Observations and Lessons Learned from the World Trade Center and Pentagon Terrorist Attacks

National Response Team

INTERIM FINAL REPORT
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This report presents a distillation of observations made by U.S. National Response Team (NRT) member agencies regarding the September 11, 2001, terrorist incidents in New York City and at the Pentagon. NRT member agencies were involved in providing National Oil and Hazardous Substances Pollution Contingency Plan (NCP)/Emergency Support Function (ESF) #10 response to environmental threats, consistent with the Federal Response Plan (FRP). The event tested the capabilities of the federal response nationwide and was the largest activation under the FRP to date. Based on the observations made by these member agencies, the Preparedness Committee derived a series of lessons learned. This report also includes preliminary recommendations for action by NRT and other federal government agencies to address the lessons learned. The NRT could implement some of these recommendations immediately, some require additional discussion and review, and some would have to be referred to specific agencies or organizations for consideration.

The observations addressed in this report cover the period from the initial Federal Government response through the end of September 2001. As such, this initial report has been prepared without the benefit of additional On–Scene Coordinator (OSC) reports. Nor does it reflect actions taken since October 1, 2001 to address the issues that are identified in this report. As OSC reports are completed and follow-up actions taken, it is anticipated that additional National Response System (NRS) assessments of the ongoing federal response will follow.

The report is divided into two sections. Section 1 provides a brief overview of the incidents and the NRS response under ESF #10. Section 2 presents the lessons learned derived from the observations. The lessons learned are presented in two groups. “Nationally Significant Lessons Learned” are those that have the greatest potential for improving national response capabilities. “NRT-specific Lessons Learned” are those that have the potential to improve the internal operations of the NRT. Please note that no particular rank ordering or prioritization has been assigned to the lessons learned within each group. Please also be aware that the purpose of the Lessons Learned process is to improve our capability to respond to emergencies, not to assign fault or second-guess decisions made and actions taken during the emergencies.

1. OVERVIEW OF INCIDENTS AND NRS RESPONSE

1.1 Summary of Events

On Tuesday, September 11, 2001, at approximately 0845 hours (EDT), a hijacked commercial airplane crashed into the north tower of the World Trade Center (WTC) complex in New York City. At that time, the severity of the incident, the numbers of people involved, and the reason for the crash were all unknown. Shortly after 0900 hours, a second hijacked airplane hit the south tower of the WTC. Around 1000 hours, official reports indicated that another airplane hit the Pentagon, near Washington, DC, and a fourth airplane crashed in Somerset County, PA, about 80 miles southeast of Pittsburgh. Shortly after 1000 hours, the south tower of the WTC collapsed. Within the next half-hour, the north tower of WTC collapsed. Within the next half-hour, the north tower of

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the WTC also collapsed. At approximately 1730 hours, a third tower in the WTC complex, Building #7, also collapsed.

Under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the Governor of New York requested a major disaster declaration for individual and public assistance. The President provided the declaration within hours of the attack. This led to the execution of the FRP under the Federal Emergency Management Agency’s (FEMA) overall lead, with the Environmental Protection Agency (EPA) coordinating support for hazardous materials operations under ESF #10. The Governor of Virginia also requested, and was eventually granted, an expedited disaster declaration for Arlington County, VA. This occurred some time after the WTC declaration.

Although the U.S. Coast Guard (USCG) normally would have the lead in an ESF #10 activation in the zone where the WTC was located, EPA and USCG agreed that EPA would take the lead so that USCG’s resources could be focused on port security and support to emergency rescue efforts (many medical evacuations were done by water due to inaccessible roads). EPA had the ESF #10 lead in the zone where the Pentagon is located. Under its NCP authorities, EPA immediately deployed OSCs to New York and Virginia to address potential air quality issues resulting from the release of any asbestos or other hazardous materials within the WTC and the Pentagon. USCG deployed National Strike Force (NSF) members to implement the Incident Command System (ICS) with EPA in Edison, NJ, and to assist with WTC on-site air monitoring and the establishment of wash-down stations for rescue workers. Other NRT member agencies supported the OSCs pursuant to the NCP and ESF #10.

