essential supporting aspects that are common to all incidents (e.g., financial management, volunteer and donations management, privatesector coordination).
- Incident Annexes, which address the unique aspects of how we respond to seven broad categories or types of incidents (e.g., biological, nuclear/radiological, cyber, mass evacuation).
- Partner Guides, which provide ready references describing key roles and actions for local, tribal, State, Federal, and private-sector response partners.

ESF Overview

Display Visual 5



Instructor Notes: Present the following key points.

The Federal Government and many State governments organize many of their resources and capabilities—as well as those of certain private-sector and nongovernmental organizations—under Emergency Support Functions (ESFs).

The ESFs:

- Are coordinated by the Federal Emergency Management Agency (FEMA) through the National Response Coordination Center (NRCC), Regional Response Coordination Centers (RRCCs), and Joint Field Offices (JFOs).
- Are a critical mechanism to coordinate functional capabilities and resources provided by Federal departments and agencies, along with certain private-sector and nongovernmental organizations.

Note that some States also have organized an ESF structure along this approach.

ESF Overview

Display Visual 6



Instructor Notes: Present the following key points.

Review the general ESF duties listed on the visual.

Why is it important that ESFs have the authority to commit agency assets?

ESF Overview

Display Visual 7



Instructor Notes: Present the following key points.

The ESF structure includes:

- ESF Coordinator. The entity assigned to manage oversight for a particular ESF.
- Primary Agencies. ESF primary agencies are Federal agencies with significant authorities, resources, or capabilities for a particular function within an ESF. A Federal agency designated as an ESF primary agency serves as a Federal executive agent under the Federal Coordinating Officer (or Federal Resource Coordinator for non-Stafford Act incidents) to accomplish the ESF mission.
- Support Agencies. Support agencies are those entities with specific capabilities or resources that support the primary agencies in executing the mission of the ESF.

ESFs provide support to other ESFs. For example: ESF #3 – Public Works and Engineering may support rural ESF #5 – Emergency Management forces to obtain heavy equipment and/or demolition services as needed to suppress incident-related fires.

ESF Overview

Display Visual 8



Instructor Notes: Present the following key points.

The ESF coordinator has management oversight for that particular ESF.

Note that, as described on the visual, the ESF coordinator has a role throughout the incident management cycle.

ESF Overview

Display Visual 9



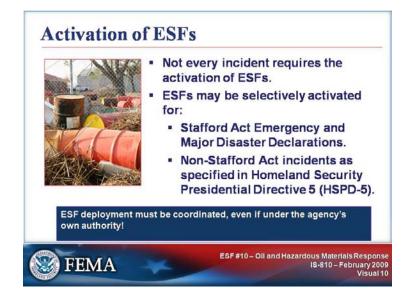
Instructor Notes: Present the following key points.

When an ESF is activated in response to an incident:

- The primary agency is responsible for:
 - Serving as a Federal executive agent under the Federal Coordinating Officer (or Federal Resource Coordinator for non-Stafford Act incidents) to accomplish the ESF mission.
 - Orchestrating Federal support within its functional area for an affected State.
 - Providing staff for the operations functions at fixed and field facilities.
 - Notifying and requesting assistance from support agencies.
 - Managing mission assignments and coordinating with support agencies and appropriate State agencies.
 - Working with appropriate private-sector organizations to maximize use of all available resources.
 - Supporting and keeping other ESFs and organizational elements informed of ESF operational priorities and activities.
 - Maintaining trained personnel to support interagency emergency response and support teams.
- Support agencies are responsible for:
 - Conducting operations, when requested by the Department of Homeland Security (DHS) or the designated ESF primary agency, using their own authorities, subject-matter experts, capabilities, or resources.
 - Participating in planning for short- and long-term incident management and recovery operations
 and the development of supporting operational plans, standard operating procedures (SOPs),
 checklists, or other job aids, in concert with existing first-responder standards.
 - Assisting in the conduct of situational assessments.
 - Furnishing available personnel or other resource support as requested by DHS or the ESF primary agency.
 - Providing input to periodic readiness assessments.
 - Participating in training and exercises aimed at continuous improvement of response and recovery capabilities.
 - Identifying new equipment or capabilities required to prevent or respond to new or emerging threats and hazards, or to improve the ability to address existing threats.