Concurrently, because this was assumed to be a terrorist incident, the Federal Bureau of Investigation (FBI) and FEMA initiated activities under Presidential Decision Directive (PDD) 39. FBI Headquarters opened the Strategic Intelligence Operations Center (SIOC) to coordinate information on the multiple attacks. FEMA activated its Emergency Support Team (EST) at FEMA Headquarters and a FEMA team was deployed to the designated Continuity of Operations location. FEMA also activated all 10 FEMA Regional Operations Centers (ROCs). However, because of damage to its location in the New York City area, the Region II ROC was unable to stand-up. The Region I ROC in Maynard, MA, served as the back-up location. Similarly, the Disaster Field Office (DFO) also had initial problems in determining an appropriate location site in the New York City area. Although it was eventually established at Pier 90 in New York City, there was some initial confusion about its location.

FEMA quickly determined that all ESFs should be fully activated under the FRP. A mission assignment was made to all member agencies to deploy to the FEMA EST. Because of the evacuation of the Federal Government from the Washington, DC, area, there was an initial discussion that the FEMA EST should be located at its alternate site, but it was eventually established at FEMA Headquarters. Various NRT agencies activated under one or more ESFs and coordinated with other ESFs. The primary mission of the NRT was coordinated under the Hazardous Materials Group ESF #10. This ESF was part of the Emergency Services Branch, which, in addition to ESF #10, included ESF #4, the Firefighting Group led by the U.S. Forest Service, ESF #8, the Health and Medical Services Group led by U.S. Department of Health and Human Services (HHS), and ESF #9, the Urban Search and Rescue Group led by FEMA.

1.2 ESF #10 Response to the Incidents

**NEW YORK CITY RESPONSE**

As noted above, as part of the overall FRP activation, ESF #10 was activated to provide support to New York City in addressing potential environmental releases resulting from the
destruction of the WTC. The environmental releases of primary concern were airborne particulates.

FEMA provided a series of mission assignments to activate ESF #10. Following the initial assignment to all ESF Lead Agencies to deploy to the FEMA Headquarters EST, EPA received a $10,000 mission assignment to support the FEMA ROC at the Maynard, MA alternate location. EPA also received a $50,000 mission assignment to staff the DFO once it was established in New York City.

In response to continuing concerns about public health and environmental threats posed by the collapsed buildings, FEMA issued a number of additional mission assignments to EPA to assess these threats and manage the cleanup. EPA's primary response focus included air monitoring and sampling, as well as dust sampling for asbestos; water quality monitoring to assess contamination in run-off; debris transport monitoring; and washing down of personnel and equipment. The total amount of funding allocated for these efforts was greater than $80 million. The following table summarizes the key mission assignments:

<table>
<thead>
<tr>
<th>Request Date and $ Amount</th>
<th>ESF #10 Related Mission Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/11 $10,000</td>
<td>Request for ESF #10 to report to Maynard, MA, ROC for support</td>
</tr>
<tr>
<td>9/11 $50,000</td>
<td>Request to participate in FEMA ROC/DFO at disaster site</td>
</tr>
<tr>
<td>9/13 Initially $500,000, with additional $7.5 million</td>
<td>Request for ESF #10 to assess all hazardous substance and oil releases throughout the NYC/NJ area, including debris removal and air monitoring</td>
</tr>
<tr>
<td>9/23 (post-date) $750,000</td>
<td>Request for ESF #10 support to monitor storm water outfalls in lower Manhattan leading from disaster site</td>
</tr>
<tr>
<td>9/18 $75 million, in increments of $15 million</td>
<td>Request to develop plan for washing down all personnel and equipment</td>
</tr>
</tbody>
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**PENTAGON RESPONSE**

Under the NCP, the U.S. Department of Defense (DOD) provides the OSC for all incidents involving the release of hazardous substances on its property. Therefore, EPA Region III deployed OSCs to provide technical support to DOD regarding the potential environmental issues resulting from the Pentagon attack. Specifically, EPA and the Occupational Safety and Health Administration performed air monitoring and provided health and safety information to DOD and the FBI. Concurrently, FEMA Region III activated its alternate ROC at the Willow Grove Naval Air Station in Pennsylvania. The FEMA ROC gave EPA a mission assignment to staff its Emergency Response Team-Advanced Element (ERT−A), which transitioned into a DFO in Arlington, VA. Since the mission assignment was limited to funding for staffing, all EPA fieldwork was performed using authorities and funding under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

1.3 NRT Response to the Incidents

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Under the NCP, the NRT is responsible for national response and preparedness planning, for coordinating regional planning, and for providing policy guidance and support to the Regional Response Teams (RRTs). The NRT can be activated under the following conditions:

- When an oil discharge or hazardous substance release (1) exceeds the response capability of the region in which it occurs, (2) transects regional boundaries, and/or (3) involves a substantial threat to the public health or welfare of the United States or the environment, substantial amounts of property, or substantial threats to natural resources (e.g., Spills of National Significance);
- When requested by an NRT member, an OSC, or an RRT; or
- When there are questions that require interagency input into answers at the national level (e.g., from the White House, Congress, Cabinet-level officials, or national-level private groups).

On Wednesday, September 12, 2001, the NRT was activated via conference call to discuss asbestos and air-monitoring issues and to share information regarding member agency activities to support ESF #10. As a result, member agencies were able to coordinate on environmental operations, as well as share updated information on the general response. One key exchange of information during the conference call was that member agencies were made aware of HHS’ need for additional respirators in the New York City area. As a result of the call, the U.S. Department of Agriculture (USDA) subsequently coordinated with ESF #8/HHS to provide 26,000 respirators. The U.S. Department of Labor – OSHA also arranged to have thousands of respirators donated from various private manufacturers.

The NRT activation consisted of the single conference call, which included the FBI SIOC, FEMA EST, and EPA Emergency Operations Center (EOC). NRT representatives deployed to their respective agencies. The EPA EOC became the focal point for interagency cooperation during the emergency. No RRT activated for this response. Furthermore, there were no other OSC requests for NRT assistance. The NRT continued to monitor the response during its regular meetings.

2. NATIONALLY SIGNIFICANT LESSONS LEARNED

This section presents lessons learned that have the potential to improve national issues of policy, planning, or training, or that should be promptly addressed by the NRT or senior national policy makers. Please note that no particular rank ordering or prioritization has been assigned to these lessons learned.

2.1 Title: Communicating the Lead Agency Under PDD 39, PDD 62, and the CONPLAN

Observation: It was not clear to federal agency personnel involved which federal agency was in overall charge at the World Trade Center and Pentagon sites and the relationship between federal and local response authorities. This led to confusion and difficulties in coordination among agencies participating in the response.

Discussion: PDD 39, PDD 62, and the U.S. Government Interagency Domestic Terrorism Concept of Operations Plan (CONPLAN) indicate that the FBI should have the lead for crisis management and FEMA should have the lead for consequence management during terrorist incidents. According to the CONPLAN, when crisis and consequence management activities occur simultaneously, the FBI is the lead for both, until the U.S. Attorney General has made the determination that crisis management activities are complete. Although crisis and consequence management activities were occurring simultaneously at the WTC and Pentagon sites, there
was uncertainty among federal personnel involved in the response regarding which agency was assuming overall lead responsibility.

These reported difficulties might have been due to several factors. First, participating agencies’ personnel on-scene may not have had a consistent understanding of and/or training on implementation of the CONPLAN. Second, the large number of different activities being carried out simultaneously by local, state, and federal agencies (such as firefighting, search and rescue, and evidence collection) complicated the response. Finally, differences in the Pentagon and WTC response structures, even though both incidents were part of the same coordinated terrorist attack, complicated response operations for participating agencies.