ESF Overview

Display Visual 10



Instructor Notes: Present the following key points.

ESFs may be selectively activated for both Stafford Act and non-Stafford Act incidents under circumstances as defined in Homeland Security Presidential Directive 5 (HSPD-5). Not all incidents requiring Federal support result in the activation of ESFs.

FEMA can deploy assets and capabilities through ESFs into an area in anticipation of an approaching storm or event that is expected to cause a significant impact and result. This coordination through ESFs allows FEMA to position Federal support for a quick response, though actual assistance cannot normally be provided until the Governor requests and receives a Presidential major disaster or emergency declaration.

ESF Overview

Display Visual 11



Instructor Notes: Present the following key points.

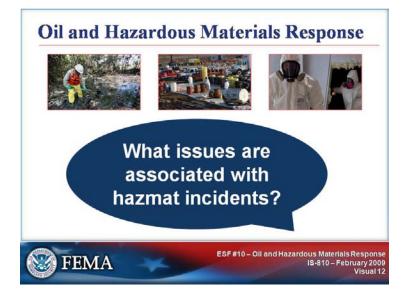
The 15 ESFs are listed on the visual. The complete ESF Annexes are available at the NRF Resource Center at www.fema.gov/nrf.

This course focuses on ESF #10 – Oil and Hazardous Materials Response.

Describe your roles or associations with ESF #10.

ESF Overview

Display Visual 12



Instructor Notes: Present the following key points.

What issues are associated with hazmat incidents?

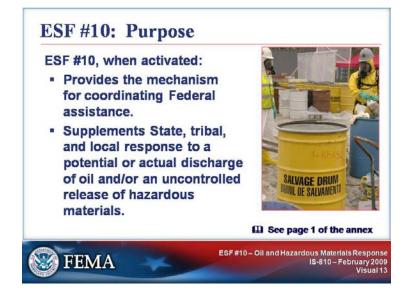
Facilitate a discussion. If not mentioned by participants, present the following points.

- Unless properly managed, a hazardous material spill or release can pose a threat to
 public health, welfare, and the environment. The hazardous material might be oil,
 industrial chemicals, automobile batteries, or even weapons of mass destruction.
 Hazardous materials can also come from unexpected sources, such as the contents of
 homes destroyed by a hurricane.
- In the event of an oil or hazardous materials release, appropriate response and recovery actions include efforts to contain or dispose of the release and to minimize its impacts. In addition to containment or removal, the surrounding air and water must be monitored to ensure the safety of an area and to protect natural resources.

This course explains how ESF #10 – Oil and Hazardous Materials Response provides the mechanism for coordinated Federal assistance to help communities recover safely from an incident and move forward.

ESF #10 Purpose and Scope

Display Visual 13



Instructor Notes: Present the following key points.

Emergency Support Function #10 – Oil and Hazardous Materials Response, when activated, provides the mechanism for coordinated Federal assistance to supplement State, tribal, and local resources in response to a potential or actual discharge of oil and/or an uncontrolled release of hazardous materials.

Refer to the purpose statement on page 1 of the ESF #10 – Oil and Hazardous Materials Response Annex.

ESF #10 Purpose and Scope

Display Visual 14



Instructor Notes: Present the following key points.

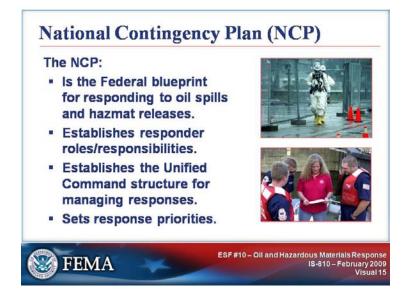
For purposes of the ESF #10 Annex, "hazardous materials" is a general term intended to mean hazardous substances, pollutants, and contaminants as defined in the NCP. Hazardous materials include chemical, biological, and radiological substances, whether accidentally or intentionally released.

Response to oil and hazardous materials incidents is generally carried out in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300.

The scope information can be found on page 1 of the ESF #10 – Oil and Hazardous Materials Response Annex.