As noted in section 1.1, above, the President issued a disaster declaration for New York City within hours of the attack, so the response was carried out under the FRP under FEMA’s overall lead, with EPA coordinating support for hazardous materials response operations. A similar declaration was not immediately issued for the Pentagon area, resulting in hazardous materials response operations being conducted initially under local authorities and then under the NCP with EPA as the lead. The effect for those involved in hazardous materials operations was that there was no clear information regarding lead agency responsibility at the national or local levels. Unity of command is a key principle of response doctrine. The NRS has adopted a standard interagency Incident Command System/Unified Command (ICS/UC) to integrate multiple response organizations under a single command during oil/hazmat incidents.

**Lesson Learned:** All agencies participating in a response need to know as soon as possible who is in charge and communicate this to agency personnel on-scene. When agencies bring essential but different authorities to a response, the lead agency needs a way to ensure exercise of these authorities is coordinated so response operations can be efficient and effective. Particularly for a large and complex incident, many activities occur simultaneously. Plans and practices need to take this into account. Federal plans also need to provide for working with a strong local authority where one exists, as was the case in New York City.

**Recommendation:** FEMA and the FBI should review the portion of plans designating the lead agency, to determine how to clarify and ensure clear communication of lead federal agency identification, particularly when crisis and consequence management activities occur simultaneously. Interagency training and reference materials should be developed on PDD 39, PDD 62, and the CONPLAN to ensure uniform understanding of lead federal agency identification, effective implementation of crisis to consequence management activities, and transitioning lead federal agency authority from the FBI to FEMA during future incidents. Finally, FEMA and the FBI should adopt ICS/UC as a means to coordinate and lead joint crisis and consequence management operations for terrorism response.

### 2.2 Title: Response Planning in the National Capitol Area (NCA)

**Observation:** The Pentagon incident, which occurred in the National Capitol Area (NCA), had unique implications for federal agency resources in response and recovery.

**Discussion:** The NCA poses unusual issues for ESF #10 response activities. For example, the density of government buildings and headquarters personnel poses unique security concerns and has significant impacts on the decision-making process. Constitutional divisions of authority among the Executive, Legislative, and Judicial Branches may preclude Executive Branch responders from exercising controls over hazardous materials incidents occurring on the property of the other Branches. Damage or contamination of response agency headquarters may impede response coordination. It is unlikely that the President will declare a federal emergency on federal structures, which increases the likelihood that response and recovery operations for a terrorist act in the NCA will be conducted under the NCP. These unique

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Lesson Learned: Planning within the NCA is more complex than most other areas of the country and, therefore, the typical sub-area plan may not be sufficient.

Recommendation: The NRT should work with RRT III to consider potential options to address the unique concerns of the NCA (e.g., reviewing the existing RRT III sub-area plan for potential enhancements or establishing an NCA RRT).

2.3 Title: Preparedness Activities for Terrorist/Intentional Events

Observation: Current contingency plans and planning guidelines do not appear to adequately address specific response issues associated with terrorist and/or intentional events.

Discussion: These incidents showed that common transportation systems could be used by terrorists with disastrous effects. If other modes of transportation were used as weapons or targets, how prepared would responders be to manage the incident? The basic assumption in most response plan development under the NCP has been that the release of hazardous materials, oil, pollutants, and contaminants is triggered by an accident. Intentional releases and terrorist activities are different from accidental releases, as they require larger and more complex responses than existing plans consider and require additional coordination with other responders, such as law enforcement agencies. For example, Area and Regional Contingency Plans generally do not include measures for the security of personnel responding to incidents. Likewise, Local Emergency Planning Committee (LEPC) plans may not adequately consider the consequences associated with marine incidents. Currently, there are no requirements for ships carrying chemicals to prepare contingency plans, even though these vessels may transit near populated areas with large volumes of chemicals. Furthermore, response guidelines and other planning tools may not address response to releases of chemical and biological agent incidents from ships and marine-transportation-related facilities, including planning isolation zones, protective action decision-making, evacuation distances, etc.

Lesson Learned: Contingency plans and planning guidelines need to be continually revised and expanded to address terrorist events and intentional releases of chemical, biological, or nuclear agents, and/or any combination of these, or any other similar national terrorist-related event. This is consistent with the NRT lessons learned from Exercise TOPOFF 2000, where the NRT recommended that the weapons of mass destruction (WMD) planning community (e.g., U.S. Department of Justice (DOJ), FEMA, and DOD) should promote the incorporation of WMD plans and programs into existing local plans, including LEPC and Area Plans.

Recommendation: In the short term, the NRT/RRTs can increase communication with law enforcement agencies and the private sector regarding WMD planning issues. For example, the NRT should determine a mechanism for expanded communication of existing training materials, guidance, and technical support for planning at the regional level. In the longer term, the NRT should revisit planning assumptions and develop guidelines for the NCP and Regional Contingency Plans (RCPs) to address intentional releases of chemical and biological agents. RRTs should help revise all plans to address intentional releases, including Area Contingency Plans (ACP), LEPC Plans, and Port Security Plans to ensure that existing systems are fully utilized without developing overlapping and duplicative response structures/mechanisms. USCG should continue its effort to develop regulations requiring response plans for chemical carrying tank vessels. Additionally, the NRT should recommend to agencies preparing emergency response guidelines the inclusion of intentional releases and encourage coordination with the NCP.
2.4 Title: Prioritization of Chemical Hazards

**Observation:** Lacking chemical hazards prioritization criteria, the FBI and Navy sought information from individual agencies on facilities and carriers that posed the greatest environmental hazards.

**Discussion:** The FBI and Navy were seeking information on chemical facilities, ships, and nuclear power plants that posed the greatest risk as potential targets for terrorist attacks. While thousands of facilities and vessels may pose a risk, there is only a small subset that is of highest concern. During this incident, individual agencies identified these priority facilities based on criteria that were thought to be appropriate and provided this information to the requesting agency. For example, EPA provided a list to the FBI on chemical plants, while USCG prioritized high-risk vessels and shared this information with the Navy. Similarly, the Nuclear Regulatory Commission provided the FBI with priority lists of nuclear facilities. Moving forward, it may be helpful for agencies to coordinate with each other in pre-determining criteria for prioritization and in disseminating that information to agencies that need it. Because agencies in the NRS have information needed to establish such criteria and a pre-established coordination protocol, the NRS could serve as a single focal point for developing and communicating this necessary information.

**Lesson Learned:** There are currently no consistent, agreed-upon criteria for prioritizing terrorist threats from hazardous materials production, storage, and transport. Additionally, there is no established protocol for collecting and providing this information to agencies that need it.

**Recommendation:** The NRT and its member agencies should be available to provide recommendations and assistance to the FBI and Office of Homeland Security (OHS) in the development of risk prioritization criteria for chemical hazards. The NRT should also assist WMD coordinating agencies in the field to identify vessels and facilities that pose the greatest risks.

2.5 Title: Public Health Risk Communication

**Observation:** Initially, there were no coordinating mechanisms for collecting and analyzing data on risks to human health and the environment, and for communicating those risks to the public.

**Discussion:** When there is an FRP activation, ESF #5 collects information on ongoing operations and provides situation reports. Initially in the WTC event, federal agencies were perceived to be speaking in different voices as to the nature of the risks posed to the public. Federal, state, local, private, and academic sources engaged in hazardous materials sampling and air monitoring efforts based upon different authorities and standards, which led to conflicting reports on public health risks for several days into the incident. Initial efforts to coordinate data and provide a unified government voice with timely communication to the public were not fully effective. The absence of a unified, credible federal voice to communicate health information appeared to leave the public and the media on their own in dealing with conflicting information. Subsequently, EPA, in a coordinated interagency effort, developed a mechanism for collecting data and assessing the risks posed to public health and the environment from the WTC incident. This was done by sponsoring a daily conference call for the approximately 40 reporting sources sampling at “ground zero” and surrounding areas. All sampling data were entered into a database created specifically for the incident to compare and compile a single health risk assessment. However, the absence of a predetermined credible voice from the medical/scientific community that represented the Federal Government continued to hamper delivery of a coordinated message to the public.
Lesson Learned: Because uncertainties about health effects to the public and workers on site are likely to exist, it is extremely important to have the best possible scientific information and to communicate it clearly and accurately to the public.