National Contingency Plan

Display Visual 15



Instructor Notes: Present the following key points.

The National Oil and Hazardous Substances Pollution Contingency Plan, more commonly called the National Contingency Plan or NCP, is the Federal Government's blueprint that ESF #10 uses for responding to both oil spills and hazardous substance releases. The NCP:

- Establishes the National Response Team and Regional Response Teams and their roles and responsibilities in the National Response System.
- Establishes general responsibilities of Federal On-Scene Coordinators and authorizes predesignation of these coordinators.
- Requires notification of any discharges or releases above certain levels to the National Response Center.
- Establishes the Unified Command structure for managing responses to discharges.

ESF #10 Coordinator and Primary Agencies

Display Visual 16



Instructor Notes: Present the following key points.

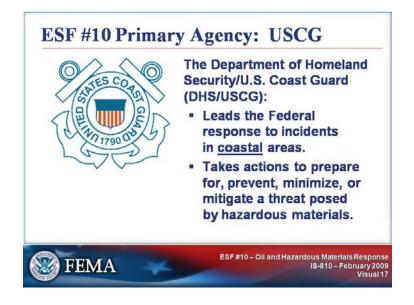
The Environmental Protection Agency (EPA) is the ESF #10 coordinator.

For incidents involving **inland areas**, EPA serves as the primary agency. As ESF #10 primary agency, EPA:

- Leads the Federal response to actual or potential oil and hazardous materials incidents.
- Takes appropriate actions to prepare for, prevent, minimize, or mitigate a threat posed by hazardous materials.

ESF #10 Coordinator and Primary Agencies

Display Visual 17



Instructor Notes: Present the following key points.

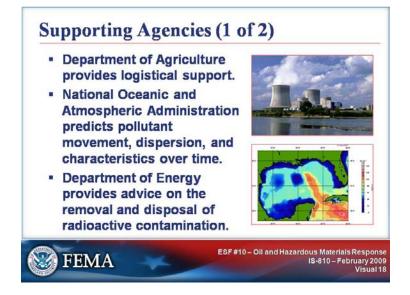
For incidents affecting **coastal zone areas**, the Department of Homeland Security/U.S. Coast Guard (DHS/USCG) serves as the primary agency. For incidents affecting both coastal areas and inland areas, EPA is the primary agency and DHS/USCG serves as the deputy.

As ESF #10 primary agency, DHS/USCG:

- Leads the Federal response to actual or potential oil and hazardous materials incidents in coastal areas.
- Takes appropriate actions to prepare for, prevent, minimize, or mitigate a threat posed by hazardous materials.

ESF #10 Support Agencies

Display Visual 18



Instructor Notes: Present the following key points.

Partners in providing ESF #10 services include:

- The Department of Agriculture, which provides logistical support, such as incident command expertise, personnel, and communications.
- The Department of Commerce/National Oceanic and Atmospheric Administration, which predicts pollutant movement, dispersion, and characteristics over time.
- The Department of Energy, which provides advice on the removal and disposal of radioactive contamination.

ESF #10 Support Agencies

Display Visual 19



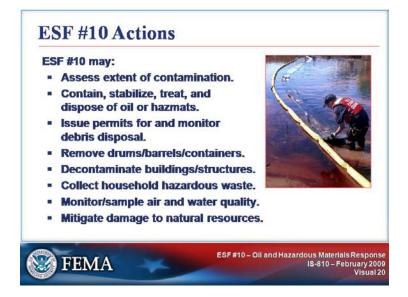
Instructor Notes: Present the following key points.

Additional partners in providing ESF #10 services include:

- The Department of Health and Human Services, which assists in the assessment of health hazards.
- The Department of the Interior, which provides technical assistance in protecting natural and cultural resources.
- The Department of Defense, which directs response for an incident involving release of its hazardous materials.

ESF #10 Activities

Display Visual 20



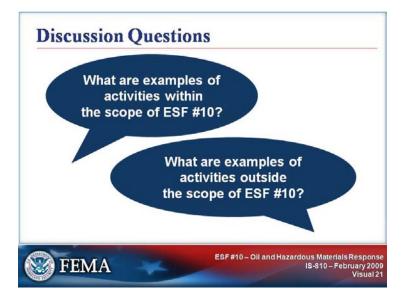
Instructor Notes: Present the following key points.