Recommendation: The NRT should work to improve public health risk communication before, during, and after an incident. NRT member agencies should coordinate with each other to more effectively utilize trained risk communication spokespersons (e.g., medically trained federal, state, and local health officials) in providing a unified, credible voice to disseminate this information in a timely manner. A Joint Information Center (JIC) is the best mechanism for coordinating communications to the public. The NRT should compile existing risk communication information and make it available to NRT agencies and the public. Building on the experience of EPA during the WTC incident, the NRT should formalize processes to compile and coordinate incident data and risk thresholds for human health effects. The NRT should also initiate conferences and interagency meetings to improve risk communications.

2.6 Title: Geographic Focus of the FRP

Observation: The FRP is designed to address incidents that affect specific geographic areas and lacks a mechanism for dealing with an incident with the potential to affect the entire nation. The WTC and Pentagon incidents, however, were recognized as national events because of the potential for additional attacks at other locations across the nation.

Discussion: The FRP is designed for response to incidents, such as earthquakes or hurricanes, which affect specific geographic areas. The initial wave of attacks affected three separate areas and potentially threatened the entire nation. The FRP does not have a national “master plan” for coordinating federal resources and funding for related but geographically separate incidents. The FRP enables the federal government to allocate resources, establish priorities, and resolve conflicts in response to presidentially declared disasters and emergencies. Lack of this capability for related incidents that occur in different areas could seriously hamper the nation’s ability to respond. For example, if air transportation had been needed to address an environmental emergency elsewhere in the country (e.g., an oil spill in Alaska), there was no mechanism to coordinate allocation of military aircraft to assist in that response.

Lesson Learned: Except for the WTC and Pentagon incidents, federal response throughout the rest of the nation to possible additional terrorist attacks was conducted without centralized interagency coordination or funding.

Recommendation: The NRT should recommend that FEMA, OHS, or Congress examine the issue of expanding the Stafford Act to address simultaneous federal responses to geographically separate but related incidents.

2.7 Title: Relationship Between the OSC and the ESF #10 Chair

Observation: The WTC event demonstrated that EPA and USCG have different perceptions of the role of the OSC as it relates to the ESF #10 Regional Chair.

Discussion: Shortly after the attack, the pre-designated USCG OSC was fully occupied with evacuation and port security operations and requested that EPA Region II assume the role of OSC and ESF #10 Chair for the WTC incident. In practice, whenever the FRP is activated, EPA assigns OSCs to implement the decisions of the ESF #10 Regional Chair. Depending upon the complexity of the incident, the Regional Chair may employ numerous OSCs to accomplish the mission, as was done in the WTC incident. While operating under the FRP, EPA places less
emphasis on the question of which individual is the single OSC for the incident and more emphasis on supporting the ESF #10 chair. USCG interprets the FRP a little differently than EPA. USCG believes that there must be a pre-designated OSC whenever the FRP is activated. Rather than the OSC working for the ESF #10 chair, USCG interprets the role of the ESF #10 chair as one of support for and coordination with the OSC.

**Lesson Learned:** Had the WTC incident unfolded a little differently with EPA retaining ESF #10 chair and USCG providing the OSC, the differing agency interpretations of the FRP might have caused confusion and slowed the response.

**Recommendation:** The NRT should encourage USCG and EPA to resolve the potential differences in their approaches and communicate that resolution to other agencies and the RRTs.

2.8 **Title:** ESF #10 Use of the Incident Command System/Unified Command (ICS/UC)

**Observation:** The ICS/UC was effective during the incident once it was put into place at the regional ESF #10.

**Discussion:** The use of the ICS/UC proved to be effective during the response to the WTC attacks. However, it was not established initially, challenging the ESF #10 Regional Chair to initiate and efficiently manage the response during the early stages. Existing responsibilities and response management structures were not fully identified.