In the event of a potential or actual release of hazardous materials, actions to supplement State, tribal, and local resources by ESF #10 may include:

- Assess extent of contamination.
- Contain, stabilize, treat, and dispose of oil or hazmats.
- · Remove drums, barrels, and containers.
- Decontaminate buildings and structures.
- Collect household hazardous waste.
- Issue permits for and monitor debris disposal.
- Monitor water quality.
- Sample air quality.
- Mitigate damage to natural resources.

ESF #10 Activities

Display Visual 21



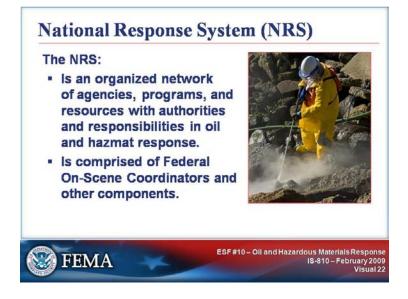
Instructor Notes: Present the following key points.

Conduct the activity as follows:

- 1. Tell the participants to work in their table teams.
- 2. Ask the participants to think about activities that do and do NOT fall within the scope of ESF #10. Instruct the participants to list the examples on chart paper.
- 3. Give the teams approximately 5 minutes to complete their lists. Ask spokespersons from each team to present their answers.
- 4. If necessary, suggest the following responses:
 - 1. The following activities are **included** in the scope of ESF #10:
 - Collecting containers of paint, solvents, or oils found in homes destroyed by a tornado.
 - Decontaminating buildings affected by anthrax.
 - Containing oil spilled by a tanker that ran aground off the Texas coast.
 - Monitoring air quality around an incident site.
 - 2. The following activities are **not included** in the scope of ESF #10:
 - Removing woody debris from areas affected by a severe ice storm.

National Response System

Display Visual 22



Instructor Notes: Present the following key points.

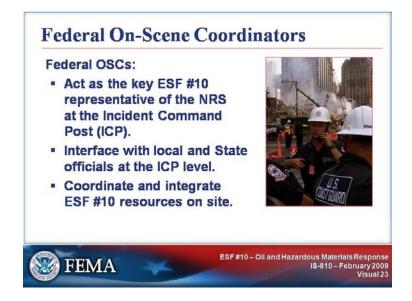
Response actions carried out under ESF #10 are conducted in accordance with the National Response System (NRS). The NRS is an organized network of Federal, State, tribal, and local agencies, programs, and resources with authorities and responsibilities in oil and hazardous materials response.

The NRS is used to respond to smaller oil and hazardous materials incidents on a day-to-day basis, and plugs into the National Response Framework under ESF #10 for larger-scale incidents.

States and tribes participate in the NRS at the regional and local levels, following regional and area oil and hazardous substance pollution contingency plans.

National Response System Components

Display Visual 23



Instructor Notes: Present the following key points.

Federal OSCs:

- Act as the key ESF #10 representative of the NRS at the on-site Incident Command Post (ICP).
- Interface with local and State officials at the ICP level.
- Coordinate and integrate ESF #10 resources on site.

Other ESF #10 resources on-site report to the Federal OSC.

National Response System Components

Display Visual 24



Instructor Notes: Present the following key points.

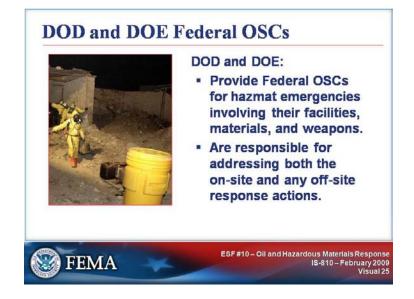
Other key components of the NRS include:

- The National Response Team (NRT).
- Regional Response Teams (RRTs).
- The National Response Center (NRC).

States and tribes participate in the NRS at the regional and local levels, following regional and area oil and hazardous substance pollution contingency plans.

National Response System Components

Display Visual 25



Instructor Notes: Present the following key points.