**Lesson Learned:** Once activated, ESF #10 should implement ICS/UC as soon as possible.

**Recommendation:** Building on the NRT recommendation from Exercise TOPOFF 2000, the Federal Government should ensure training in and implementation of the ICS/UC so that it becomes the standard response system used whenever ESF #10 is activated, including WMD incidents. The NRT should ensure, to the extent possible, that federal agency personnel are fully trained in ICS/UC; that guidance being developed by agencies such as FEMA, the FBI, and EPA is completed and properly implemented; and that the experience of those agencies that have adopted ICS/UC (such as USCG, Fire Service, U.S. Department of the Interior (DOI), and USDA Forest Service) is fully utilized.

2.9 **Title:** NRS as a Model for Interagency Collaboration

**Observation:** One of the reasons the NRS worked well during the 9/11 response activities was because its members interact on a regular basis.

**Discussion:** Collaboration among NRS federal agencies during the incidents was facilitated by their experience gained in working together during preparedness activities and previous disasters and emergencies. In particular, the importance of collaboration between EPA and USCG was noted during Exercise TOPOFF 2000 and re-emphasized during the WTC and Pentagon events, when USCG assigned liaison officers to support EPA at multiple locations. In general, cooperation among NRS agencies was effective in implementing ESF #10, despite difficulties posed by the events. For example, the NRT was able to rapidly surge to provide resources to New York City (e.g., EPA OSCs, USCG Strike Force, and respirators from the Centers for Disease Control and Prevention (CDC), USDA, etc).

**Lesson Learned:** The NRS provides an effective model for interagency collaboration.
Recommendation: The NRT should suggest that FEMA promote increased interagency coordination in all ESFs under the FRP by encouraging more frequent interaction among agency representatives who participate in the ESFs.

3. NRT-SPECIFIC LESSONS LEARNED

This section presents lessons learned that might require NRT action to improve plans or policy or that may improve NRT performance in implementing the plans. Please note that no particular rank ordering or prioritization has been assigned to these lessons learned.

3.1 Title: NRS Access to Classified Information

Observation: The NRT has no protocol or mechanism for communicating classified information during an incident that involves issues of national security.

Discussion: Because of national security concerns, much of the information being communicated among response agencies was classified. Many NRT members do not have security clearances and/or secure communication mechanisms, resulting in restricted exchange of information. For example, participants were reminded to keep their discussions limited to topics of an unclassified nature when it was clear that not all participants had appropriate clearances or secure communication mechanisms.

Lesson Learned: In the current environment, the NRT needs secure procedures and mechanisms for exchanging classified information.

Recommendation: The NRT should first determine what level of security clearance is needed for its purposes. Then, NRT member agencies should obtain the appropriate security clearances for their assigned representatives. Finally, the NRT should examine the need for a secure communications system for exchanging classified information.

3.2 Title: NRS Access to Area Contingency Plan (ACP) Sensitive Information

Observation: As a result of the incidents, some of the information in plans that are widely available to the public was deemed sensitive in light of national security concerns.

Discussion: The NRS needs to exchange sensitive information, such as that contained in ACPs, in order to continue its mission to respond to pollution incidents. There was much concern following the 9/11 attacks, however, that sensitive information (e.g., information in ACPs on water intake locations, chemical facilities, pipelines, etc.) could be used by terrorists for further attacks. As a result, EPA and USCG removed ACPs from their Internet sites, and removed what was judged to be the most sensitive information.

Lesson Learned: The NRS needs a mechanism for continued access by responders to sensitive information needed for response.

Recommendation: The NRT should establish guidelines for Area Committees (ACs) to segregate sensitive from non-sensitive information in ACPs so that industry planners, emergency responders, and the public will have continued access to essential ACP information. The NRT should also consider developing a password-protected web site that will allow NRS members to have continued access to sensitive elements of ACPs and other documents.

3.3 Title: SONS-Type Structure for Hazardous Substance Releases
Observation: Had either of the events involved a major hazardous substance release, the ability to expand the level of response management beyond the incident commander at the regional level would not have been in place under the NCP.

Discussion: When a hazardous substance incident that exceeds the capabilities of a federal OSC occurs, a structure is needed to effectively manage the response. For oil spills, Subpart D of the NCP calls for the development of a Spill of National Significance (SONS) system to allow for the effective management of an incident of national concern. In the coastal zone, USCG assigns a National Incident Commander (NIC) to such incidents. The NIC responds under the ICS/UC structure. No similar system has been developed for major hazardous substance releases. The SONS system has worked well in exercises and could assure a more effective response structure for nationally significant hazardous substance incidents as well.