The Department of Defense (DOD) and Department of Energy (DOE) provide Federal OSCs for the response to hazardous materials (not oil) emergencies involving their facilities, materials, and weapons.

DOD and DOE OSCs are responsible for addressing both the on-site and any off-site response actions.

National Response System Components

Display Visual 26



Instructor Notes: Present the following key points.

The NRS also includes a number of teams with specialized expertise that can be deployed to assist Federal OSCs and other Federal, State, and local officials. The environmental response team (ERT) is one of EPA's special teams. The ERT's capabilities include:

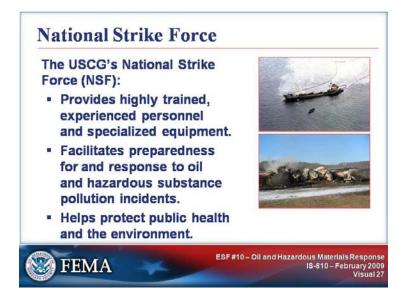
- Air surveillance.
- Analytical laboratory support.
- Environmental risk assessment.
- Oil and hazmat assessment.
- Freight and transport.
- Dive team for underwater investigations.
- Cleanup and remediation techniques.
- 24-hour hotline and response, on-scene or reach-back.

Examples of past ERT actions include:

- After the Space Shuttle Columbia disaster, the ERT worked with Federal OSCs, FEMA, and NASA in the recovery and investigation. The ERT conducted environmental monitoring of the area and assisted in the cleanup of hazardous materials from the space shuttle.
- Washington, DC; Florida; and six other States were sites of anthrax contamination via the mail. As part of the cleanup effort, the ERT provided technical assistance. After chlorine dioxide was pumped into contaminated buildings to kill the anthrax spores, the ERT analyzed the air outside of the buildings to ensure the area was safe.
- After the terrorist attacks at the World Trade Center, the ERT joined the Federal, State, and local responders. The ERT set up mobile gas analyzers to monitor air quality at the site and set up health risk procedures for the responders.

National Response System Components

Display Visual 27



Instructor Notes: Present the following key points.

The USCG's National Strike Force (NSF) provides highly trained, experienced personnel and specialized equipment to facilitate preparedness for and response to oil and hazardous substance pollution incidents in order to protect public health and the environment.

The NSF totals over 200 personnel and includes:

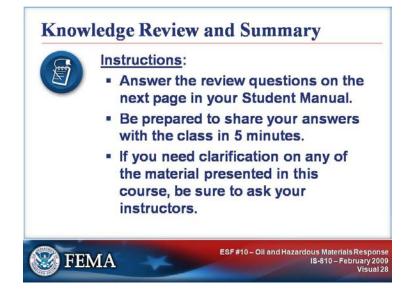
- The National Strike Force Coordination Center (NSFCC).
- The Atlantic Strike Team.
- The Gulf Strike Team.
- The Pacific Strike Team.
- The Public Information Assist Team (PIAT).

Examples of past NSF actions include:

- Members of the Atlantic Strike Team were deployed to the site of the World Trade
 Center attacks. There they tackled numerous tasks, including monitoring air at Ground
 Zero, setting up washing stations to decontaminate workers, establishing landfills, and
 screened and disposed of hazardous waste materials.
- Members of the Gulf Strike Team were deployed to a train derailment in Graniteville, SC. A total of 26 cars derailed, including 5 containing hazardous chemicals. In the incident, 9 people were killed, 250 injured, and more than 5,000 residents evacuated. The Gulf Strike Team conducted search and rescue operations, established evacuation sites, provided on-scene communications during cleanup operations, and conducted site safety and oversight during tank car off-loading operations.
- Members of the Pacific Strike Team were deployed when a bulk carrier loaded with fuel oil ran aground off the coast of Hawaii. Pacific Strike Team members supervised the removal of 148,000 gallons of oil from the grounded vessel, and conducted site safety and oversight during cargo removal and vessel refloating operations.

Summary

Display Visual 28



Instructor Notes: Present the following key points.