Lesson Learned: A structure is needed to manage nationally significant hazardous substance incidents.

Recommendation: The NRT should endorse a SONS-like structure for hazardous substance incidents and encourage EPA to develop and exercise this structure to prepare for a major hazardous substance incident.

3.4 Title: NRS Activation and FRP Implementation

Observation: Although NRT activation was effective, the integration of NRS activities within the FRP was not clear.

Discussion: According to the FRP, the ESF #10 function is primarily to implement the NCP and activate the NRS. FEMA’s role is to issue mission assignments to agencies to carry out certain functions. Each agency then determines how best to carry out that function. In those circumstances where the NRS operated independently of the FRP, the NRS worked as planned. For example, the NRT activation occurred smoothly and all participants and/or alternates received information about the call and were able to participate. However, when the NRS was integrated into the FRP, coordination was not as smooth. For example, under the NRS model, the OSC would have activated the RRT as needed. However, at the WTC the ESF #10 Regional chair did not activate the RRT. As a result, there were some difficulties in communication between response personnel and local land managers. [Note: During Exercise TOPOFF 2000, it was noted that RRT activation is important to effective information exchange between the regional and national levels.] Additionally, there was some confusion regarding funding. FEMA funded the USCG National Strike Force (NSF) deployment with mission assignments directly to USCG and regional ESF #10 activities via mission assignments to EPA. Eventually, USCG mission assignments were cancelled and reissued under the overall EPA ESF #10 mission assignments. As another example, some agency representatives indicated that they were not clear about the role of the ESF #10 desk at the EST or what they should do once they were notified. Information regarding air monitoring and hazard levels was slow in being transmitted to the EST and the DFO. Several NRS agency representatives suggested that the difficulties with integration of NRS activities into the FRP were due to lack of training and policy within their agencies.

Lesson Learned: Personnel from individual agencies likely to be involved in ESF #10 activities need training on the integration of the NRS into the FRP.

Recommendation: The NRT should discuss the establishment of criteria for RRT activation when operating under the FRP. The NRT should encourage member agencies to develop consistent guidelines and training needed to address NRS member agency roles and responsibilities under ESF #10 activation.
3.5 Title: NRT Plan for Continuity of Operations

Observation: The September 11th shutdown of the Federal Government, competing demands for NRS personnel and resources, and infrastructure/communication problems could have compromised the operation of the NRT.

Discussion: NRT activation is dependent on availability of member agency participants and availability of space or phone lines to assemble in person or via conference call. On September 11, 2001, the National Response Center (NRC) 1-800 access number suffered a mechanical failure not related to the terrorist attacks. Additionally, telephone communications across the eastern seaboard were impacted by the loss of lines and the simultaneous overloading of circuits. Convening an in-person NRT meeting on the first day of the event would have been difficult, since the Federal Government ordered building evacuations and a temporary government shutdown. In addition, many NRT participants were tasked with multiple functions, including ESFs other than ESF #10 under the FRP, and duties within their agencies. In some cases, agencies have a limited number of personnel who are qualified to staff the numerous command centers that were needed in an event of this magnitude. Furthermore, such an event may require a prolonged NRT activation and may therefore impose additional physical limitations on staffing. Prior to 9/11 the NRT had no plan for addressing these issues.

Lesson Learned: NRT authorities, membership responsibilities and activation are identified in 40 CFR 300.110 (the National Contingency Plan). In addition, call down procedures and lists are exercised and updated regularly. However, the NRT needs a more detailed plan, similar to a Continuity of Operations Plan (COOP), for how the essential work of the NRT will be accomplished in the event that federal facilities and communications required for “business as usual” are disrupted.

Recommendation: The NRT should develop a more detailed plan that identifies procedures and authorities to ensure that it can continue to function when Federal Government facilities and/or phone communications are damaged. The plan should address staffing availability and alternate communications.