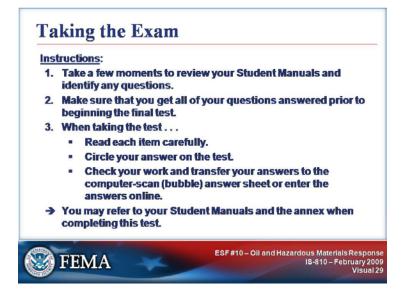
Conduct the review as follows:

- Direct the participants to the Knowledge Review located at the end of their Student Manuals.
- Allow 5 minutes for the participants to answer the questions.
- Monitor the time. When 5 minutes have passed, ask for volunteers to provide their answers
- If not mentioned by participants, provide the correct responses from the answer key on the next page.
- Ask the participants if they have any questions on the material covered in this course.
 Be sure to answer all questions before moving on to the exam.

Additional information about the National Response Framework and Emergency Support Functions may be obtained at the NRF Resource Center at www.fema.gov/nrf.

Topic Summary

Display Visual 29



Instructor Notes: Present the following key points.

Present the following instructions:

- 1. Take a few moments to review your Student Manuals and identify any questions.
- 2. Make sure that you get all of your questions answered prior to beginning the final test.
- 3. When taking the test . . .
 - 1. Read each item carefully.
 - 2. Circle your answer on the test.
 - 3. Check your work and transfer your answers to the computer-scan (bubble) answer sheet or enter the answers online.

Tell the participants that they may refer to their Student Manuals and the annex when completing this test.

Important Instructor Note: It is important that you allow the participants enough time for them to review the course materials prior to taking the exam. If time permits, you can facilitate a structured review of the materials using the following techniques:

- Assign each team a lesson and have them summarize and present the key points to remember.
- Select five to seven of the most critical points from each lesson. Present a brief review of these points. Ask questions to ensure that the participants remember the most important information.

When the review is completed, distribute the exams. Remain in the room to monitor the exam and to be available for questions. Collect the completed exams.

Instructor Note: To receive a certificate of completion, students must take the 10-question multiple-choice posttest, submit an answer sheet (to EMI's Independent Study Office), and score 75% on the test. Explain that students may submit their tests online, and receive a certificate in the mail. Direct them to:

- Go to http://training.fema.gov/EMIWeb/IS/ and click on the link for IS-801.
- Click on "Download Final Exam Questions" (found at the bottom of the page). You may want to print the test.
- Click on "Take Final Exam" (found at the bottom of the page).

Topic Summary

Display Visual 30



Instructor Notes: Present the following key points.

Ask the participants to complete any course evaluation/feedback forms. Use standard course evaluation forms from your agency or jurisdiction.

ESF #10 - Knowledge Review

1. For incidents affecting inland areas, who serves as the primary agency?

Answer: Environmental Protection Agency

2. For incidents affecting coastal zone areas, who serves as the primary agency?

Answer: U.S. Coast Guard

3. For an incident that affects both inland and coastal zone areas, who serves as the primary agency?

Answer: Environmental Protection Agency

4. Decide whether the following statement is **TRUE** or **FALSE**: The National Oil and Hazardous Substances Contingency Plan (NCP) has been superseded by the revised ESF #10 annex.

Answer: False

5. What is the correct title of the highly skilled, on-call Federal responders who conduct, direct, and coordinate emergency response oil and hazmat actions by interfacing with local, tribal, and State officials?

Answer: Federal On-Scene Coordinators

6. Fill in the blank: The ______ is an organized network of agencies, programs, and resources with authorities and responsibilities in oil and hazardous materials response.

Answer: National Response System

7. Match the activities with the ESF #10 support agencies that perform them.

	Activities		Support Agencies
В.	Provides advice on the removal of radioactive material released in an industrial accident.	A.	Department of Agriculture
C.	Creates predictive model of the movement of a cloud of toxic gas.	B.	Department of Energy
<u>E.</u>	Provides advice on protecting threatened and endangered species impacted by an oil spill.	C.	Department of Commerce/ National Oceanic and Atmospheric Administration
Α.	Provides communications equipment to support the incident command.	D.	Department of Health and Human Services
D.	Evaluates available information and recommends protective measures for an assisted living facility downwind of a pesticide warehouse fire following an earthquake.	E.	Department of the Interior

8. Use the space below to make note of any questions you have about the material covered in this course.